

**40365 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Community Air Monitoring and Sampling Results
October 1, 2012
PO# 12-H0408-MR**

This data report discusses community real-time air monitoring data collected between September 30th 00:00 and September 30th 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) 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 five AreaRAE units, these results are preliminary and may include drift in the instrument’s sensor. Additionally, these AreaRAE instruments are located adjacent to roads and are subject to detecting products of combustion due to vehicular emissions. A maximum VOC reading of 144.1 ppm was observed on AreaRAE Unit 3. At the time of this detection, CTEH[®] personnel were dispatched with a calibrated hand-held MultiRAE and confirmed this detection as AreaRAE sensor drift. No H₂S or LEL detections were observed within the community using real-time handheld or colorimetric tubes. Table 3 highlights analytical sample counts collected within air and residential soil. Appendix 1 shows incident site maps.

**Table 1
AreaRAE Summary – September 30th 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	VOC	4448	174	0.1 - 2.6 ppm
Unit 2	VOC	4622	1	1 - 1 ppm
Unit 3	VOC	4411	161	0.1 - 144.1 ppm
Unit 4	VOC	4291	194	0.1 - 1.4 ppm
Unit 10	VOC	1251	0	0 - 0 ppm
Unit 11	VOC	4393	0	0 - 0 ppm
Unit 12	VOC	4464	52	0.1 - 0.4 ppm
Unit 13	VOC	4522	0	0 - 0 ppm

***Detections may include drift events** - Drift is defined as any interference in the 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 30th 00:00 – 23:59**

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
H ₂ S**	184	0	NA	< 1.0 ppm
LEL	268	0	NA	< 1.0 %
VOC	268	0	NA	< 0.1 ppm

NA = not applicable

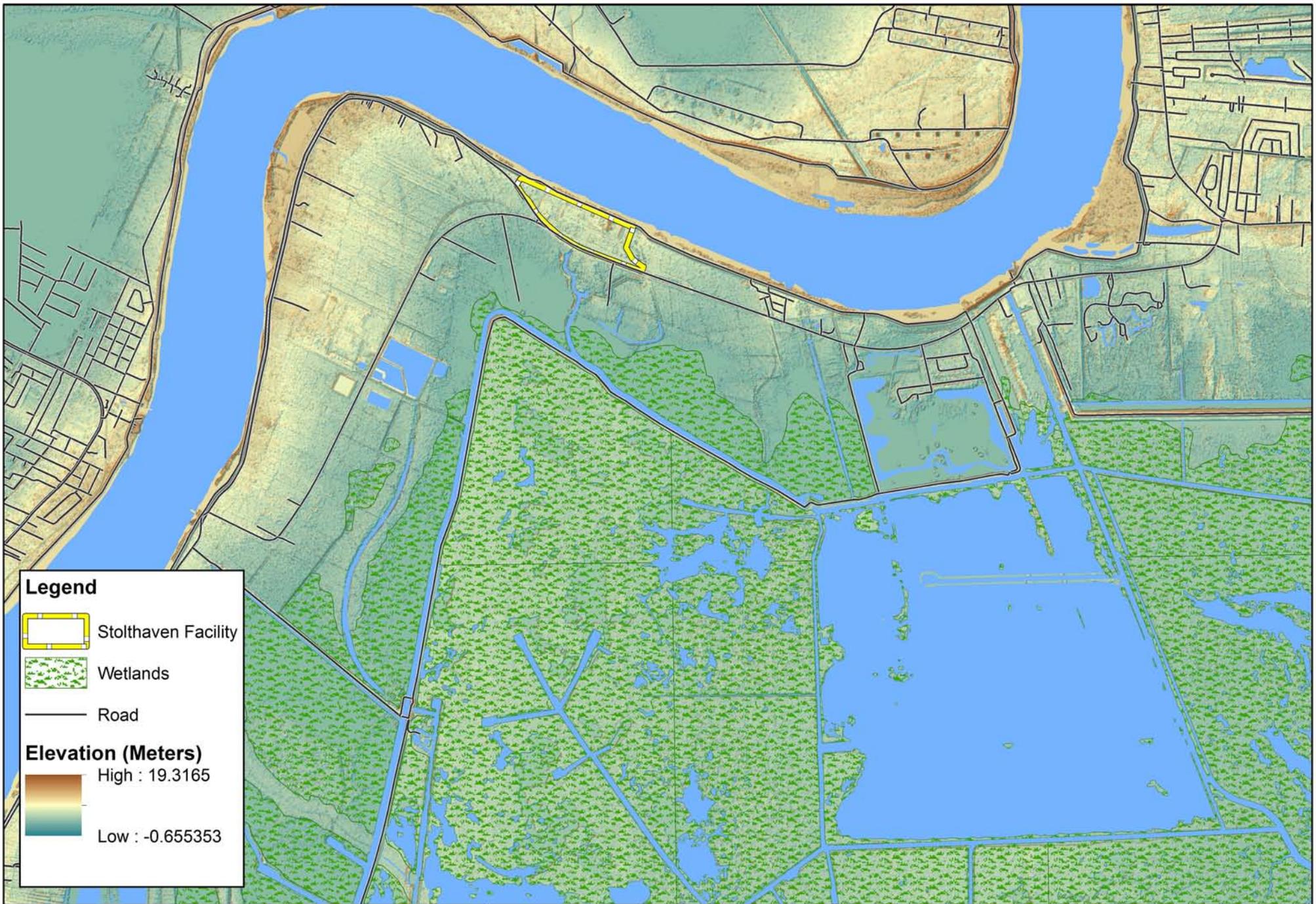
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

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

**Table 3
Analytical Sample Counts – September 30th 00:00 – 23:59**

Matrix	Number of Samples
Air	44
Residential Soil	15

Appendix 1: Incident Maps



Legend

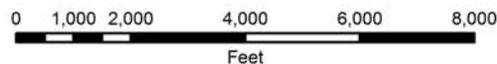
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



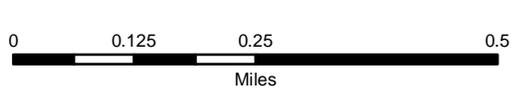
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



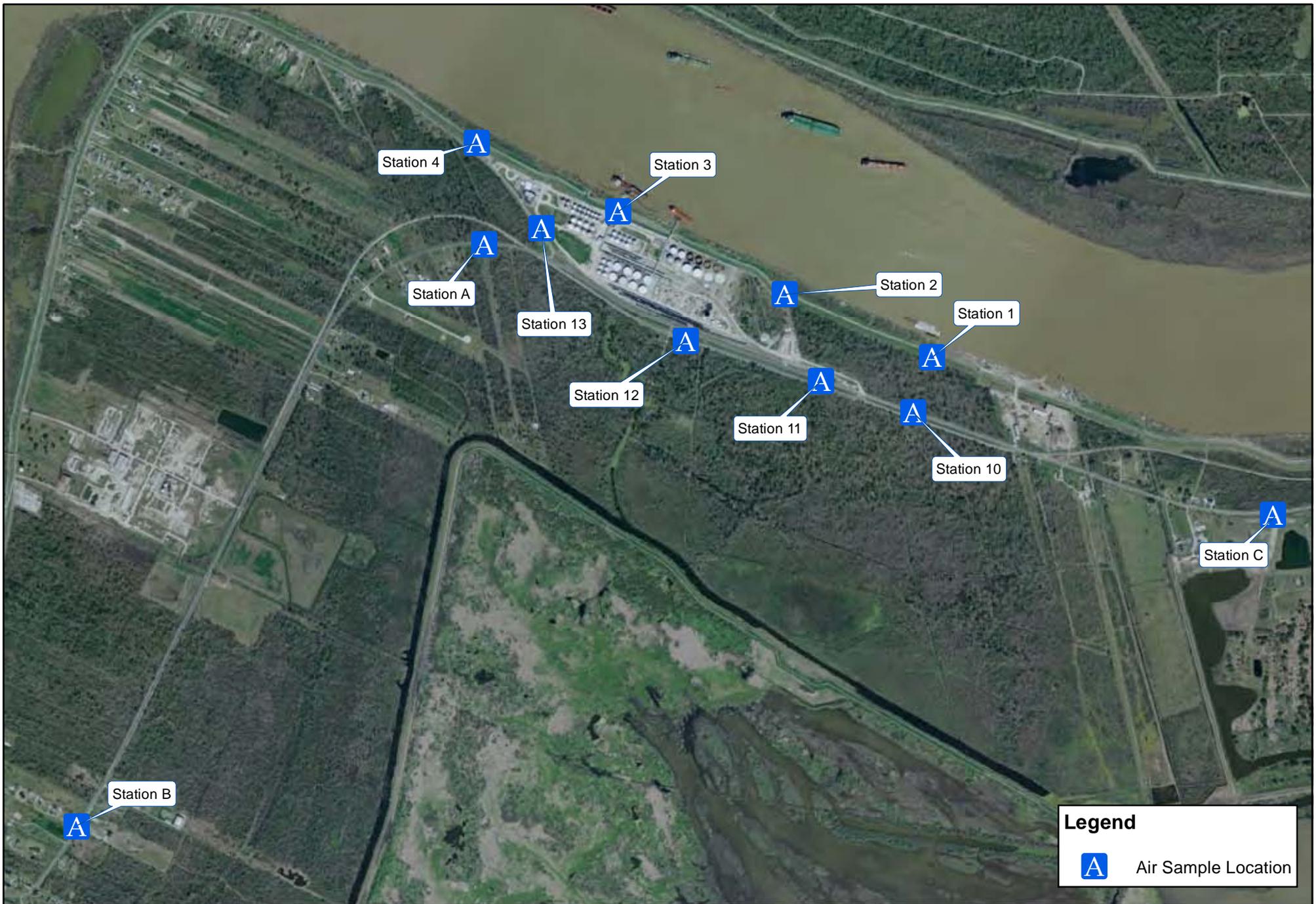
Legend

 AreaRAE Station

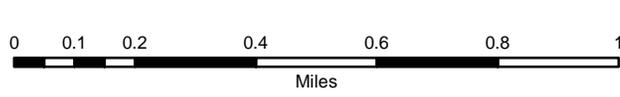
**Community
AreaRAE Station Locations**
September 21, 2012



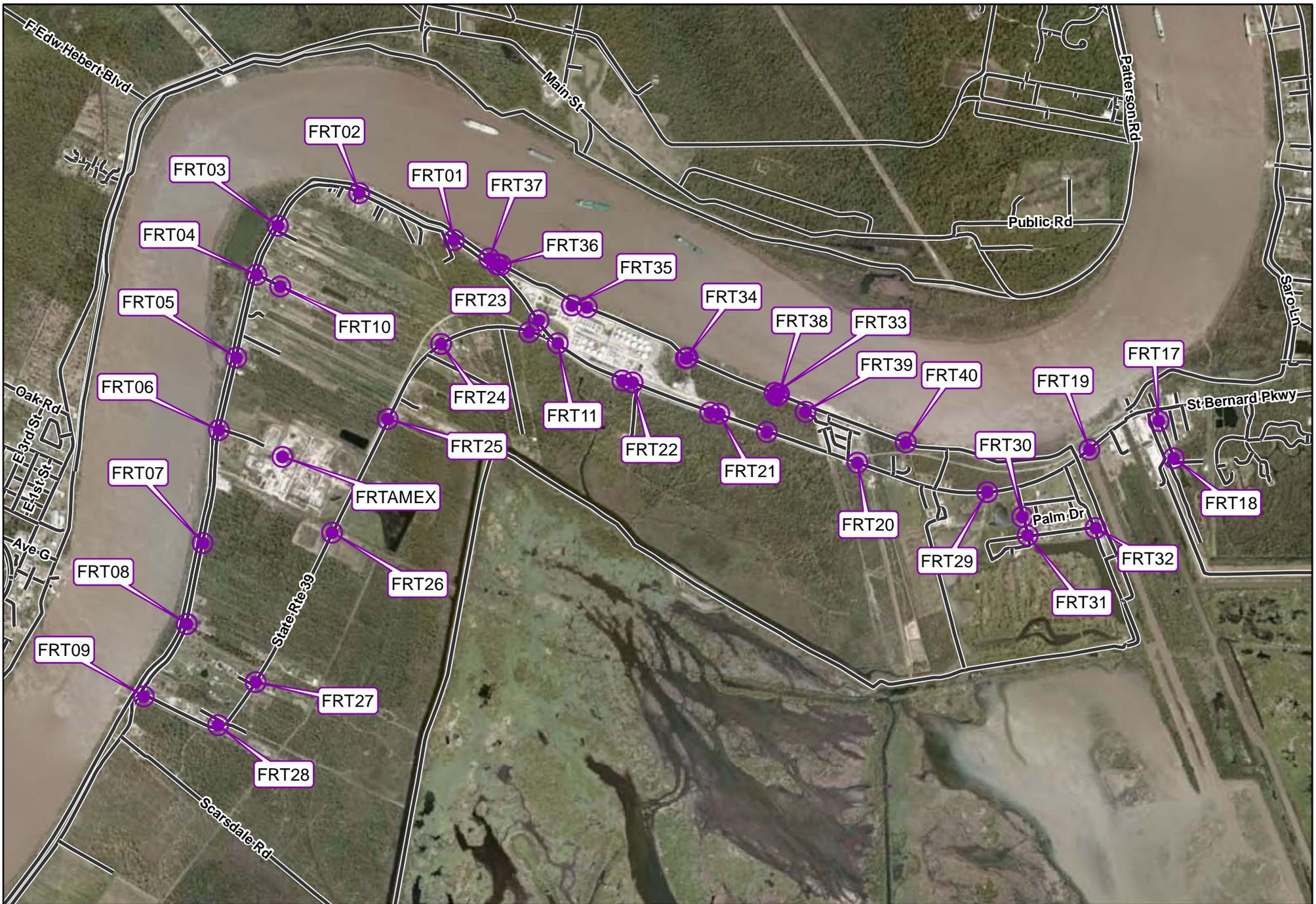
 Project No. 40365	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/26/2012



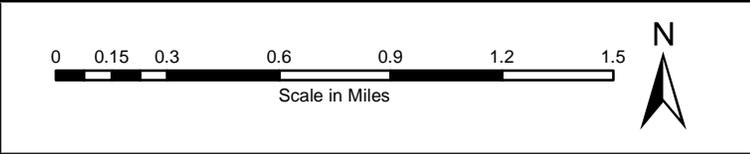
**Ambient Air
Analytical Sampling Locations**



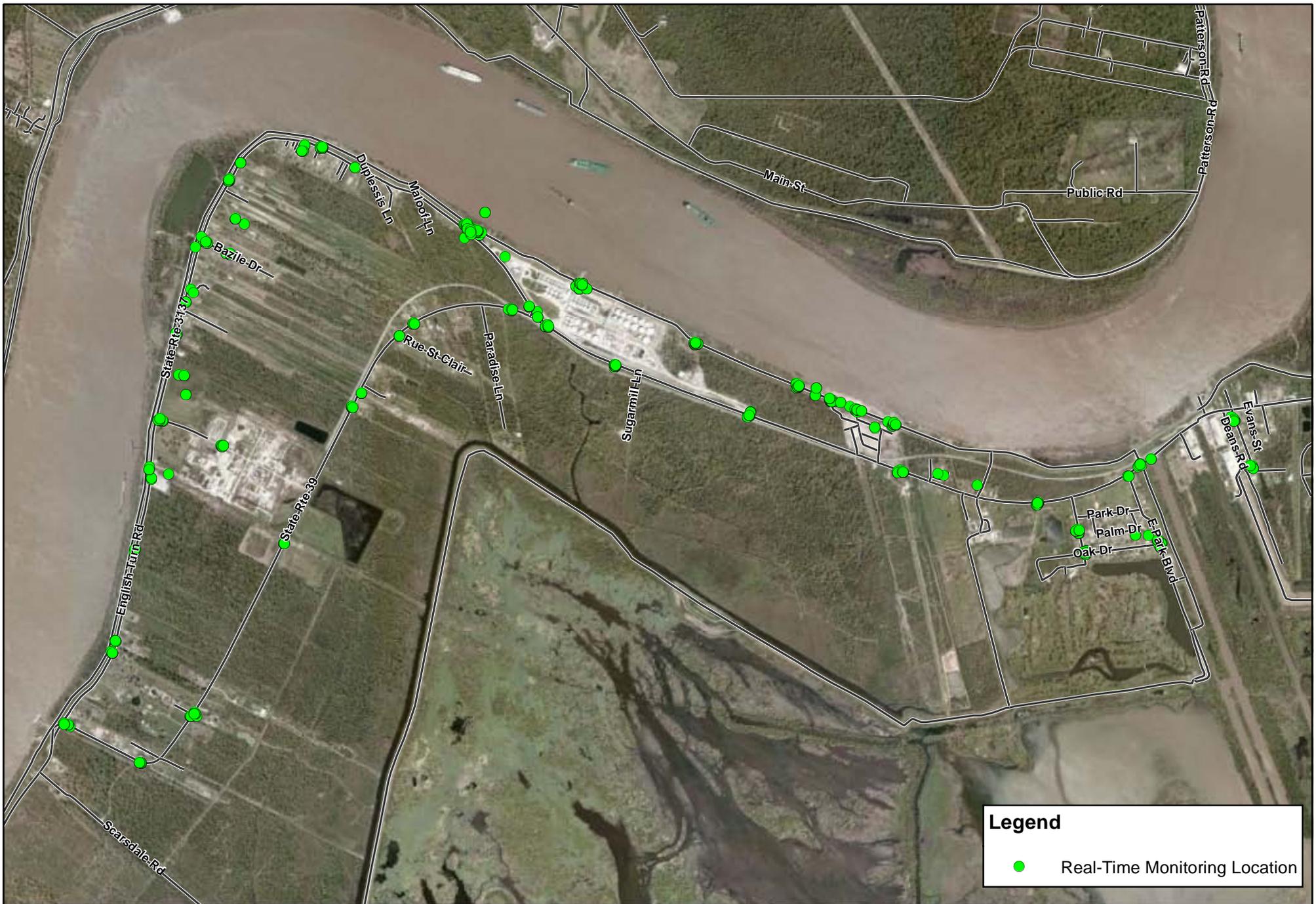
 Project No. 40365	Stolt Haven
	Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/28/2012



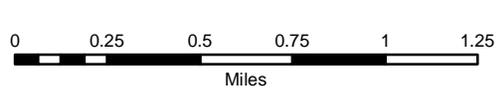
Community Fixed Real-Time Monitoring Locations



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



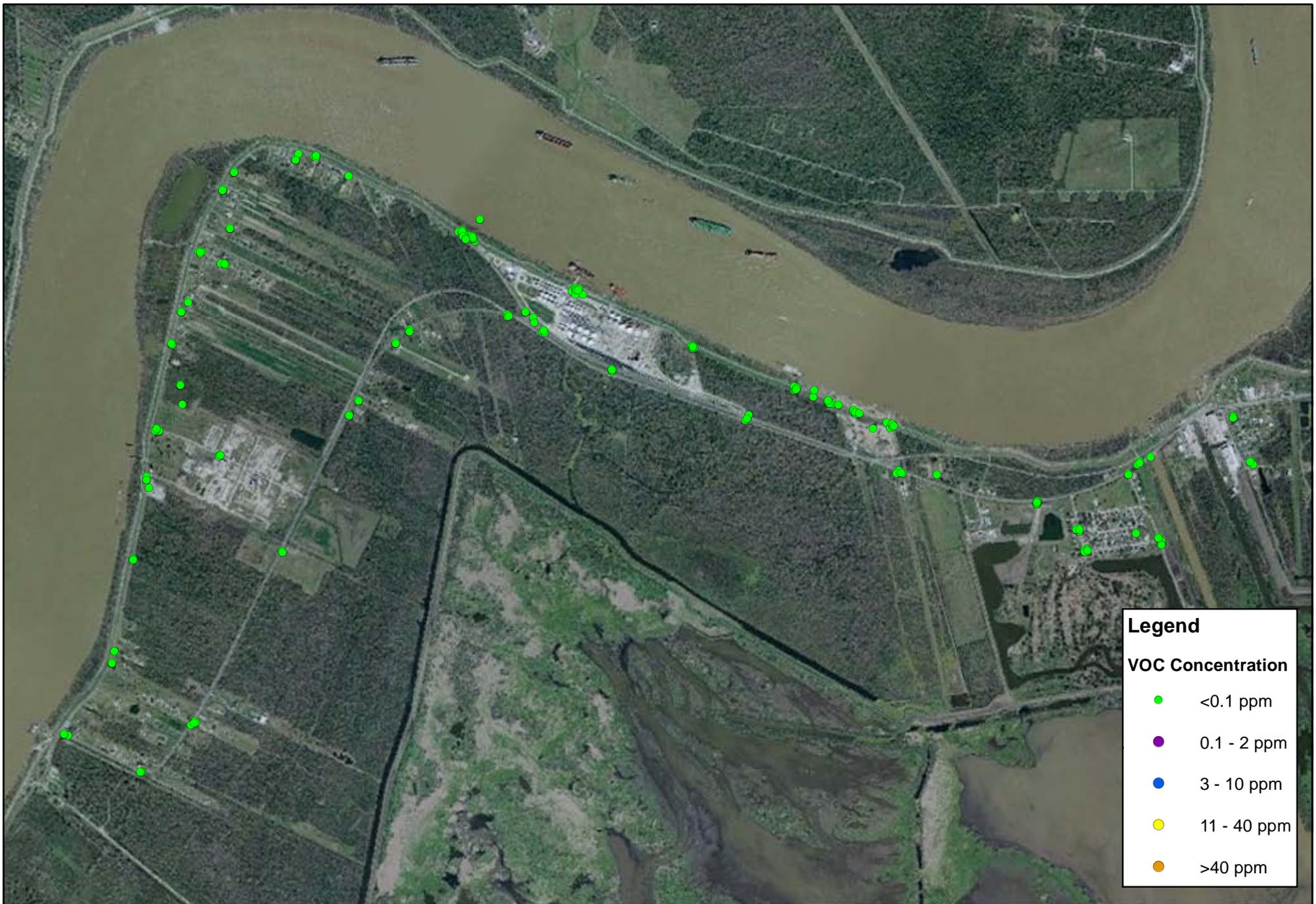
Community Real-Time Monitoring Locations
09/30/2012



Legend

- Real-Time Monitoring Location

 Project No. 40365	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 10/1/2012

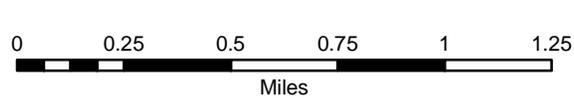


Legend

VOC Concentration

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

**Manually-Logged
Community VOC Concentrations**
9/30/2012



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40365

Stolthaven
Braithwaite, LA
Plaquemines Parish
Print Date: 10/1/2012