

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

This data report discusses real-time air monitoring data collected within the work area 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.

Real-time hand-held air monitoring reported a single VOC detection exceeding the action level for donning respiratory protection within the work area on September 30th. At the time of this detection, CTEH[®] personnel noted that workers were not present and that no work activity was occurring. While stationary AreaRAE results indicate detections of VOCs and/or LEL at 10 locations within the work area, these results are preliminary and may include drift in the instrument's chemical sensors. If VOC or LEL detections were observed, CTEH[®] personnel were dispatched to the AreaRAE location for further evaluation. While a series of LEL detections were observed on AreaRAE Unit 17, these readings were not related to events occurring at the Stolthaven Facility as CTEH[®] personnel noted that these detections were the result of residual gas leftover from the calibration process.

Real-time air monitoring for VOCs and LEL was conducted using stationary AreaRAEs and/or hand-held instruments including the MultiRAE. When appropriate, a Multi-Rae (11.7 eV lamp) was utilized to monitor for formic acid in areas located near the formic acid scrubber. Table 1 and Table 2 display data summaries for hand-held instruments and AreaRAEs respectively. Table 3 highlights analytical sample counts collected for onsite air, product quality and waste characterization. Appendix 1 shows incident site maps.

**Table 1
Hand-held Real-time Summary – September 30th 00:00 – 23:59**

Work Area				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	599	0	NA	< 1.0 %
VOC	591	2	0.5 ppm	0.8 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 30th 00:00 – 23:59**

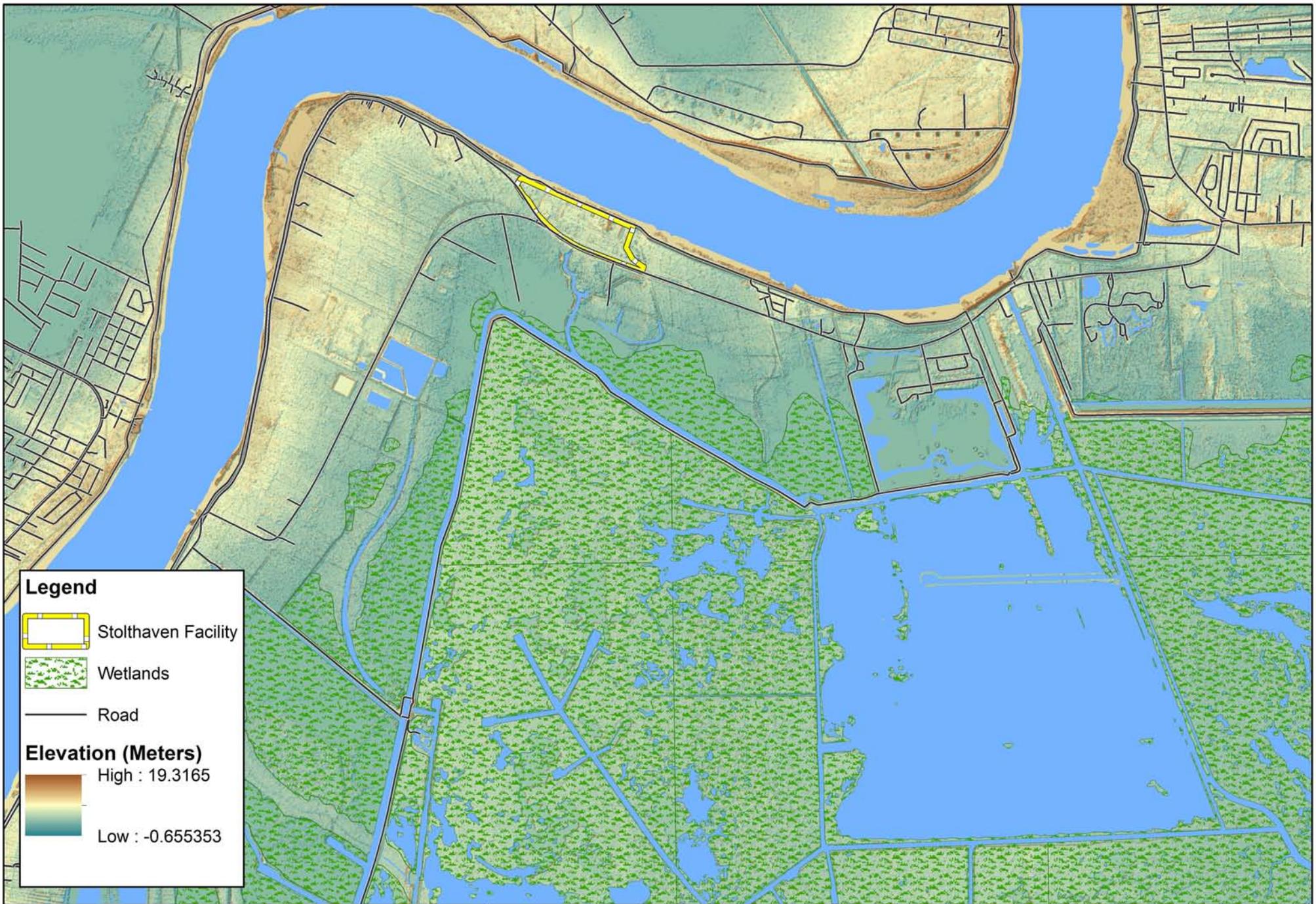
Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 14	LEL	5526	0	0 - 0 %
	VOC	5526	11	0.1 - 0.2 ppm
Unit 15	LEL	5111	0	0 - 0 %
	VOC	5111	7	0.1 - 0.4 ppm
Unit 16	LEL	5369	0	0 - 0 %
	VOC	5369	208	0.1 - 3.2 ppm
Unit 17	LEL	5230	5	3.2 - 3.9 %
	VOC	5230	119	0.1 - 0.4 ppm
Unit 18	LEL	5449	0	0 - 0 %
	VOC	5449	0	0 - 0 ppm
Unit 19	LEL	4926	0	0 - 0 %
	VOC	4926	0	0 - 0 ppm
Unit 20	LEL	5252	0	0 - 0 %
	VOC	5252	400	0.1 - 6.3 ppm
Unit 21	LEL	4973	0	0 - 0 %
	VOC	4973	293	0.1 - 9.8 ppm
Unit 22	LEL	5455	0	0 - 0 %
	VOC	5455	86	0.1 - 0.3 ppm
Unit 23	LEL	5442	0	0 - 0 %
	VOC	5442	852	0.1 - 6.4 ppm
Unit 24	LEL	5284	0	0 - 0 %
	VOC	5284	107	0.1 - 0.4 ppm
Unit 25	LEL	4467	0	0 - 0 %
	VOC	4467	18	0.1 - 0.1 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 3
Analytical Sample Counts – September 30th 00:00 – 22:59

Matrix	Number of Samples
Air	4
Product Quality	4
Waste Characterization	4

Appendix 1: Incident Maps



Legend

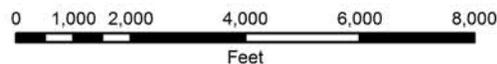
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

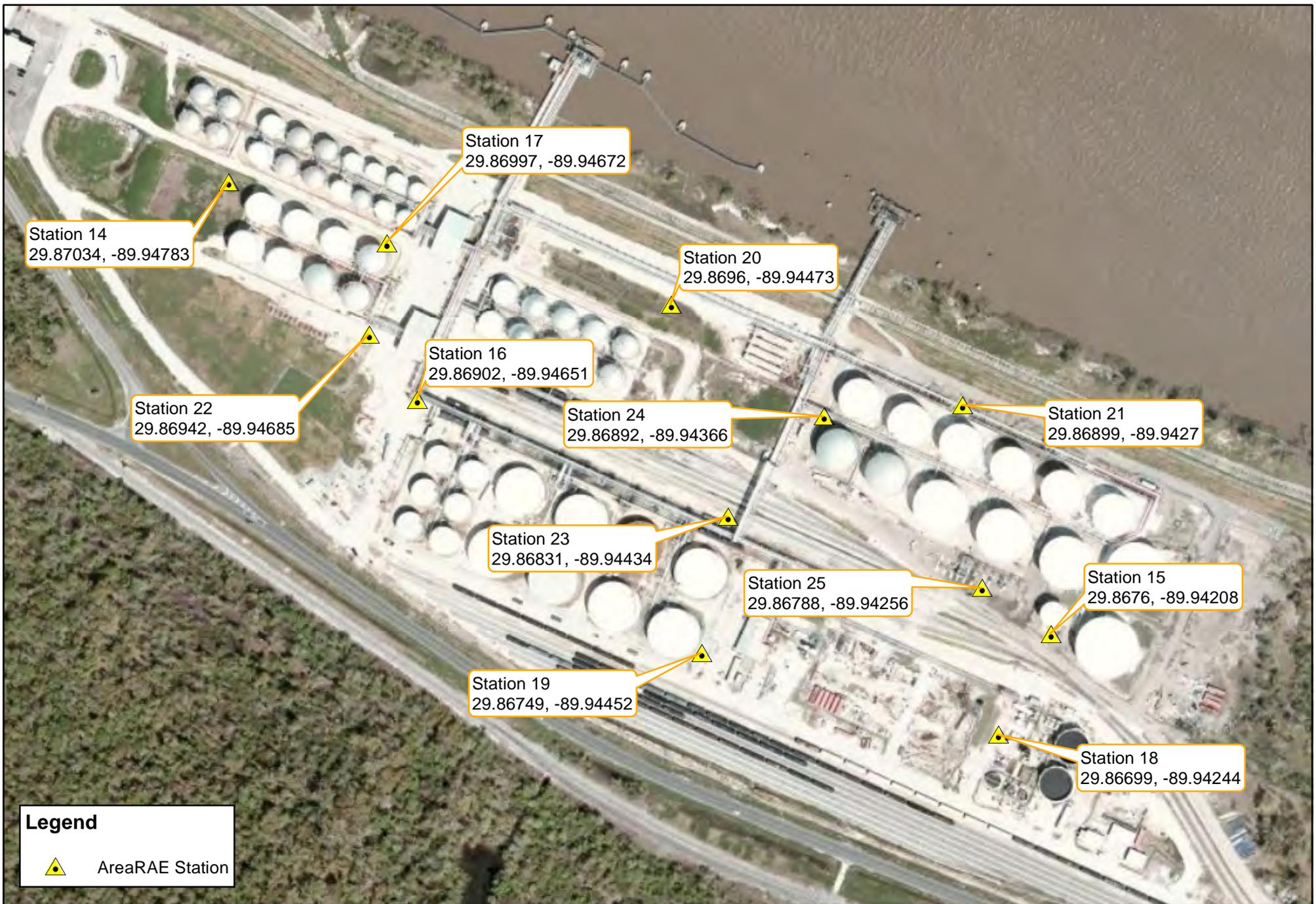
High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



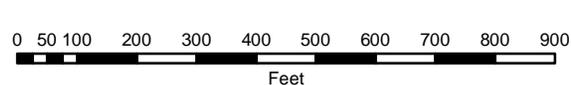
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



Legend

 AreaRAE Station

Work Area
AreaRAE Station Locations
 September 21, 2012



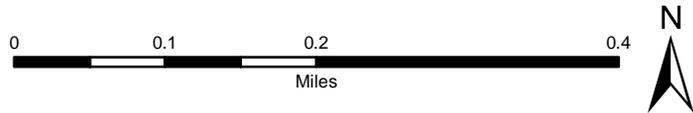
 Project No. 40365	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/26/2012



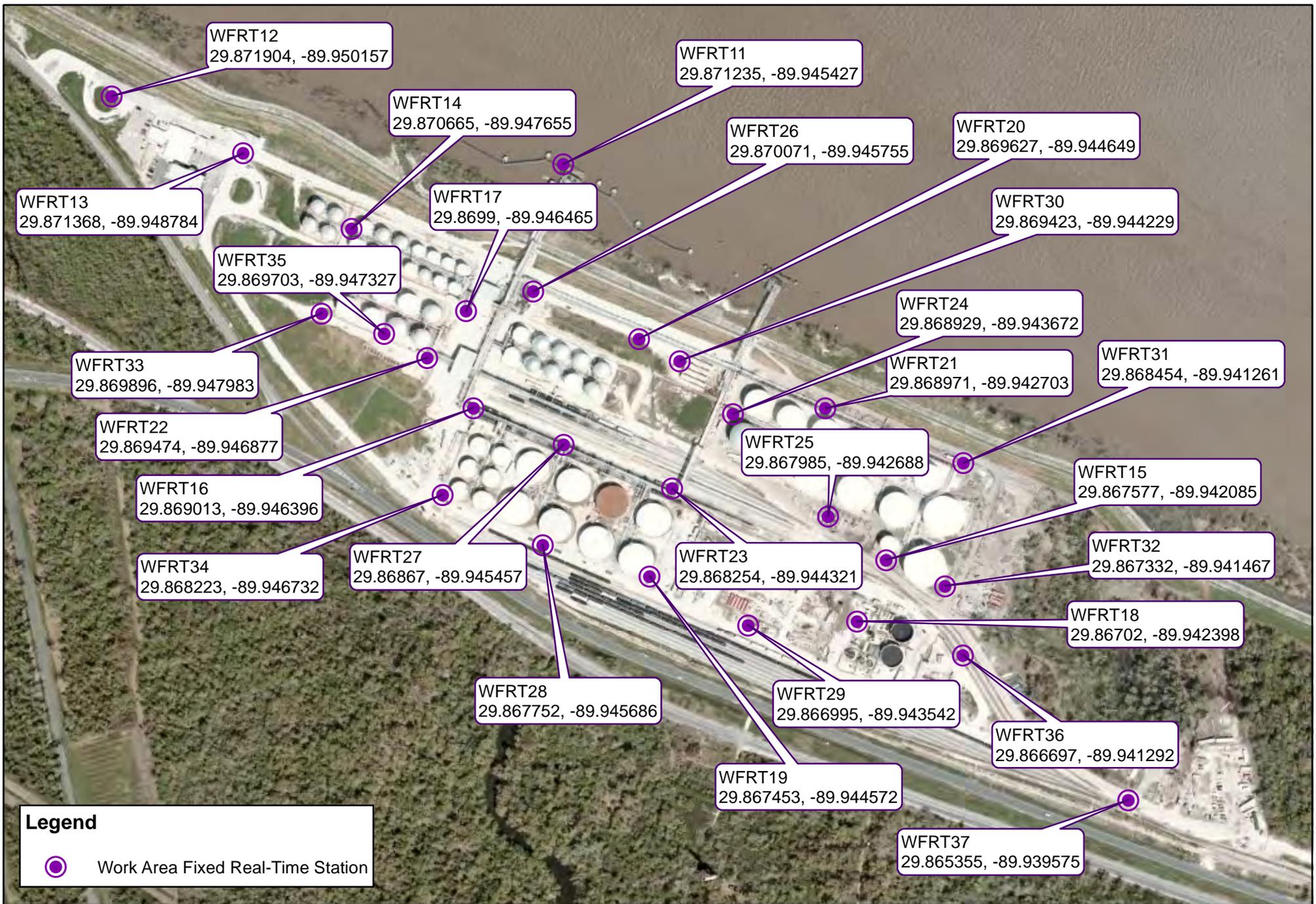
Legend

 Air Sample Location

**Ambient Air
Analytical Sampling Locations**



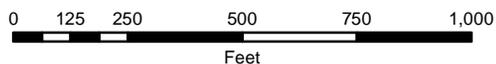
 Project No. 40365	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/28/2012



Legend

 Work Area Fixed Real-Time Station

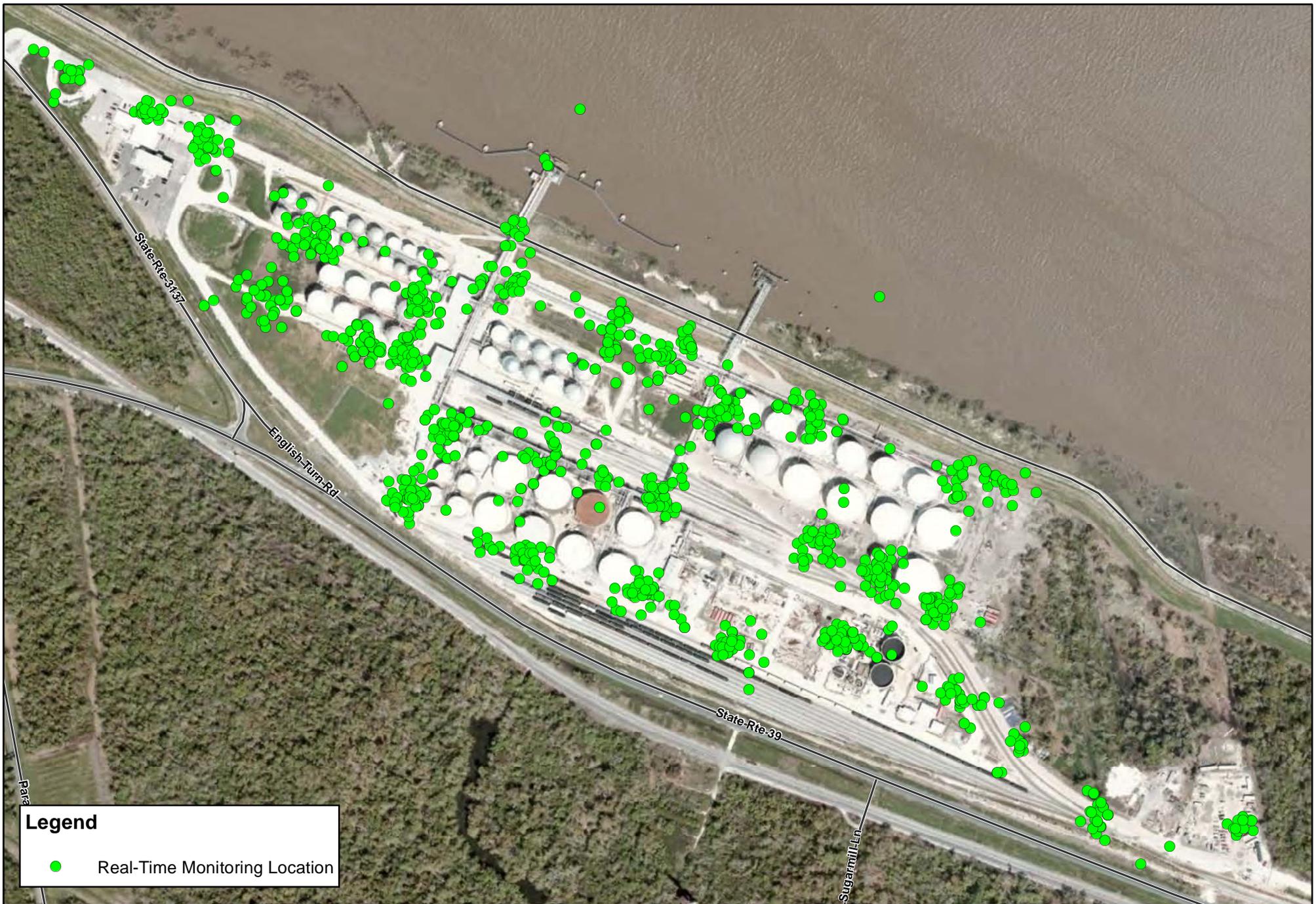
**Work Area
Fixed Real-Time Station**
September 21, 2012



Project No.
40365

**Stolthaven
Braithwaite, LA**

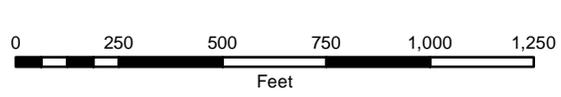
**Plaquemines Parish
Print Date: 9/28/2012**



Legend

- Real-Time Monitoring Location

Work Area
Real-Time Monitoring Locations
 9/30/2012



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

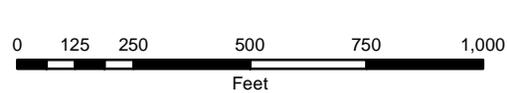


Legend

VOC Concentration

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

**Manually-Logged
Work Area VOC Concentrations**
9/30/2012



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**Stolthaven
Braithwaite, LA**

**Plaquemines Parish
Print Date: 10/1/2012**