

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Community Air Monitoring and Sampling Results
September 22, 2012
PO# 12-H0408-MR**

This data report discusses community real-time air monitoring data collected between September 21st 00:00 and September 21st 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), methyl acrylate 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 AreaRAEs and hand-held instrument data, respectively. While stationary AreaRAE results indicate elevated VOC levels at five AreaRAE Units, 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. Two detections of VOCs were observed in the community. No detections of LEL, H₂S, or formic acid were observed in the community using real-time handheld instruments. Table 3 highlights analytical sample counts collected within air, residential soil and ditch soil. Appendix 1 shows incident site maps.

**Table 1
AreaRAE Summary – September 21th 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	VOC	4645	0	0 – 0.0 ppm
Unit 2	VOC	4624	184	0.1 - 0.6 ppm
Unit 3	LEL	1318	0	0 - 0 %
	VOC	4365	467	0.1 - 13.5 ppm
Unit 4	VOC	4825	47	0.1 - 1.2 ppm
Unit 10	VOC	3494	0	0 - 0 ppm
Unit 11	VOC	4479	354	0.1 - 0.6 ppm
Unit 13	VOC	4838	445	0.1 - 2.3 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 21th 00:00 – 23:59

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
Formic Acid	3	0	NA	< 0.52 ppm
H2S	285	0	NA	< 1.0 ppm
LEL	285	0	NA	< 1.0 %
Methyl Acrylate	1	0	NA	< 2.0 ppm
VOC	286	2	0.4 ppm	0.5 ppm

NA = not applicable

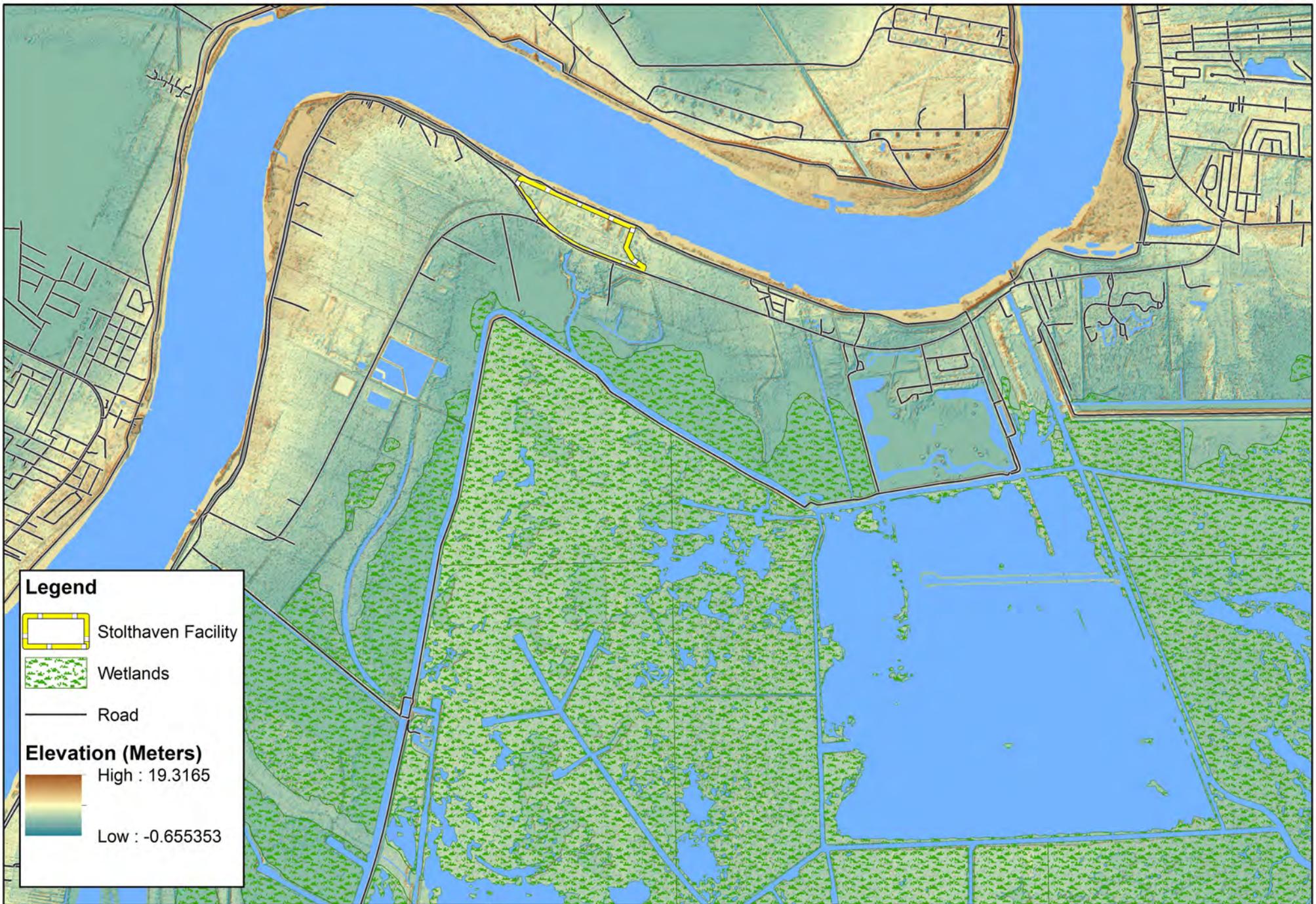
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

Table 3
Analytical Sample Counts – September 21th 00:00 – 23:59

Matrix	Number of Samples
Air	44
Residential Soil	9
Ditch Soil	29

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

Appendix 1: Incident Maps



Legend

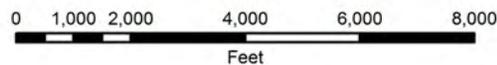
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

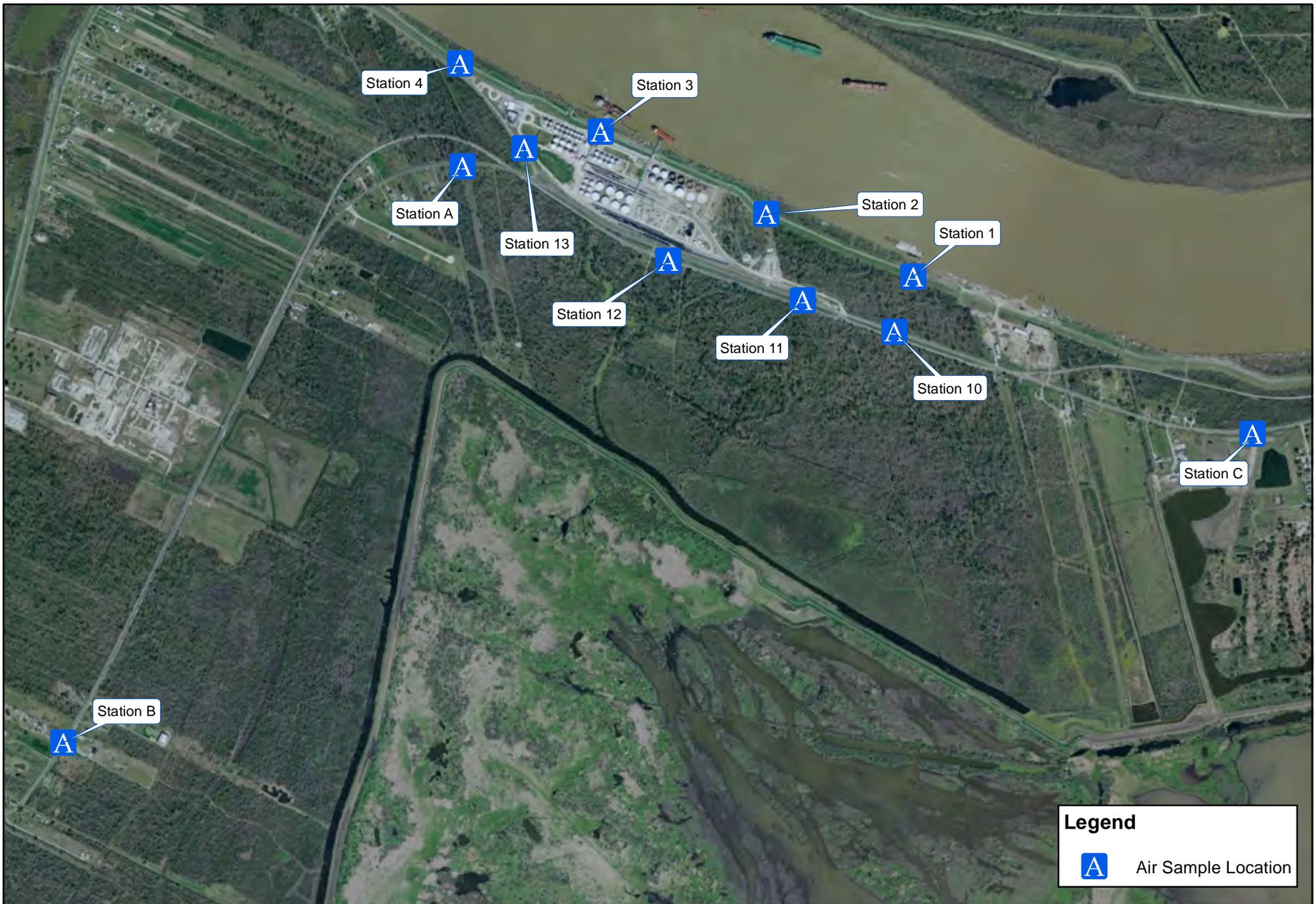
High : 19.3165

Low : -0.655353

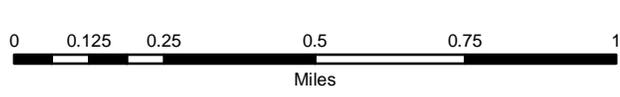
**Stolthaven Facility
Shaded Relief of Elevation**



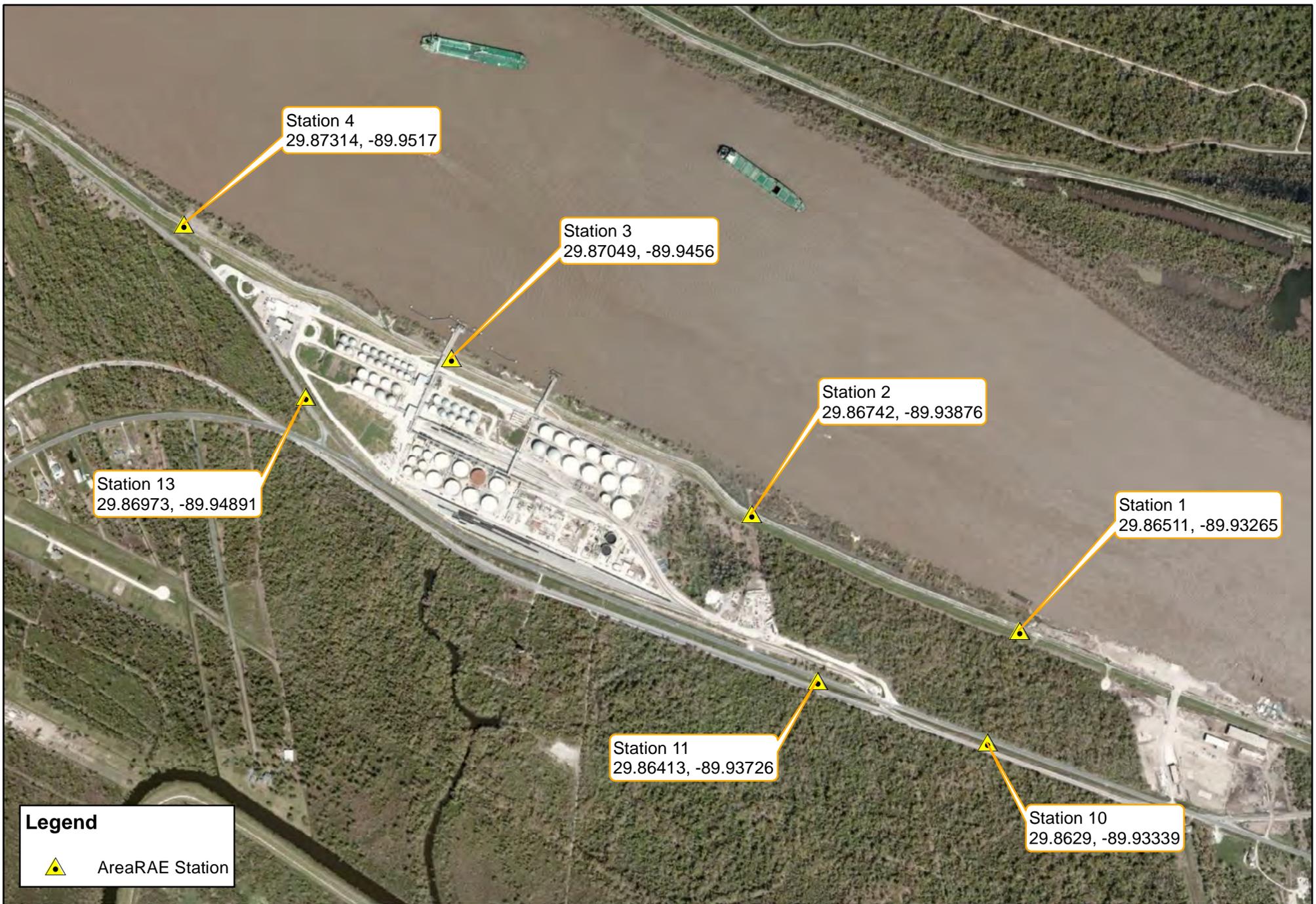
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



Community Ambient Air Analytical Sampling Locations



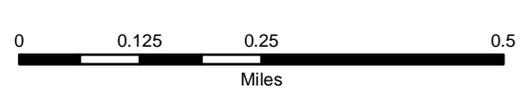
 Project No. 40355	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/18/2012



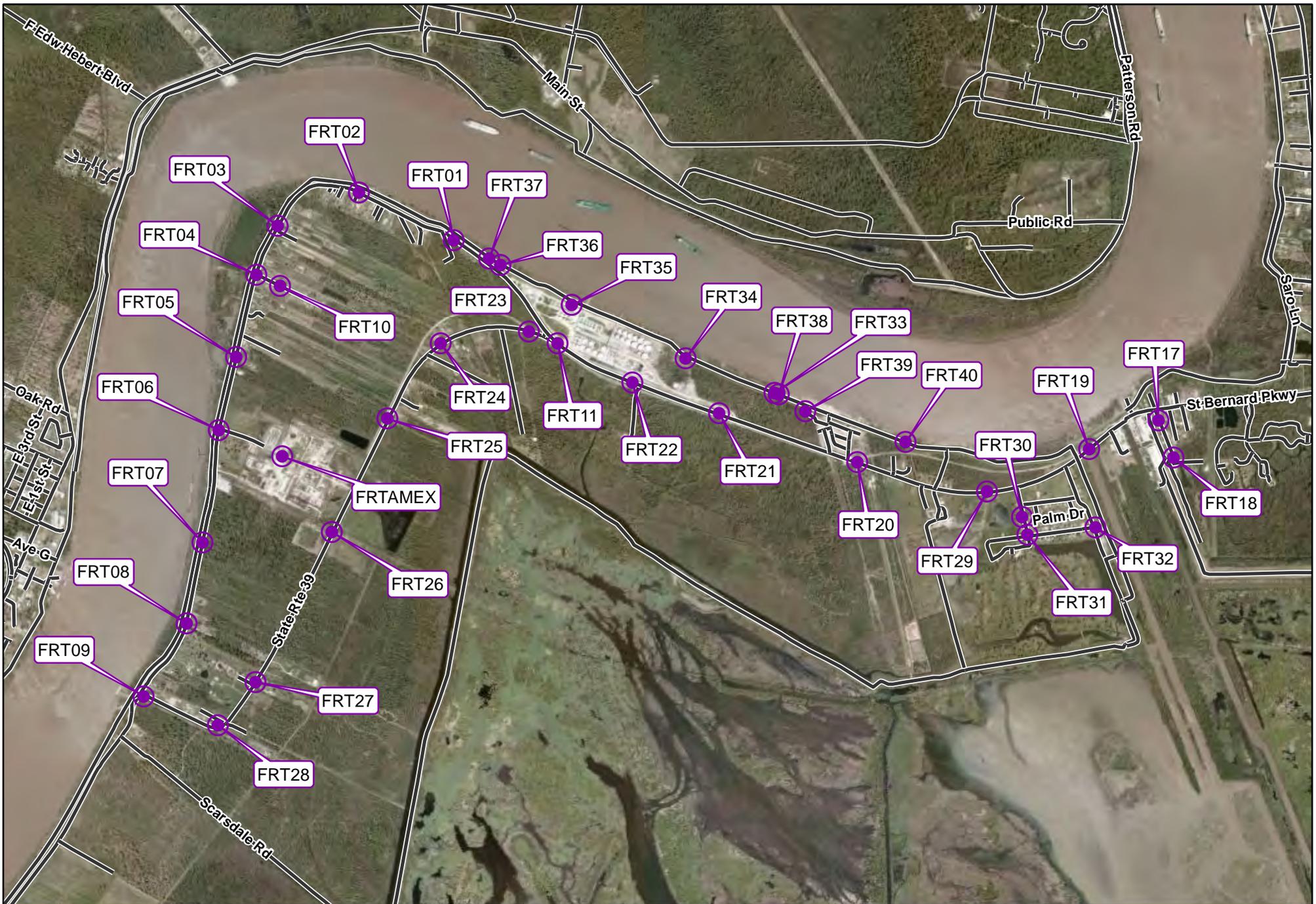
Legend

 AreaRAE Station

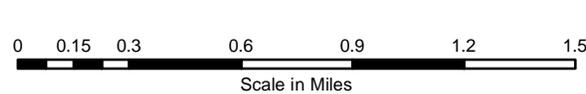
**Community
AreaRAE Station Locations**
September 21, 2012



 Project No. 40355	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/22/2012

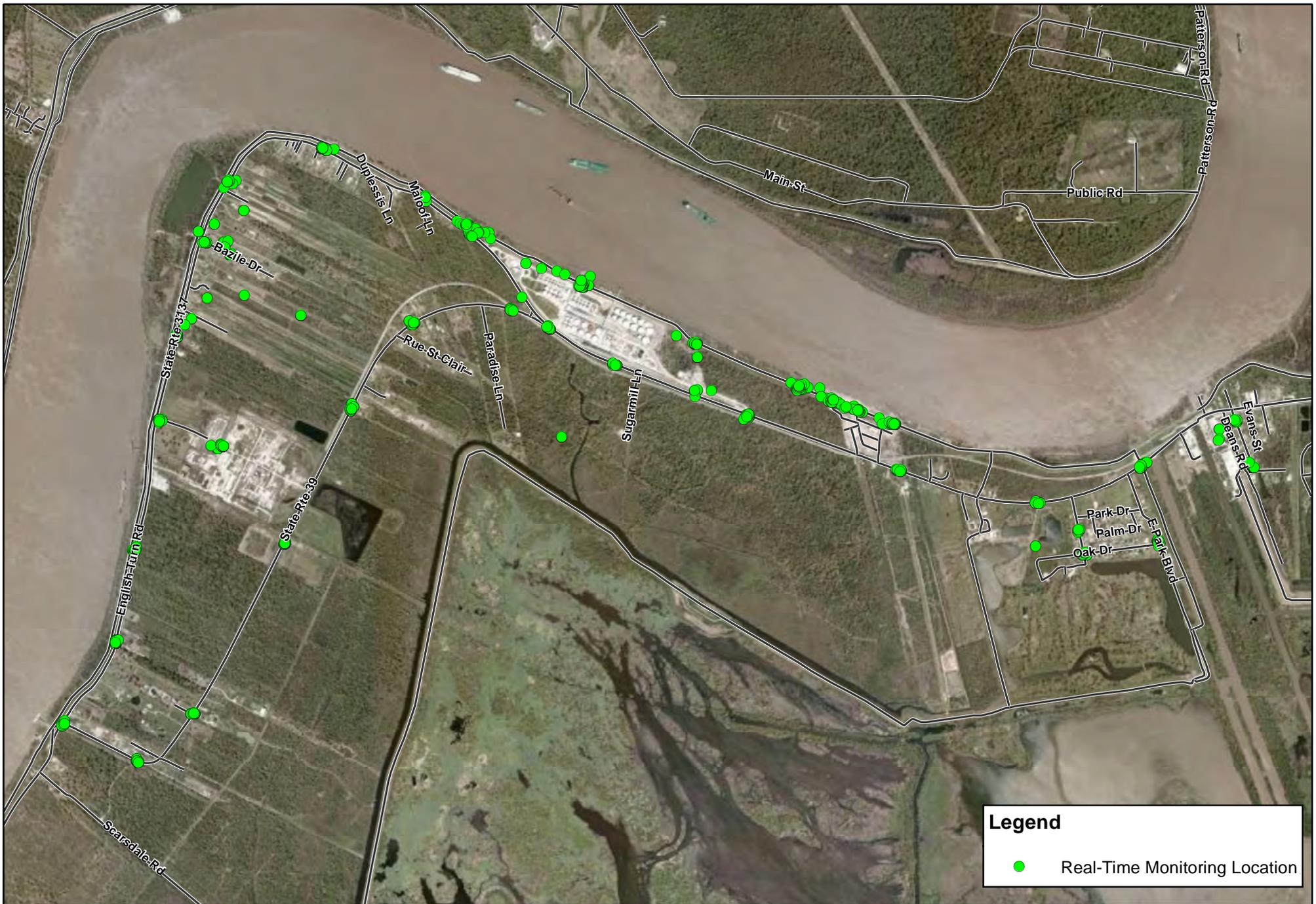


Community Fixed Real-Time Monitoring Locations



CTEH
Project No.
40355

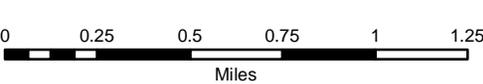
Stolthaven
Braithwaite, LA
Plaquemines Parish
Print Date: 9/18/2012



Legend

- Real-Time Monitoring Location

Community Real-Time Monitoring Locations
9/21/2012



Project No.
40355

Stolthaven
Braithwaite, LA

Plaquemines Parish
Print Date: 9/22/2012

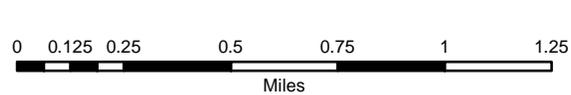


Legend

VOC Concentration

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

**Manually-Logged
Community VOC Concentrations**
9/21/2012



CTEH[®]
Project No.
40355

Stolthaven
Braithwaite, LA
Plaquemines Parish
Print Date: 9/22/2012