

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Community Air Monitoring and Sampling Results
September 19, 2012
PO# 12-H0408-MR**

This data report discusses community real-time air monitoring data collected between September 18th 00:00 and September 18th 23:59 in support of mitigation and remediation operations conducted near Stolthaven’s facility near Braithwaite, LA.

Community real-time air monitoring was conducted for VOCs, LEL, hydrogen sulfide (H₂S), and formic acid using stationary AreaRAEs and/or hand-held instruments such as the MultiRAE and colorimetric detector tubes. Table 1 and Table 2 below display data summaries for AreaRAE and hand-held instrument data, respectively. While stationary AreaRAE results indicate elevated VOC levels at three locations outside of the facility perimeter, these results are preliminary and may include drift in the instrument’s electrochemical sensor. Additionally, these AreaRAE instruments are located adjacent to roads and are subject to detecting products of combustion due to vehicular emissions. No detections of VOC, LEL, H₂S, or formic acid were observed in the community using real-time handheld instruments. Table 3 highlights analytical sample counts collected within offsite air and soil. Appendix 1 shows incident site maps.

**Table 1
AreaRAE Summary – September 18th 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	LEL	5640	0	0 - 0 %
	VOC	5640	0	0 - 0 ppm
Unit 2	LEL	5646	0	0 - 0 %
	VOC	5646	0	0 - 0 ppm
Unit 3	LEL	5660	0	0 - 0 %
	VOC	5660	0	0 - 0 ppm
Unit 4	LEL	5652	0	0 - 0 %
	VOC	5652	0	0 - 0 ppm
Unit 9	LEL	5658	0	0 - 0 %
	VOC	5658	0	0 - 0 ppm
Unit 10	LEL	3316	0	0 - 0 %
	VOC	3316	0	0 - 0 ppm
Unit 11	LEL	5201	0	0 - 0 %
	VOC	5201	34	0.1 - 0.1 ppm
Unit 12	LEL	5060	0	0 - 0 %
	VOC	5060	1	0.1 - 0.1 ppm
Unit 13	LEL	5578	0	0 - 0 %
	VOC	5578	9	0.1 - 0.1 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 Real-time Summary – September 18th 00:00 – 23:59**

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
Formic Acid	5	0	NA	< 0.52 ppm
H2S	331	0	NA	< 1.0 ppm
LEL	330	0	NA	< 1.0 %
VOC	330	0	NA	< 0.1 ppm

NA = not applicable

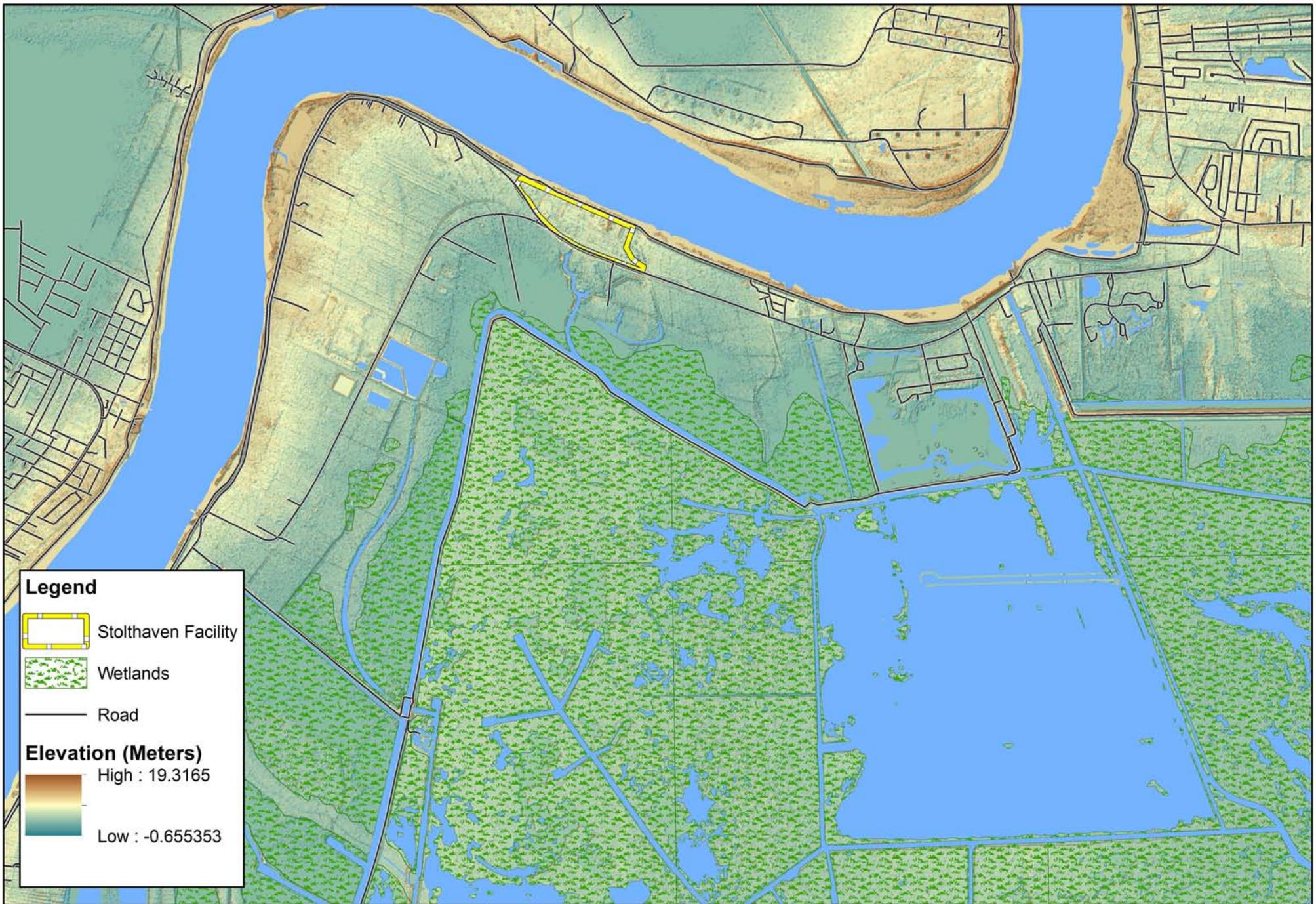
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

**Table 3
Analytical Sample Counts – September 18th 00:00 – 23:59**

Matrix	Number of Samples
Air	44
Soil	4

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

Appendix 1: Incident Maps



Legend

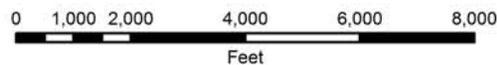
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



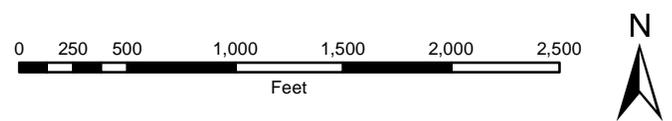
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



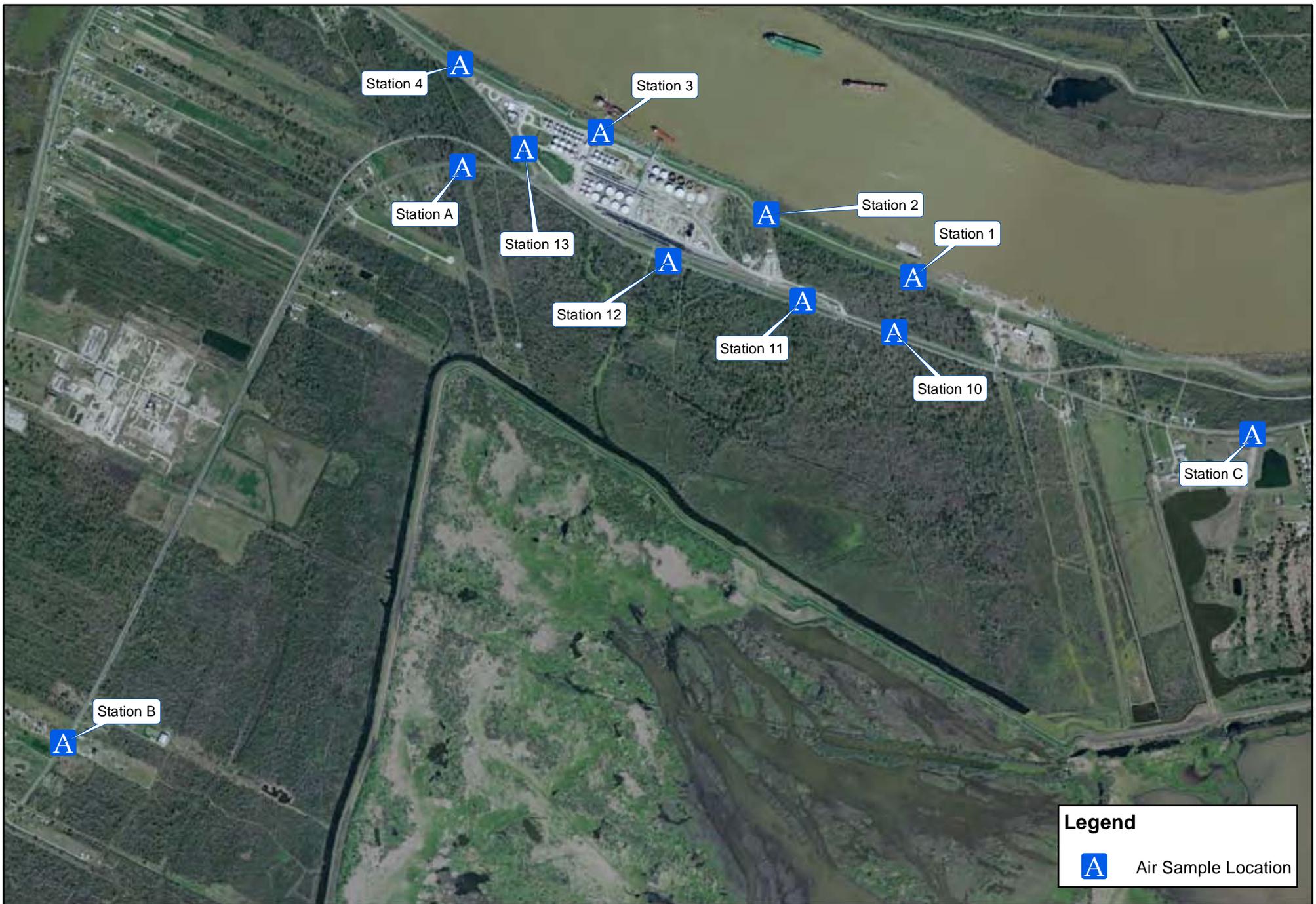
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 AreaRAE Station

AreaRAE Station Locations
September 15, 2012



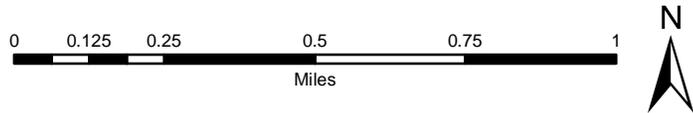
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	Print Date: 9/19/2012



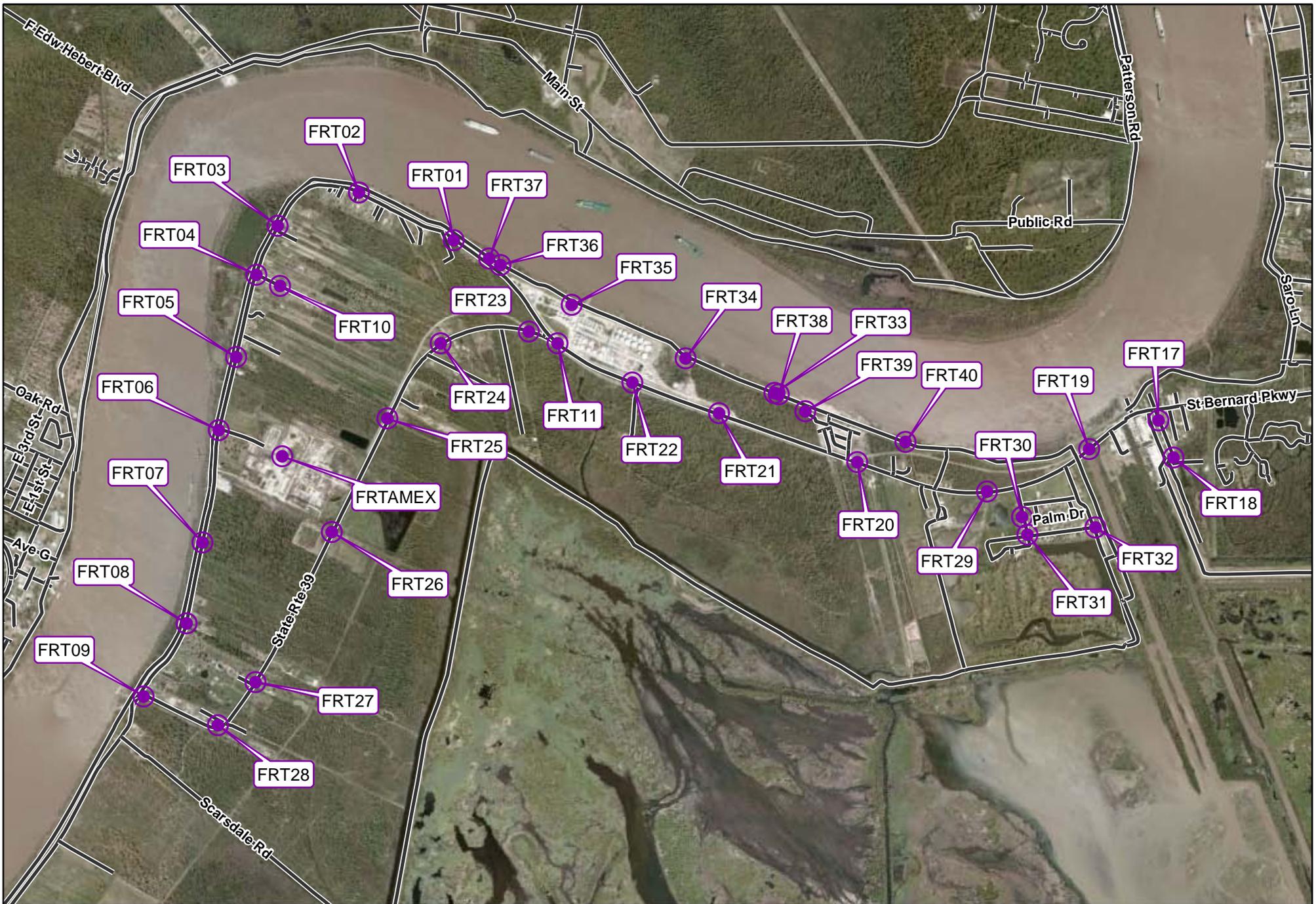
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 Air Sample Location

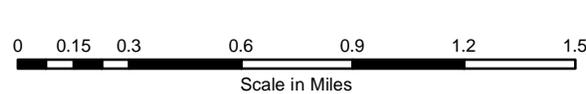
Community Ambient Air Analytical Sampling Locations



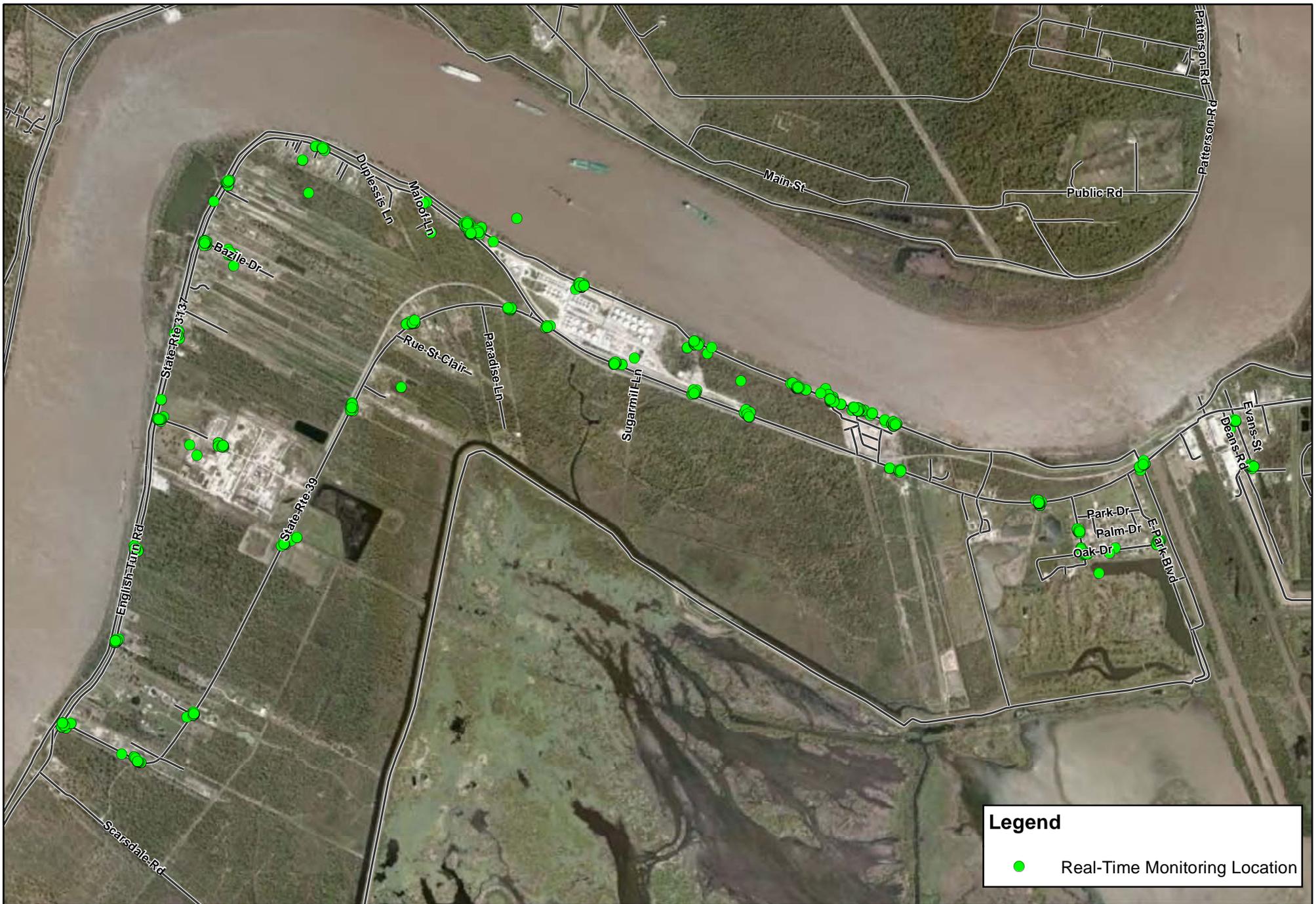
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	Plaquemines Parish
	Print Date: 9/18/2012



Community Fixed Real-Time Monitoring Locations



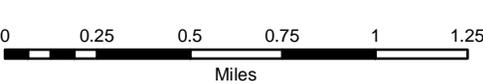
	Stolthaven
	Braithwaite, LA
Project No. 40355	Plaquemines Parish
	Print Date: 9/18/2012



Legend

- Real-Time Monitoring Location

Community Real-Time Monitoring Locations
9/18/2012



 Project No. 40355	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/19/2012

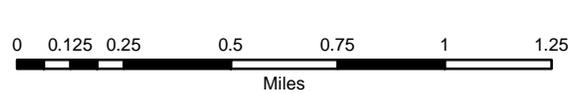


Legend

VOC Concentration

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

**Manually-Logged
Community VOC Concentrations**
9/18/2012



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