

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Onsite Summary of Air Monitoring and Sampling Results
September 20, 2012
PO# 12-H0408-MR**

This data report discusses real-time air monitoring data collected within the work area between September 19th 00:00 and September 19th 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 chemical specific action level required for donning of respiratory protection. All workers not present in respiratory protection at the time of action level exceedances were advised to don appropriate respiratory and ocular protection. Five detections of formic acid were observed within the work area. According to CTEH[®] personnel, formic acid detections were associated with nearby scrubber activity.

A single positive detection on a chlorobenzene Gastec[®] colorimetric tube was observed during entry activities. Similar events have been noted in the days prior. A CTEH[®] review of the technical literature surrounding the Gastec[®] 126 colorimetric tubes did not indicate any direct interferences with compounds present in the immediate vicinity; however, upon discussions with NEXTTEQ personnel, it was noted that alkenes, such as 1-octene, may interfere. This interference would ultimately lead to a false positive chlorobenzene reading. To confirm this interference, a field investigation was performed. Real-time VOC readings and Gastec[®] analysis, taken directly at Tank H30-5 (chlorobenzene) and associated vapor scrubber on September 19, 2012, resulted in no detectible concentrations of monochlorobenzene. However, a Gastec[®] chlorobenzene tube analyzed directly at a vapor-emitting crack in Tank H30-6 (1-octene) resulted in a colorimetric change indicative of a positive detection. Therefore, CTEH[®] believes that detections of chlorobenzene using GASTEC[®] colorimetric tube 126L are due to the presence of 1-octene known to have been released from Tank H30-6.

Real-time air monitoring for VOCs, LEL, methyl acrylate, chlorobenzene and formic acid was conducted using hand-held instruments such as the MultiRAE and colorimetric detector tubes. Table 1 displays a data summary for hand-held instruments. Table 2 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 19th 00:00 – 23:59**

Entry Activities				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	674	0	NA	< 1.0 %
VOC	796	10	2.7 ppm	8.0 ppm
Work Area				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
Chlorobenzene	6	1	60.0 ppm	60.0 ppm
Formic Acid	14	5	5.2 ppm	13.0 ppm
LEL	157	0	NA	< 1.0 %
Methyl Acrylate	1	0	NA	< 2.0 ppm
VOC	186	14	5.6 ppm	56.1 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.

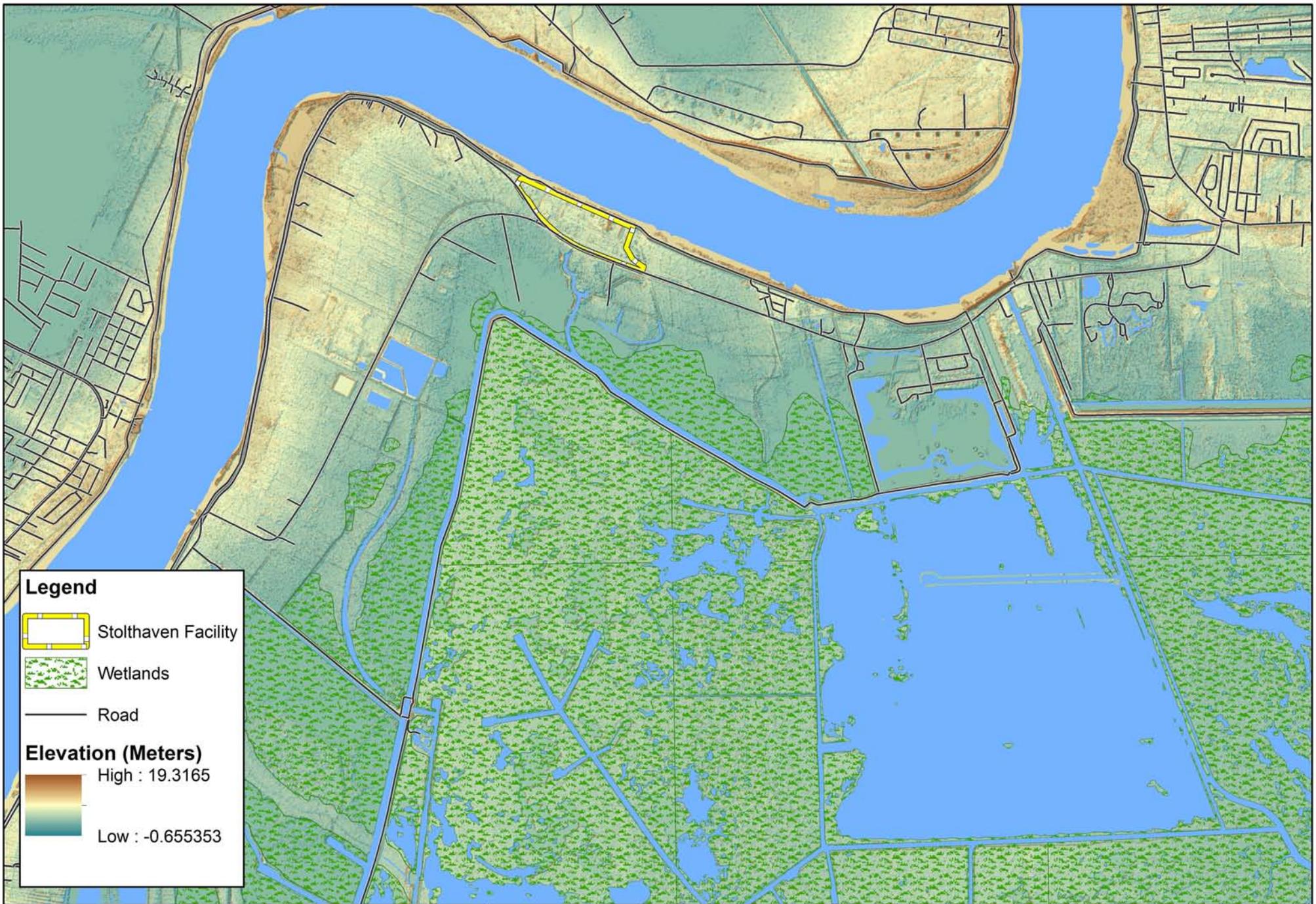
**Table 2
Analytical Sample Counts – September 19th 00:00 – 23:59**

Matrix	Number of Samples
Air	4
Waste Characterization	9

References:

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

Appendix 1: Incident Maps



Legend

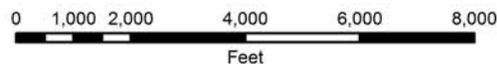
-  Stolthaven Facility
-  Wetlands
-  Road

Elevation (Meters)

High : 19.3165

Low : -0.655353

**Stolthaven Facility
Shaded Relief of Elevation**



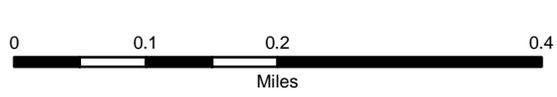
CTEH <small>Project No. 40355</small>	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
Print Date: 9/17/2012	



Legend

 Air Sample Location

**Ambient Air
Analytical Sampling Locations**



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



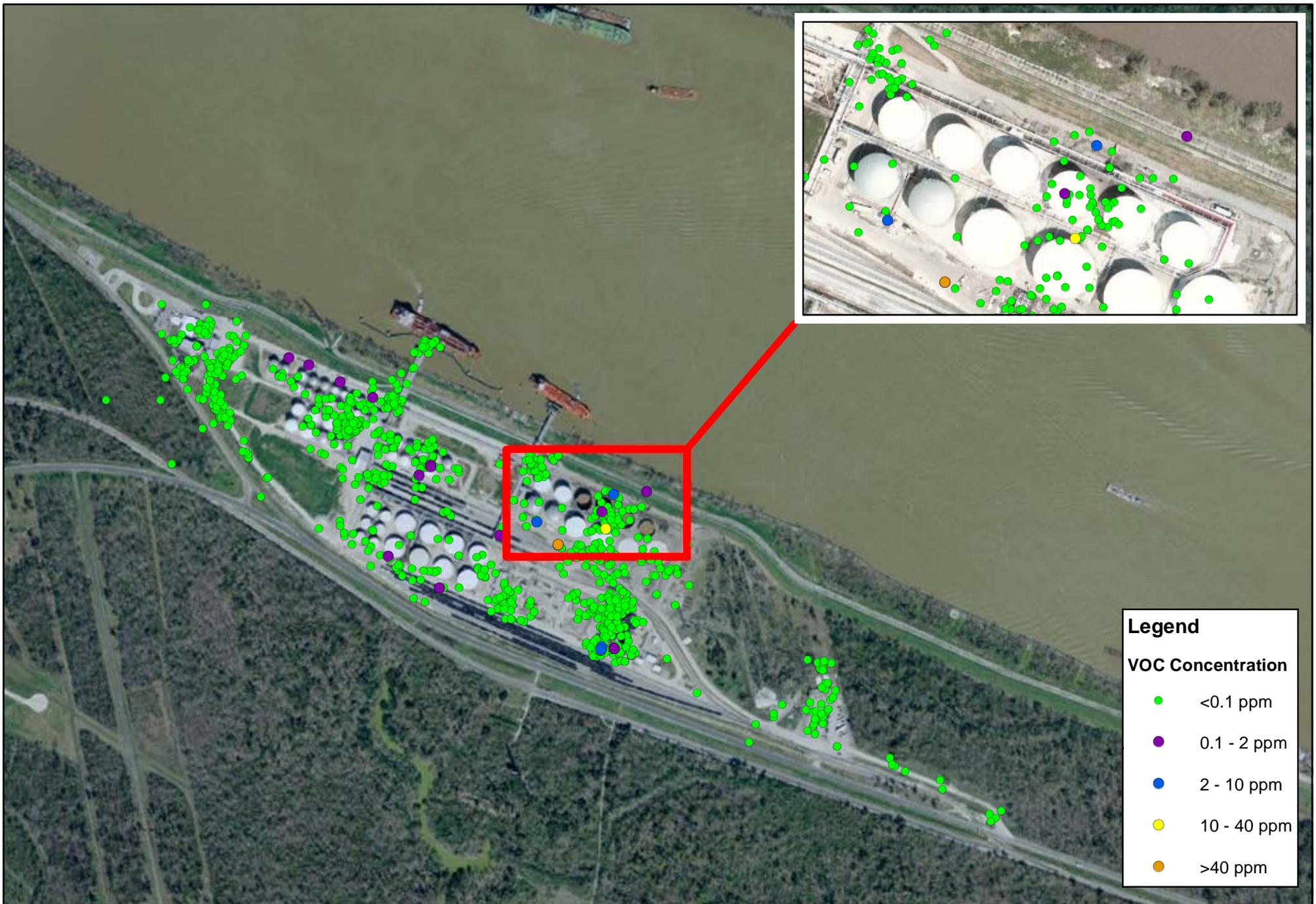
Legend

- Real-Time Monitoring Location

Real-Time Monitoring Locations
9/19/2012



 Project No. 40355	Stolthaven
	Braithwaite, LA
	Plaquemines Parish
	Print Date: 9/20/2012



Legend

VOC Concentration

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

**Manually-Logged
Work Area VOC Concentrations**
9/19/2012



CTEH[®]
Project No.
40355

Stolthaven
Braithwaite, LA
Plaquemines Parish
Print Date: 9/20/2012

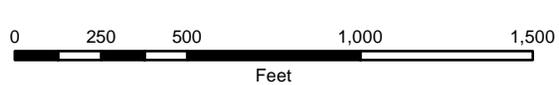


Chlorobenzene Readings

- Detection
- No Detection



**Chlorobenzene
Reading Locations**
9/19/2012



 Project No. 40355	Stolthaven Braithwaite, LA
	Plaquemines Parish Print Date: 9/20/2012

