

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

This data report discusses real-time air monitoring data collected within the work area between September 21th 00:00 and September 21th 23:59 in support of mitigation and remediation operations conducted near Stolthaven's facility near Braithwaite, LA.

Real-time air monitoring conducted within the work area and during entry activities resulted in reports of detections exceeding the action level required for the donning of respiratory protection. If workers were present at the time of the action level exceedence, they were advised to don respiratory protection or egress from the area. A maximum VOC detection of 15.5 ppm was observed around tank B80-1. At this time, CTEH[®] air monitoring personnel reported an isopropanol leak in the area estimated by site officials to be one to two gallons in volume. In response to this event, a chemical-specific action level for the donning of respiratory protection was derived based on the one-half the ACGIH TLV-TWA for 2-propanol. The maximum detection of 15.5 ppm did not exceed this isopropanol-specific action level value. While stationary AreaRAE results indicate VOC detections at ten locations within the work area, these results are preliminary and include drift in the instrument's chemical sensor. No detections of formic acid, LEL, methyl acrylate, or styrene were observed within the work area.

Real-time air monitoring for VOCs, LEL, formic acid, methyl acrylate, styrene, and chlorobenzene was conducted using stationary AreaRAEs and/or hand-held instruments such as the MultiRAE and colorimetric detector tubes. Table 1 and Table 2 display data summaries for hand-held instruments and AreaRAEs respectively. Table 3 highlights analytical sample counts collected in onsite air and waste characterization. Appendix 1 shows incident site maps.

**Table 1
Hand-held Real-time Summary – September 21th 00:00 – 23:59**

Entry Activities				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	14	0	NA	< 1.0%
VOC	22	1	2.2 ppm	2.2 ppm
Work Area				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
Chlorobenzene	10	0	NA	< 0.2 ppm
Formic Acid	14	0	NA	< 0.52 ppm
LEL	640	0	NA	< 1.0 %
Methyl Acrylate	7	0	NA	< 2.0 ppm
Styrene	2	0	NA	< 0.5 ppm
VOC	854	28	1.9 ppm	15.5 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 2
AreaRAE Summary – September 21th 00:00 – 23:59**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 14	LEL	4661	0	0 - 0 %
	VOC	4661	447	0.1 - 10.2 ppm
Unit 15	LEL	3928	0	0 - 0 %
	VOC	3928	468	0.1 - 4.4 ppm
Unit 16	LEL	4812	0	0 - 0 %
	VOC	4812	1666	0.1 - 2.4 ppm
Unit 17	LEL	4753	0	0 - 0 %
	VOC	4753	697	0.1 - 3.5 ppm
Unit 18	LEL	4041	0	0 - 0 %
	VOC	4041	625	0.1 - 1.8 ppm
Unit 19	LEL	4322	0	0 - 0 %
	VOC	4322	934	0.2 - 16.8 ppm
Unit 20	LEL	4083	0	0 - 0 %
	VOC	4083	32	8.4 - 11.3 ppm
Unit 21	LEL	4459	0	0 - 0 %
	VOC	4459	964	0.1 - 7.4 ppm
Unit 22	LEL	4803	0	0 - 0 %
	VOC	4803	0	0 - 0 ppm
Unit 23	LEL	4740	0	0 - 0 %
	VOC	4740	0	0 - 0 ppm
Unit 24	LEL	4904	0	0 - 0 %
	VOC	4904	1	0.1 - 0.1 ppm
Unit 25	LEL	4971	0	0 - 0 %
	VOC	4971	277	0.1 - 6.3 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.

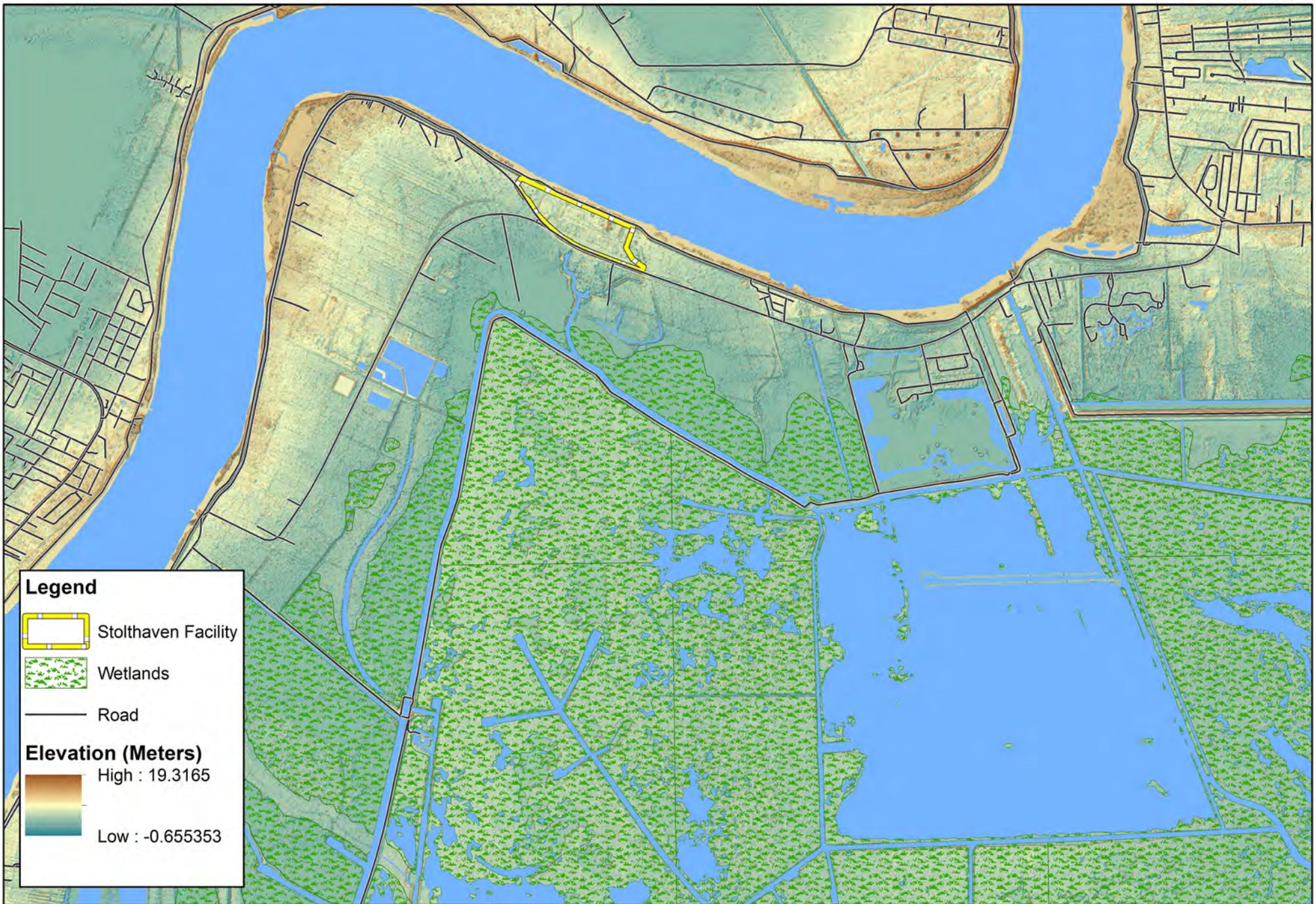
Table 3
Analytical Sample Counts – September 21th 00:00 – 23:59

Matrix	Number of Samples
Air	4
Waste Characterization	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

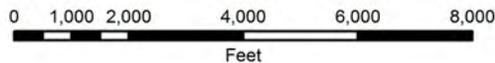
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



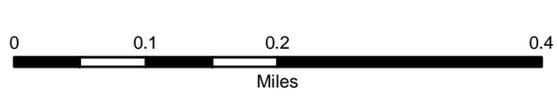
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



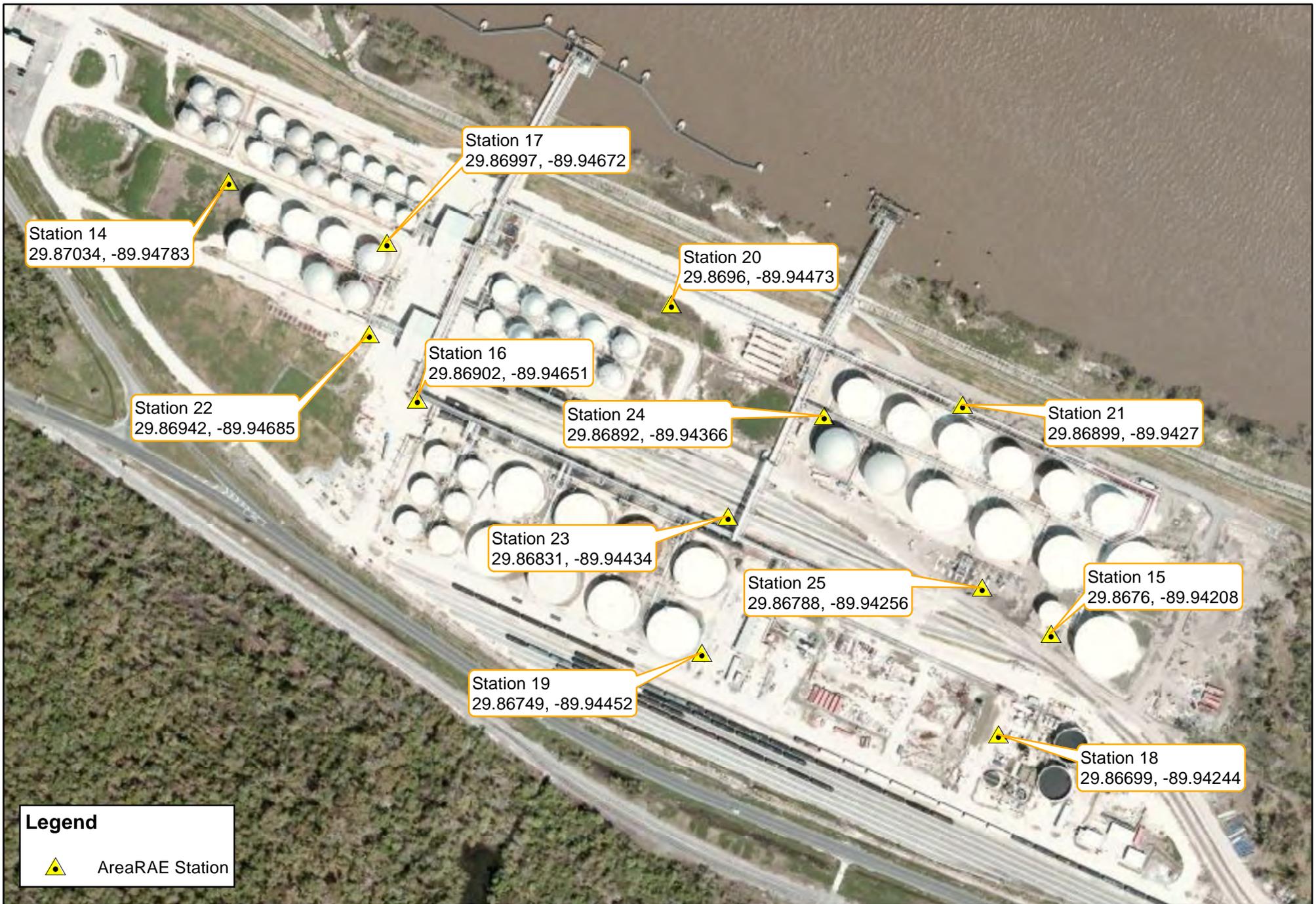
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 Air Sample Location

**Ambient Air
Analytical Sampling Locations**



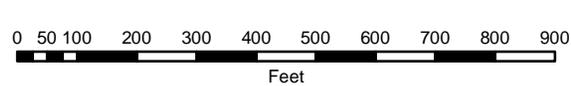
 Project No. 40355	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/18/2012



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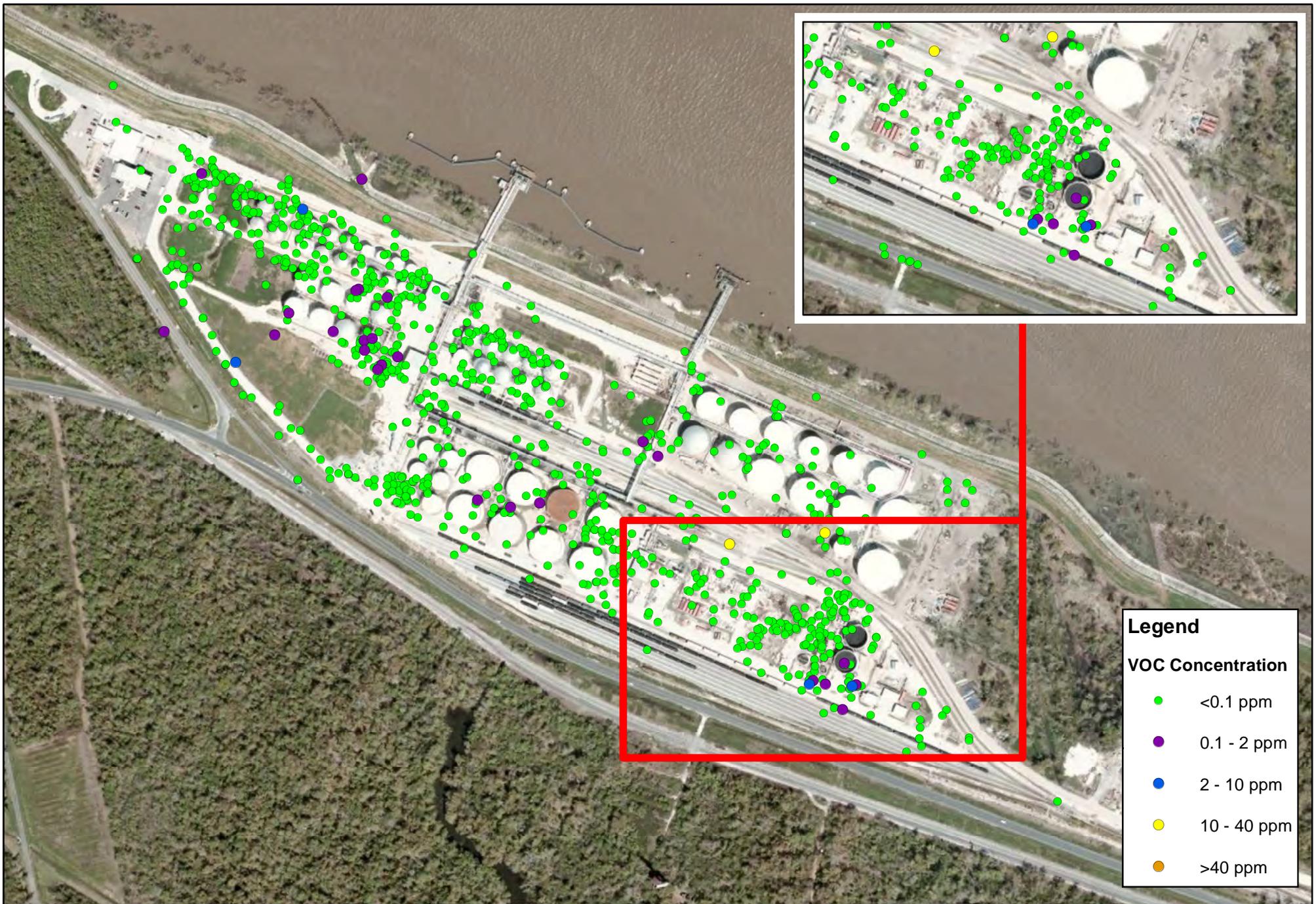
 AreaRAE Station

Work Area
AreaRAE Station Locations
 September 21, 2012



 Project No. 40355	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/21/2012



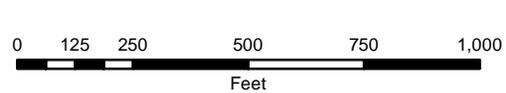


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VOC Concentration

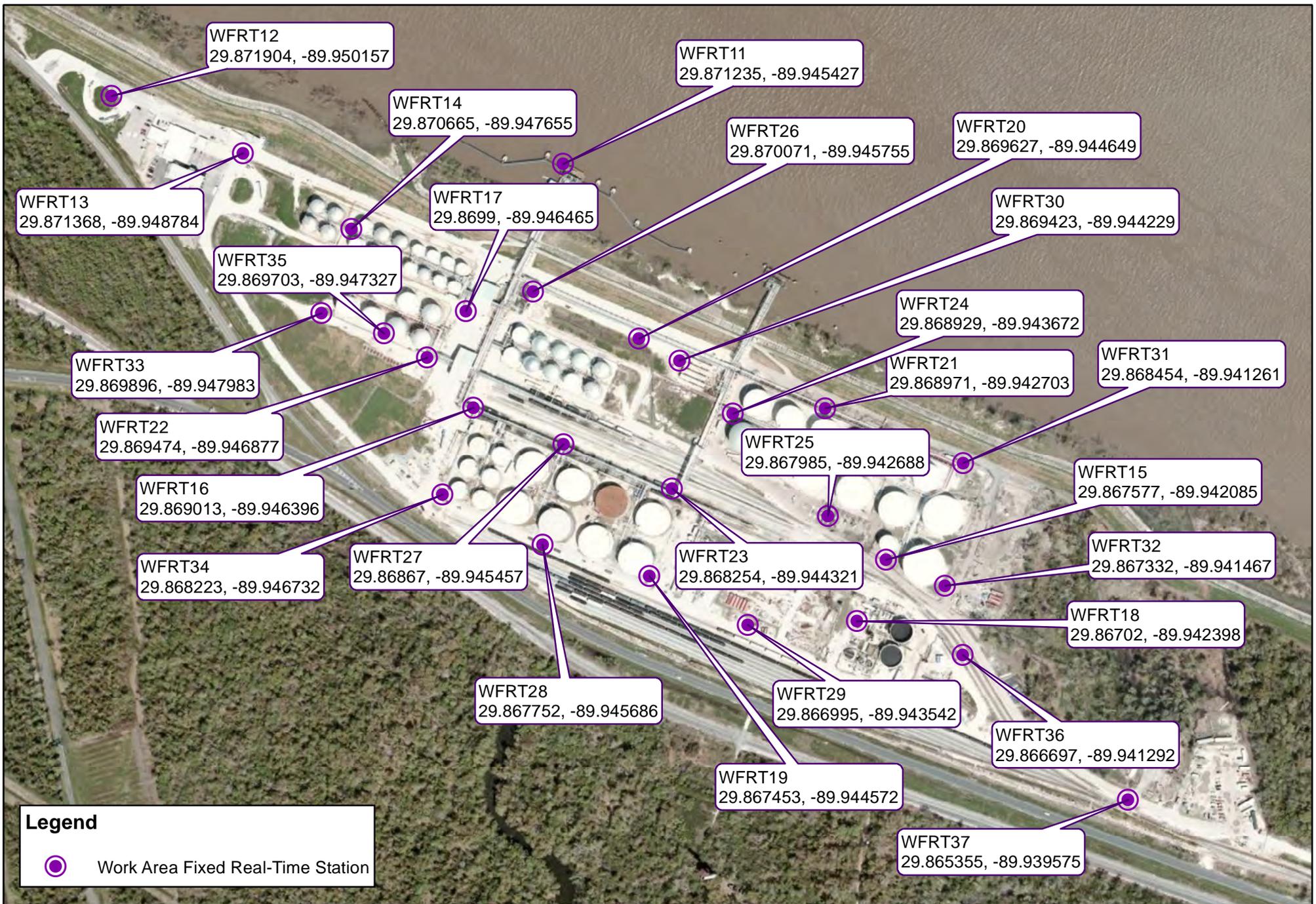
- <0.1 ppm
- 0.1 - 2 ppm
- 2 - 10 ppm
- 10 - 40 ppm
- >40 ppm

**Manually-Logged
Work Area VOC Concentrations**
9/21/2012



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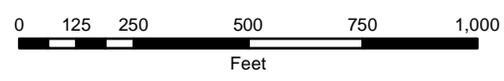
**Stolthaven
Braithwaite, LA
Plaquemines Parish
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● Work Area Fixed Real-Time Station

**Work Area
Fixed Real-Time Station**
September 21, 2012



	Stolthaven
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