

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Community Air Monitoring and Sampling Results
September 23, 2012
PO# 12-H0408-MR**

This data report discusses community real-time air monitoring data collected between September 22nd 00:00 and September 22nd 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, and hydrogen sulfide (H₂S) using stationary AreaRAEs and/or hand-held instruments such as the MultiRAE and colorimetric detector tubes. While no formic acid-specific colorimetric detector tubes were utilized in the community, this analyte is detectible on the hand-held MultiRAE (11.7 eV). 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 six 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. While a single VOC detection was observed using real-time handheld instruments in the community; no detections of LEL and H₂S were noted. 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 22nd 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	VOC	4614	106	0.1 – 0.3 ppm
Unit 2	VOC	4502	691	0.1 – 15.2 ppm
Unit 3	VOC	5159	305	0.1 - 13.5 ppm
Unit 4	VOC	5876	846	0.1 - 1.2 ppm
Unit 10	VOC	2682	0	0 - 0 ppm
Unit 11	VOC	4843	61	0.1 - 0.8 ppm
Unit 13	VOC	5152	80	0.1 - 4.3 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 22nd 00:00 – 23:59

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
H2S	205	0	NA	< 1.0 ppm
LEL	216	0	NA	< 1.0 %
VOC	223	1	0.7 ppm	0.7 ppm

NA = not applicable

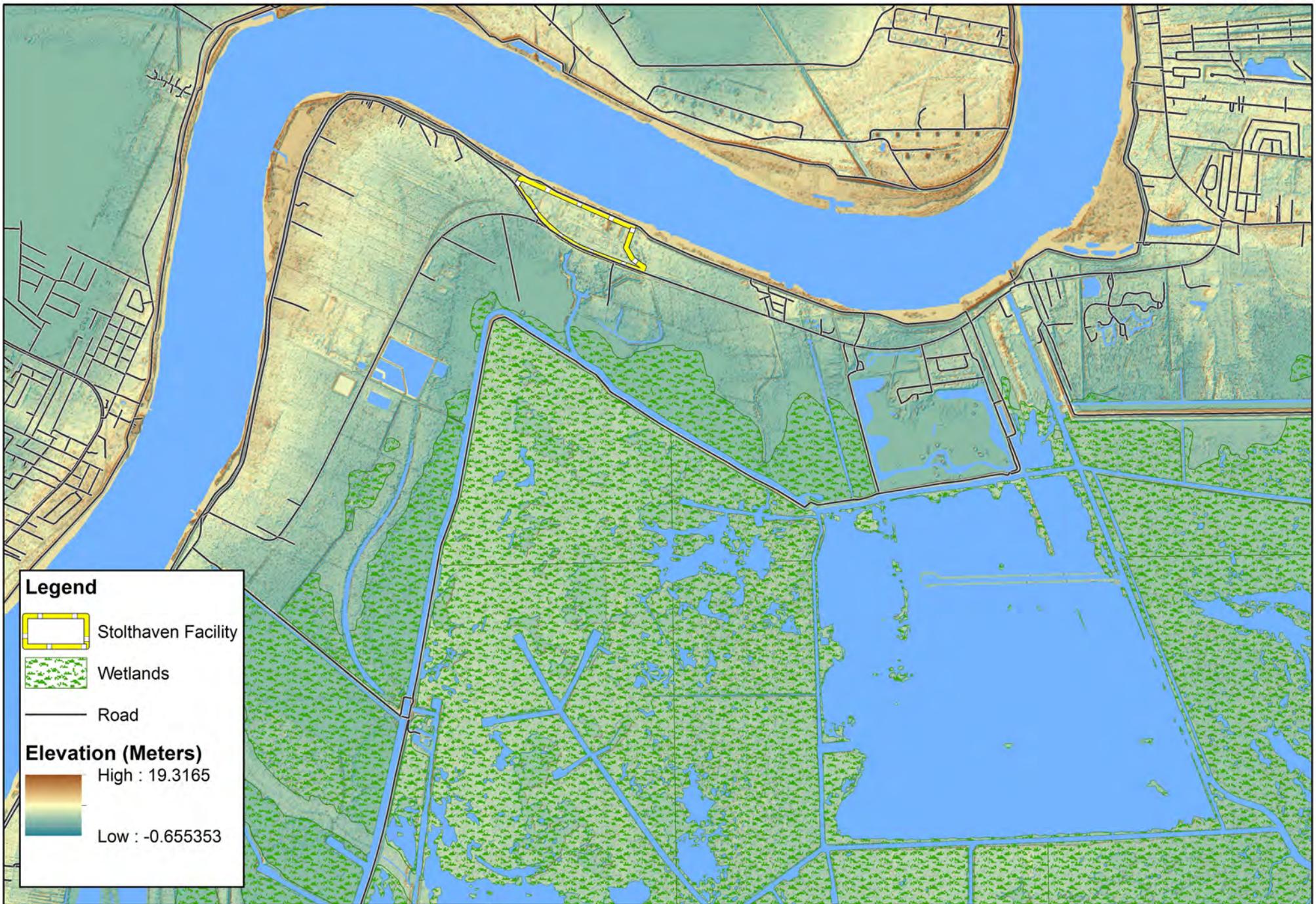
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

Table 3
Analytical Sample Counts – September 22nd 00:00 – 23:59

Matrix	Number of Samples
Air	44
Residential Soil	8
Offsite Soil	9
Offsite Surface Water	3

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

Appendix 1: Incident Maps



Legend

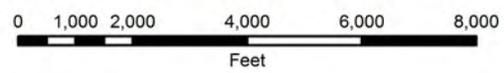
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

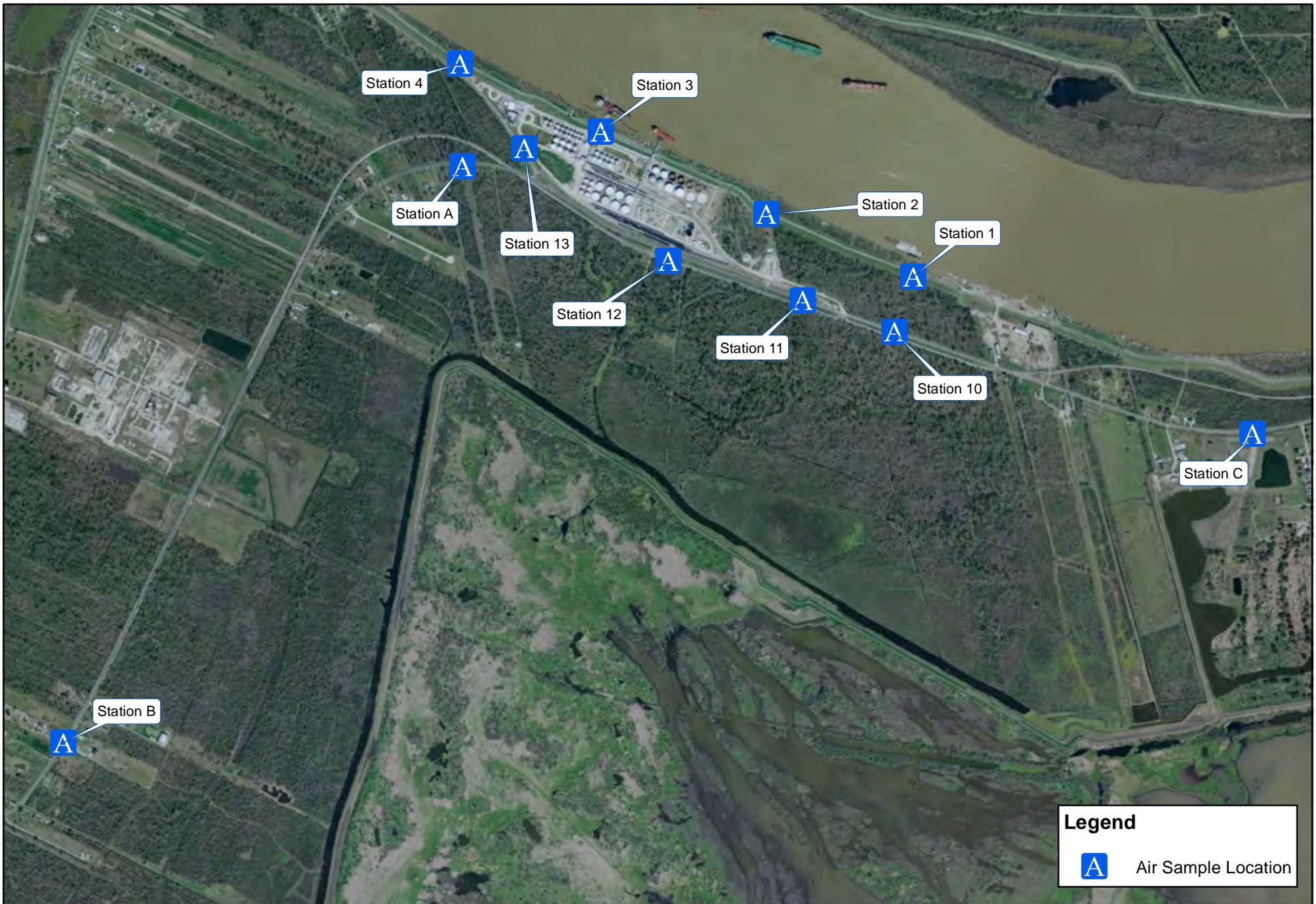
High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



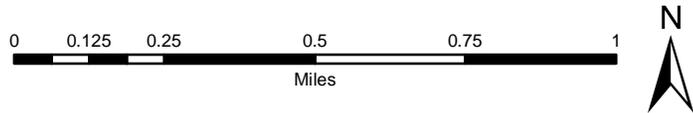
 Project No. 40355	Stolthaven Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/17/2012



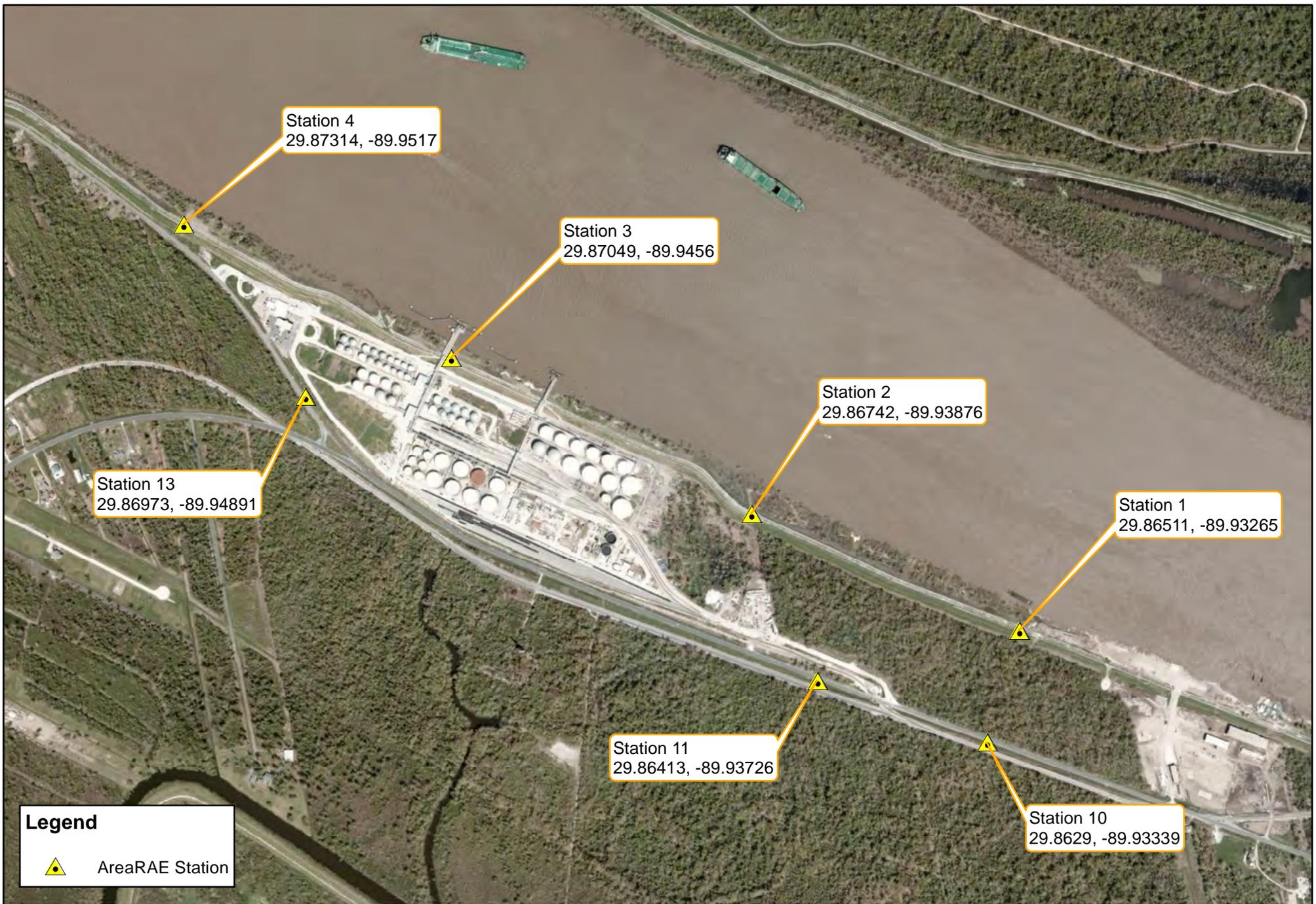
Legend

 Air Sample Location

Community Ambient Air Analytical Sampling Locations

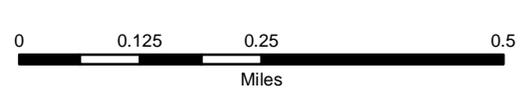


	Stolthaven
	Braithwaite, LA
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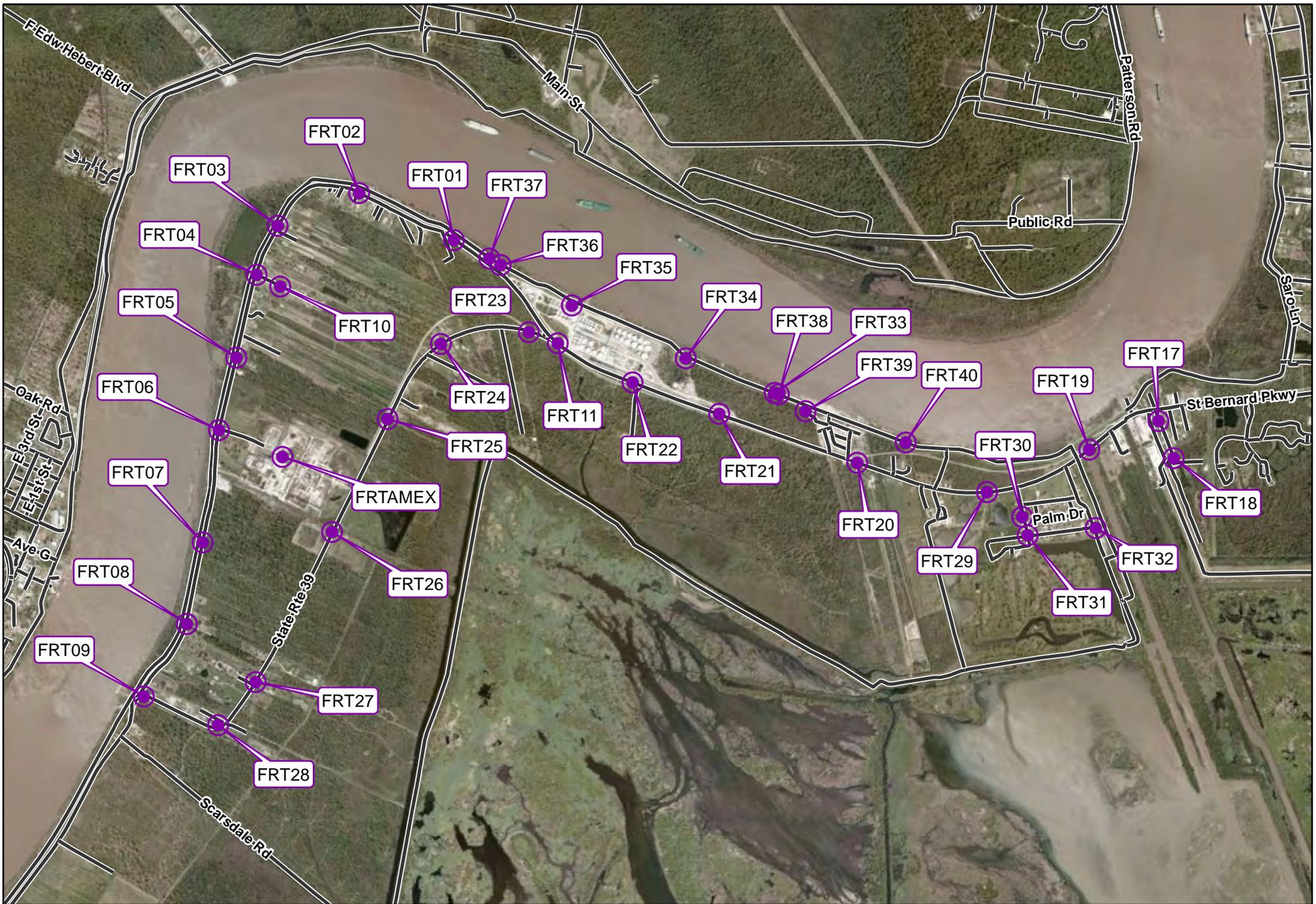


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 AreaRAE Station

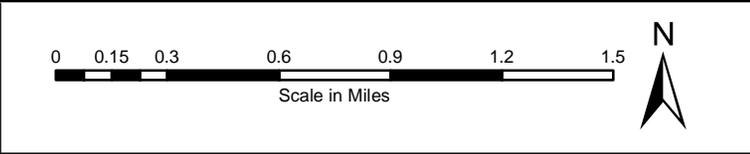
**Community
 AreaRAE Station Locations**
 September 21, 2012



 Project No. 40355	Stolthaven Braithwaite, LA
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Community Fixed Real-Time Monitoring Locations



	Stolthaven
	Braithwaite, LA
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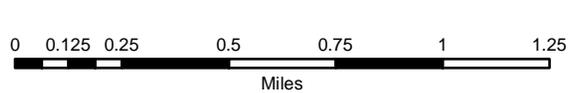


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VOC Concentration

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

**Manually-Logged
Community VOC Concentrations**
9/22/2012



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