

**40365 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Community Air Monitoring and Sampling Results
September 29, 2012
PO# 12-H0408-MR**

This data report discusses community real-time air monitoring data collected between September 28th 00:00 and September 28th 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. While real-time monitoring for hydrogen sulfide (H₂S) began on September 15th, 2012; this analyte is unrelated to events at the Stolthaven facility and has been incorporated into real-time community monitoring to evaluate potential H₂S generated by the natural decomposition of organic matter. Table 1 and Table 2 below display data summaries for AreaRAEs and hand-held instrument data, respectively. While stationary AreaRAE results indicate detections of VOCs at eight AreaRAE Units, these results are preliminary and may include drift in the instrument’s electrochemical sensor. Reports indicate confirmed drift (detection of 97.0 ppm) using MultiRAE at AreaRAE Unit 2 by CTEH[®] employee. Additionally, these AreaRAE instruments are located adjacent to roads and are subject to detecting products of combustion due to vehicular emissions. No VOCs, H₂S, formic acid, or LEL detections were observed within the community using real-time handheld or colorimetric tubes. Table 3 highlights analytical sample counts collected within air, residential soil, offsite soil, and offsite surface water. Appendix 1 shows incident site maps.

**Table 1
AreaRAE Summary – September 28th 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	VOC	3355	7	0.1 - 0.1 ppm
Unit 2	VOC	3629	869	0.1 – 97.0 ppm
Unit 3	VOC	4253	261	0.1 - 6.7 ppm
Unit 4	VOC	4422	356	0.1 - 1.6 ppm
Unit 10	VOC	2503	55	0.1 - 0.5 ppm
Unit 11	VOC	3867	1	1.4 - 1.4 ppm
Unit 12	VOC	3975	219	0.1 - 0.3 ppm
Unit 13	VOC	4366	49	0.1 - 0.6 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 28th 00:00 – 23:59**

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
Formic Acid	1	0	NA	< 0.52 ppm
H ₂ S**	203	0	NA	< 1.0 ppm
LEL	204	0	NA	< 1.0 %
VOC	204	0	NA	< 0.1 ppm

NA = not applicable

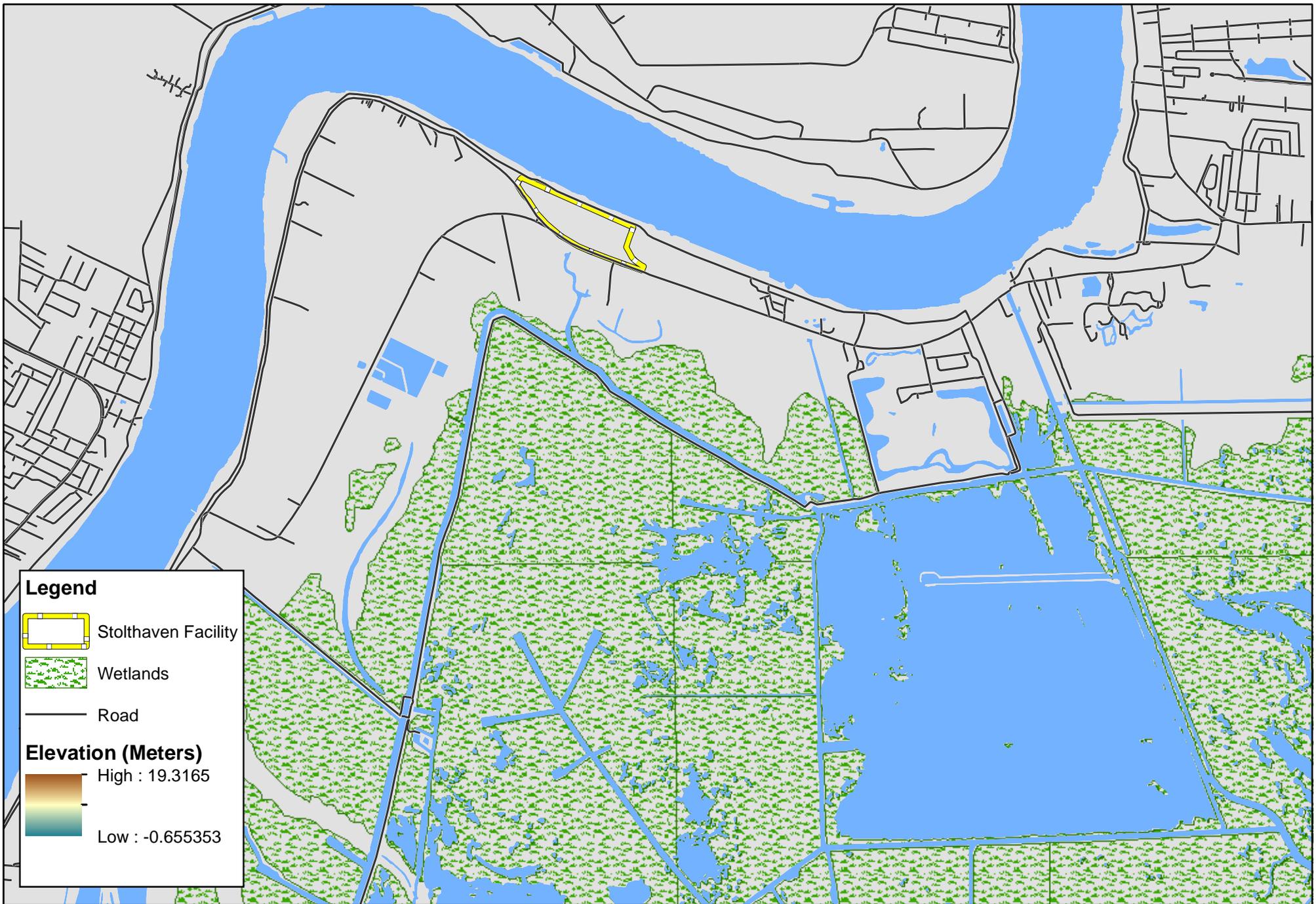
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

** H₂S is a natural product of organic matter decomposition and is unrelated to events at the Stolthaven Facility

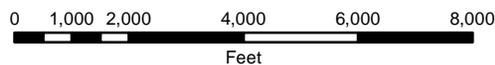
**Table 3
Analytical Sample Counts – September 28th 00:00 – 23:59**

Matrix	Number of Samples
Air	44
Residential Soil	15
Soil	1
Surface Water	2

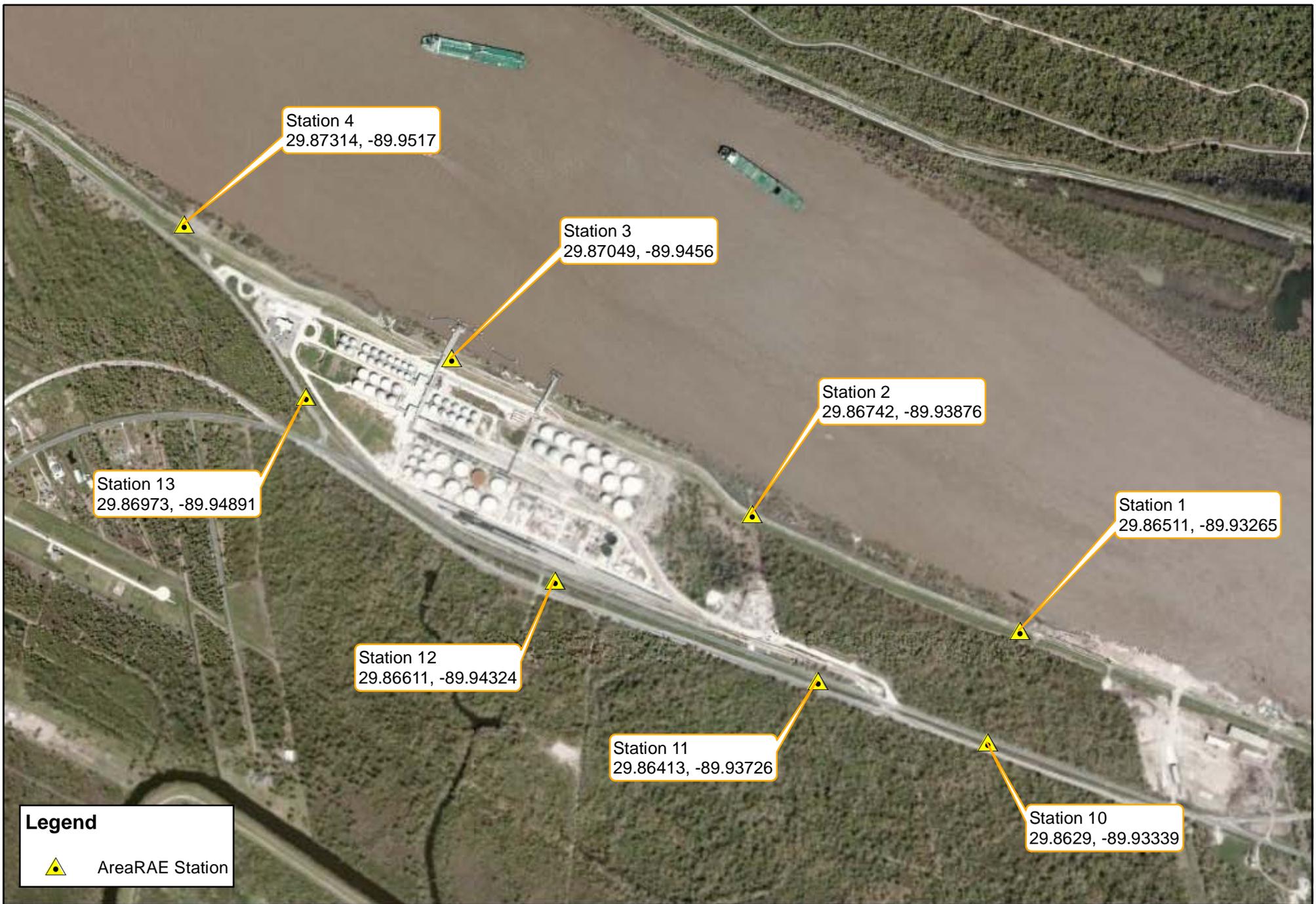
Appendix 1: Incident Maps



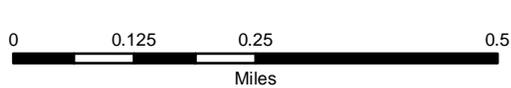
**Stolthaven Facility
Shaded Relief of Elevation**



	Stolthaven Braithwaite, LA
	Project No. 40365
	Plaquemines Parish Print Date: 9/28/2012

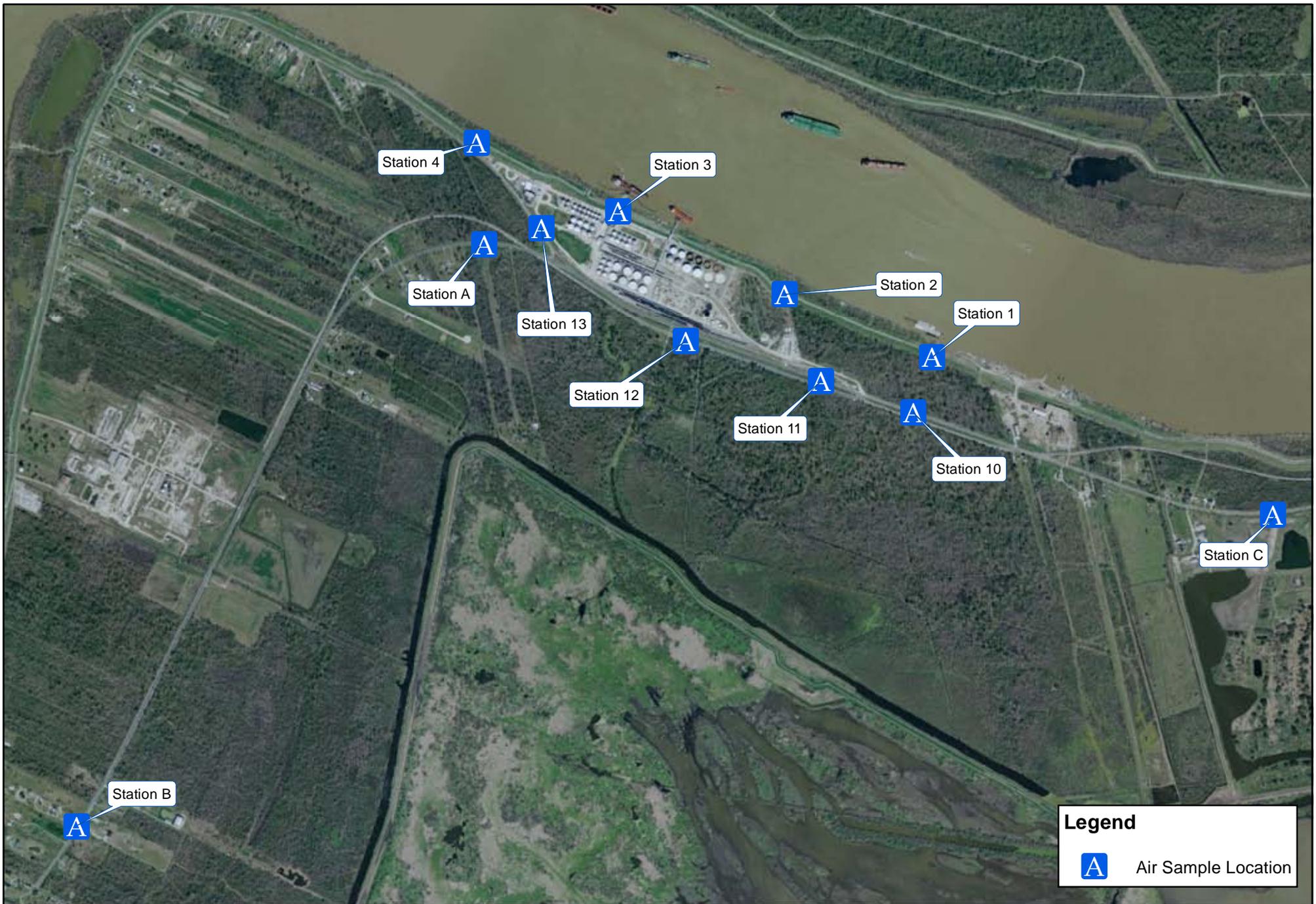


**Community
AreaRAE Station Locations**
September 21, 2012

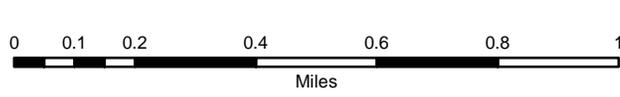


CTEH®
Project No.
40365

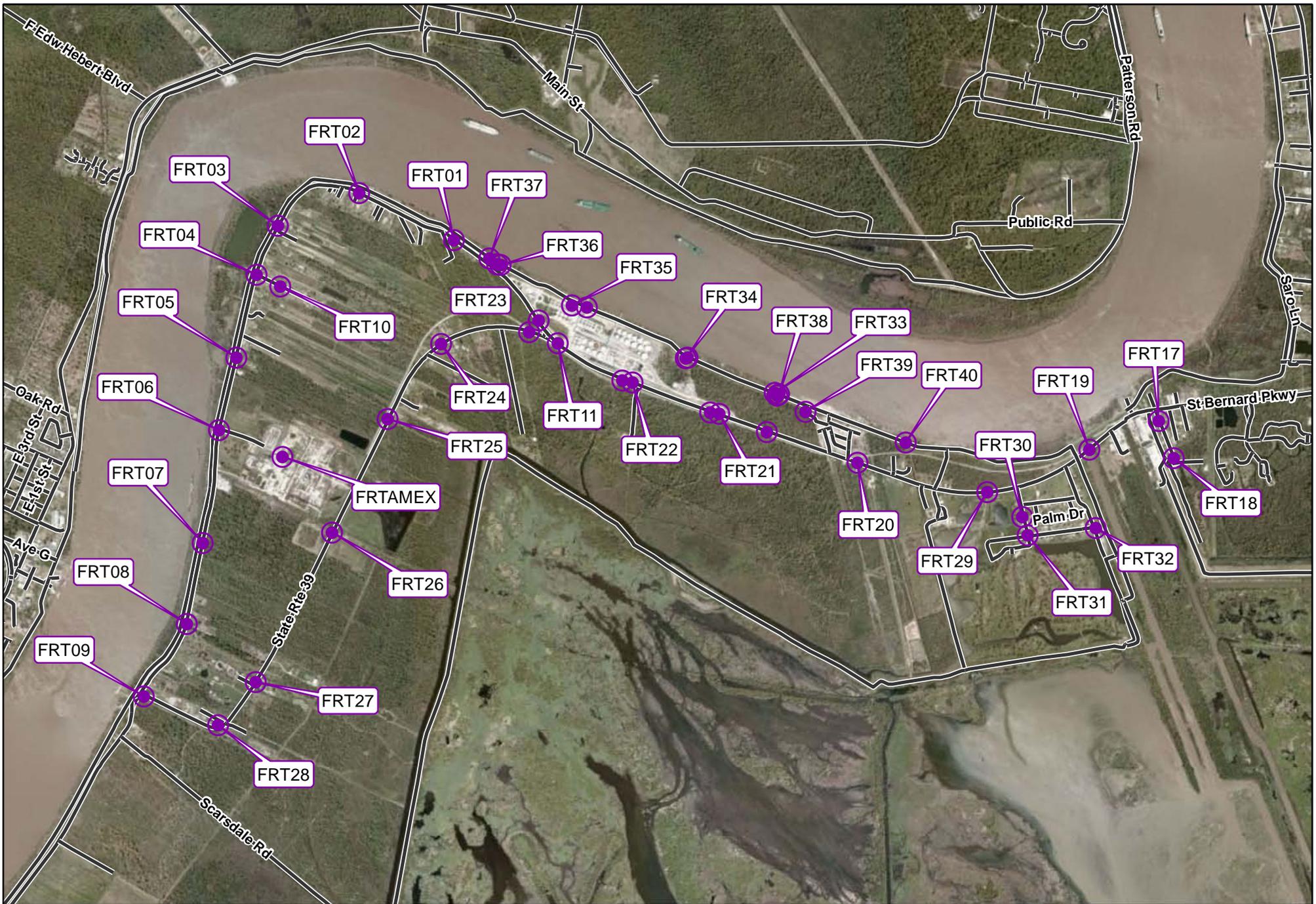
**Stolthaven
Braithwaite, LA**
Plaquemines Parish
Print Date: 9/26/2012



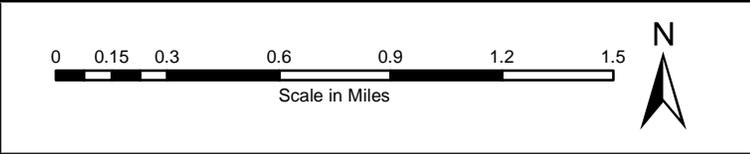
**Ambient Air
Analytical Sampling Locations**



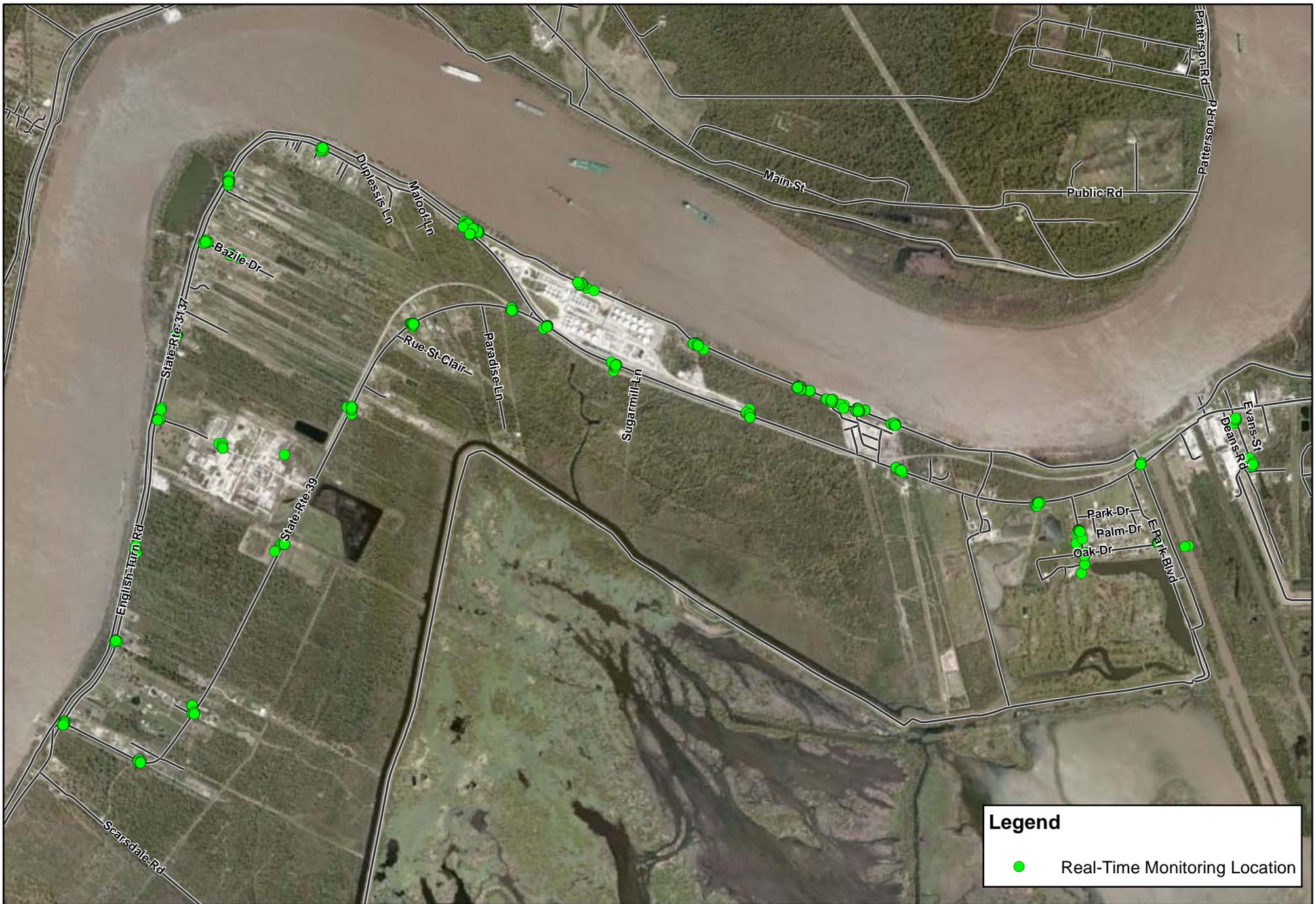
 Project No. 40365	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/28/2012



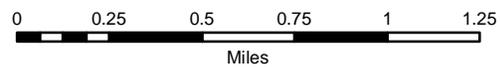
Community Fixed Real-Time Monitoring Locations



	Stolthaven
	Braithwaite, LA
Project No. 40365	Plaquemines Parish
	Print Date: 9/26/2012



Community Real-Time Monitoring Locations
9/28/2012



Legend

- Real-Time Monitoring Location

 Project No. 40365	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/29/2012

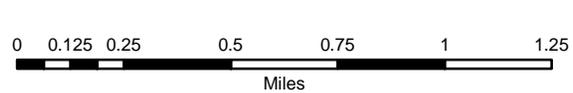


Legend

VOC Concentration

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

**Manually-Logged
Community VOC Concentrations**
9/28/2012



CTEH[®]
Project No.
40365

**Stolthaven
Braithwaite, LA**
Plaquemines Parish
Print Date: 9/29/2012