

**40365 Braithwaite, LA  
Stolthaven Terminal Facility  
Onsite Summary of Air Monitoring and Sampling Results  
September 24, 2012  
PO# 12-H0408-MR**

This data report discusses real-time air monitoring data collected within the work area between September 23rd 00:00 and September 23rd 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 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. While stationary AreaRAE results indicate elevated LEL and VOC detections at ten locations within the work area, these results are preliminary and include drift in the instrument’s chemical sensors. No hand-held MultiRAE detections of LEL were observed within the work area.

Real-time air monitoring for VOCs, LEL, and chlorobenzene was conducted 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 onsite, this analyte is detectible as a VOC on the hand-held MultiRAE with an 11.7 eV lamp. 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, soil and waste characterization. Appendix 1 shows incident site maps.

**Table 1  
Hand-held Real-time Summary – September 23<sup>rd</sup> 00:00 – 23:59**

<b>Work Area</b>				
<b>Analyte</b>	<b>Number of Readings</b>	<b>Number of Detections</b>	<b>Average Concentration of Detections</b>	<b>Highest Concentration</b>
Chlorobenzene	1	0	NA	< 0.2 ppm
LEL	734	0	NA	< 1.0 %
VOC	820	5	1.4 ppm	2.0 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 23<sup>rd</sup> 00:00 – 23:59**

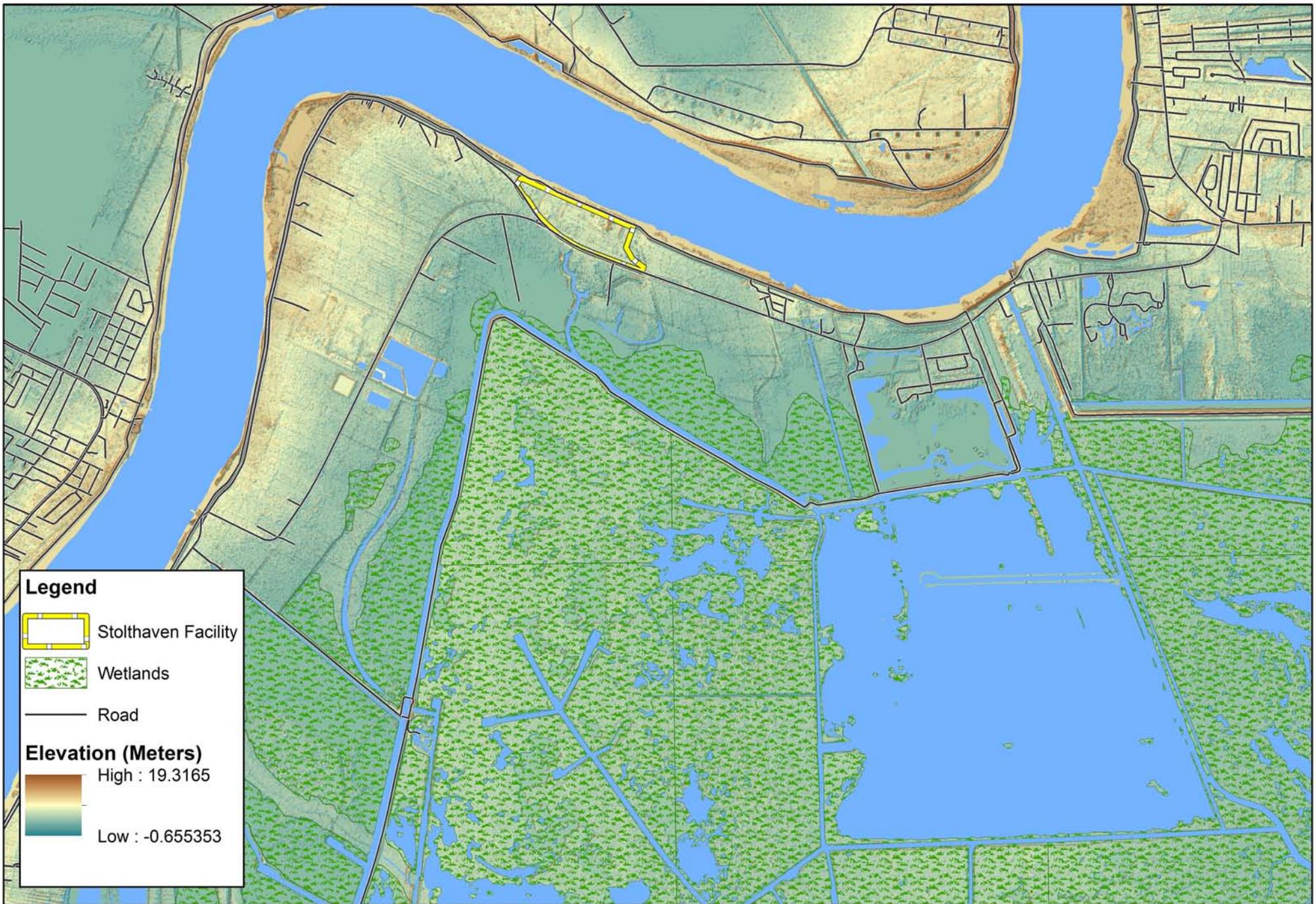
Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 14	LEL	4960	0	0 - 0 %
	VOC	4960	9	0.6 – 2.0 ppm
Unit 15	LEL	4784	0	0 - 0 %
	VOC	4784	9	0.2 - 4.2 ppm
Unit 16	LEL	4932	0	0 - 0 %
	VOC	4932	249	0.1 - 2.4 ppm
Unit 17	LEL	4925	0	0 - 0 %
	VOC	4925	235	0.1 - 12.9 ppm
Unit 18	LEL	4988	89	2.4 - 3.6 %
	VOC	4988	97	0.1 - 0.8 ppm
Unit 19	LEL	4740	0	0 - 0 %
	VOC	4740	0	0 - 0 ppm
Unit 20	LEL	5022	0	0 - 0 %
	VOC	5022	10	0.7 - 1.4 ppm
Unit 21	LEL	3938	0	0 - 0 %
	VOC	3938	7	0.2 - 2.3 ppm
Unit 22	LEL	5013	0	0 - 0 %
	VOC	5013	15	0.1 - 1.5 ppm
Unit 23	LEL	2300	0	0 - 0 %
	VOC	2300	432	0.1 - 64.8 ppm
Unit 24	LEL	4864	0	0 - 0 %
	VOC	4864	121	0.1 - 0.9 ppm
Unit 25	VOC	4752	0	0 - 0 %

**\*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 23<sup>nd</sup> 00:00 – 22:59**

<b>Matrix</b>	<b>Number of Samples</b>
Air	4
Soil	8
Waste Characterization	4

# Appendix 1: Incident Maps



**Legend**

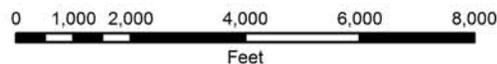
-  Stolthaven Facility
-  Wetlands
-  Road

**Elevation (Meters)**

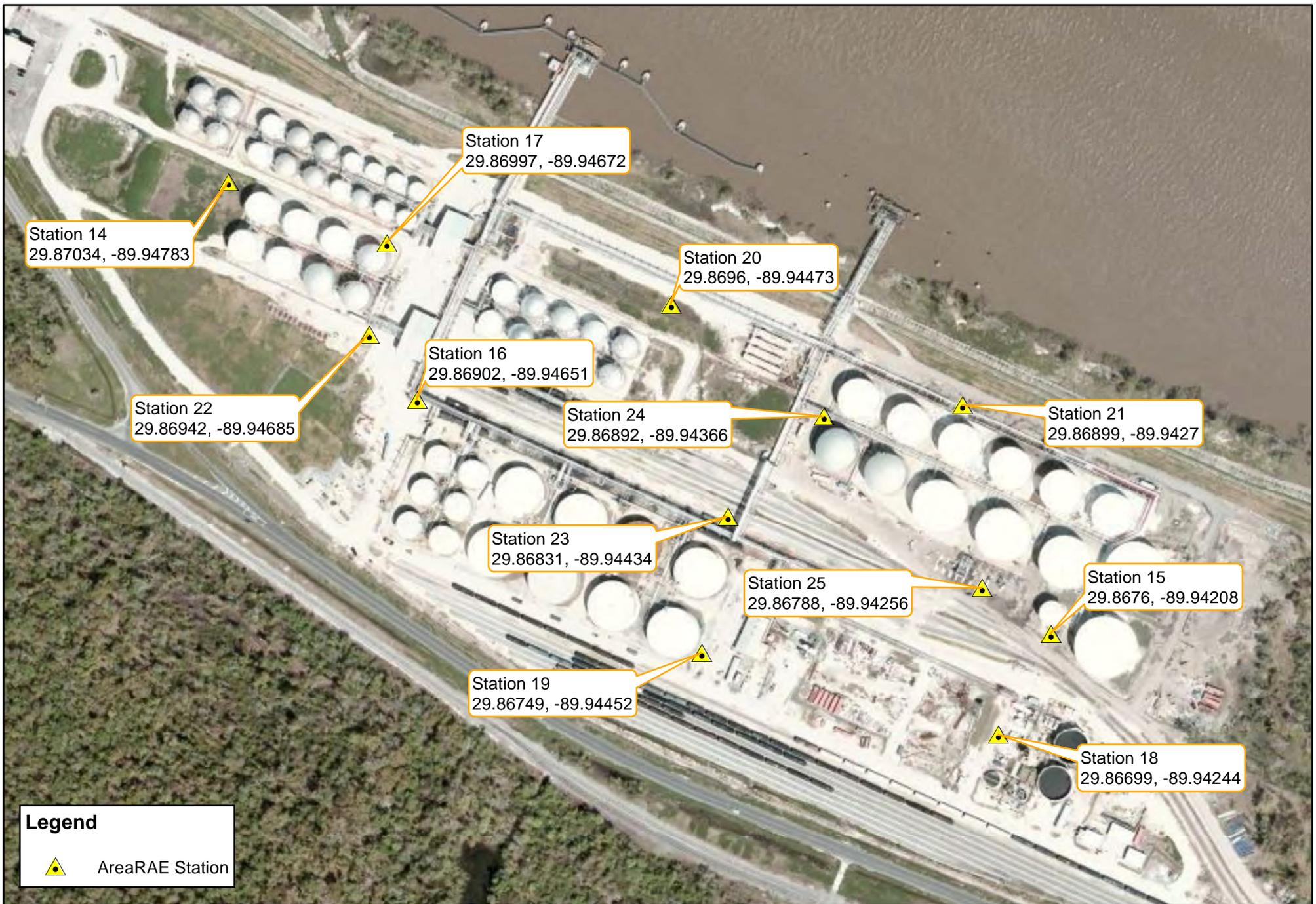
High : 19.3165

Low : -0.655353

**Stolthaven Facility  
Shaded Relief of Elevation**



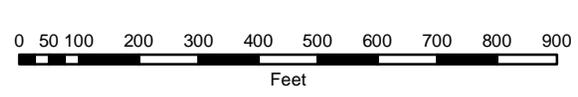
 Project No. <b>40355</b>	<b>Stolthaven</b> <b>Braithwaite, LA</b>
	<b>Plaquemines Parish</b>
	<b>Print Date: 9/17/2012</b>



**Legend**

 AreaRAE Station

**Work Area**  
**AreaRAE Station Locations**  
 September 21, 2012



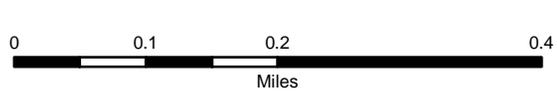
 Project No. <b>40355</b>	<b>Stolthaven</b> <b>Braithwaite, LA</b>
	<b>Plaquemines Parish</b> <b>Print Date: 9/21/2012</b>



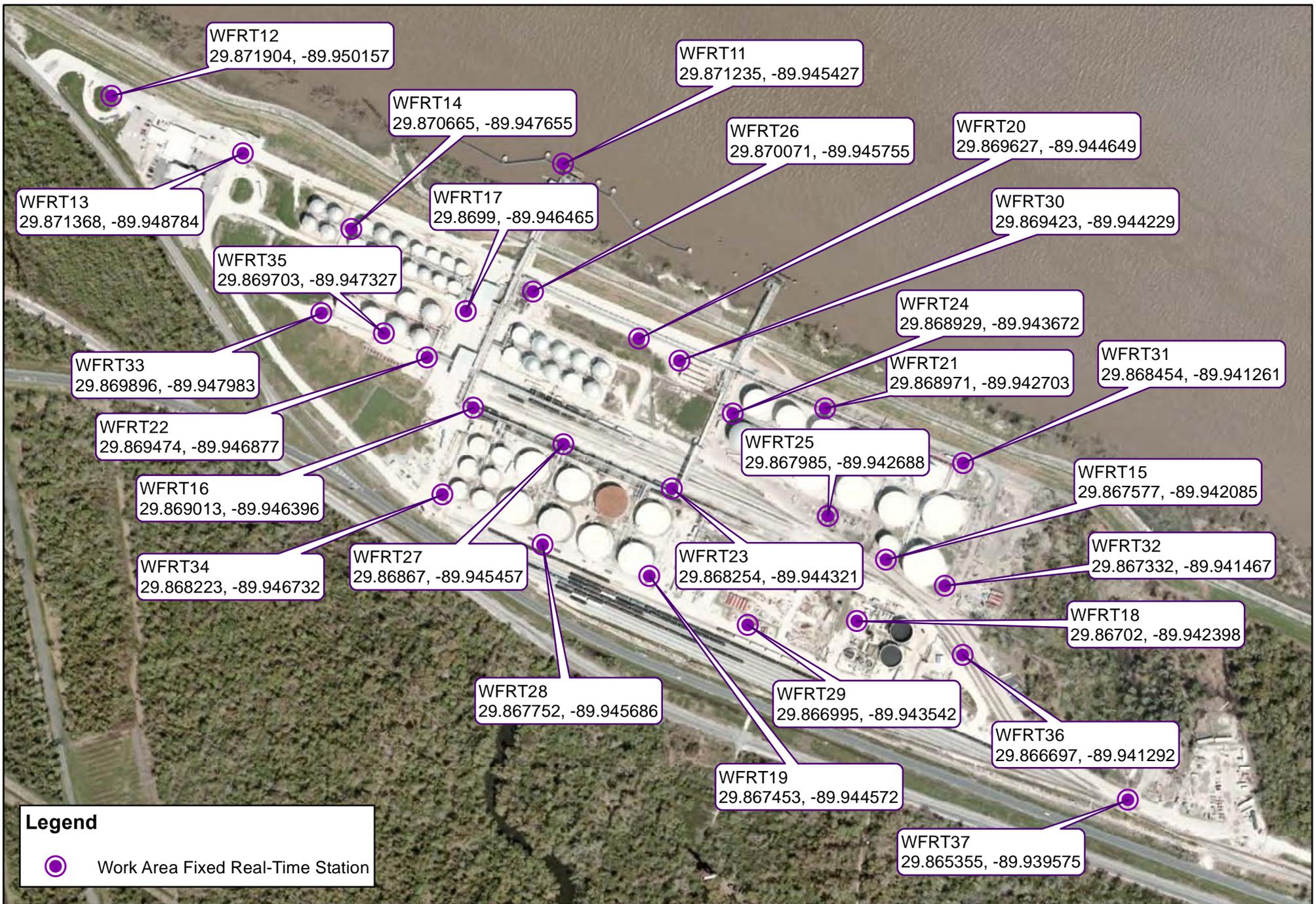
**Legend**

 Air Sample Location

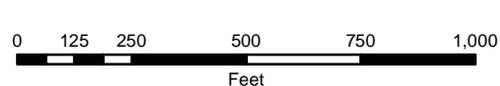
**Ambient Air  
Analytical Sampling Locations**



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



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



**CTEH**  
Project No.  
**40355**

<b>Stolthaven</b>
<b>Braithwaite, LA</b>
<b>Plaquemines Parish</b>
<b>Print Date: 9/23/2012</b>



**Legend**

- Real-Time Monitoring Location

**Work Area**  
**Real-Time Monitoring Locations**  
 9/23/2012



 Project No. <b>40355</b>	<b>Stolthaven</b> <b>Braithwaite, LA</b>
	<b>Plaquemines Parish</b> <b>Print Date: 9/24/2012</b>

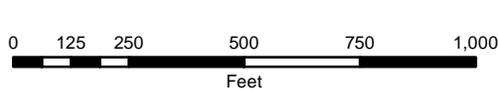


**Legend**

**VOC Concentration**

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

**Manually-Logged  
Work Area VOC Concentrations**  
9/23/2012



**CTEH<sup>®</sup>**  
Project No.  
**40355**

**Stolthaven  
Braithwaite, LA**  
**Plaquemines Parish**  
**Print Date: 9/24/2012**