40365 Braithwaite, LA
Stolthaven Terminal Facility
Onsite Summary of Air Monitoring and Sampling Results
October 10, 2012
PO# 12-H0408-MR

This data report discusses real-time air monitoring data collected within the work area between October 9th 00:00 and October 9th 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 using hand-held instruments indicated that there were six onsite VOC detections on October 9th. The maximum VOC reading, 253 ppm, was observed directly at the exhaust vent of the methyl acrylate scrubber. While this VOC level quickly dissipated with distance from the exhaust vent, workers reentering the general vicinity were advised to don respiratory protection. Stationary AreaRAE results reported detections of VOCs at 12 locations within the work area; however, these results are preliminary and may include drift in the instrument's chemical sensors. A maximum reading of 17.7 ppm VOCs was observed on AreaRAE Unit 24. Responding CTEH® personnel confirmed the AreaRAE reading but were not able to determine a VOC source in the area. This reading was not sustained. A single detection of LEL was observed on AreaRAE Unit 17.

Colorimetric detector tubes were utilized for the analytical detection of formic acid, methyl acrylate, and styrene. While no detections of formic acid were observed, the presence of both methyl acrylate and styrene was noted. The maximum methyl acrylate detection was associated with scrubber activity. A single reported reading of styrene at 1.5 ppm occurred during a styrene product transfer.

Real-time air monitoring for VOCs and LEL was conducted using stationary AreaRAEs and/or hand-held instruments including the MultiRAE. 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 and product quality. Appendix 1 shows incident site maps.

Table 1
Hand-held Real-time Summary – October 9th 00:00 – 23:59

Work Area				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
Formic Acid	1	0	NA	< 0.52 ppm
LEL	459	0	NA	< 1.0 %
Methyl Acrylate	7	4	10 ppm	25 ppm
Styrene	3	1	1.5 ppm	1.5 ppm
VOC	465	6	46.8 ppm	253 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 – October 9th 00:00 – 23:59

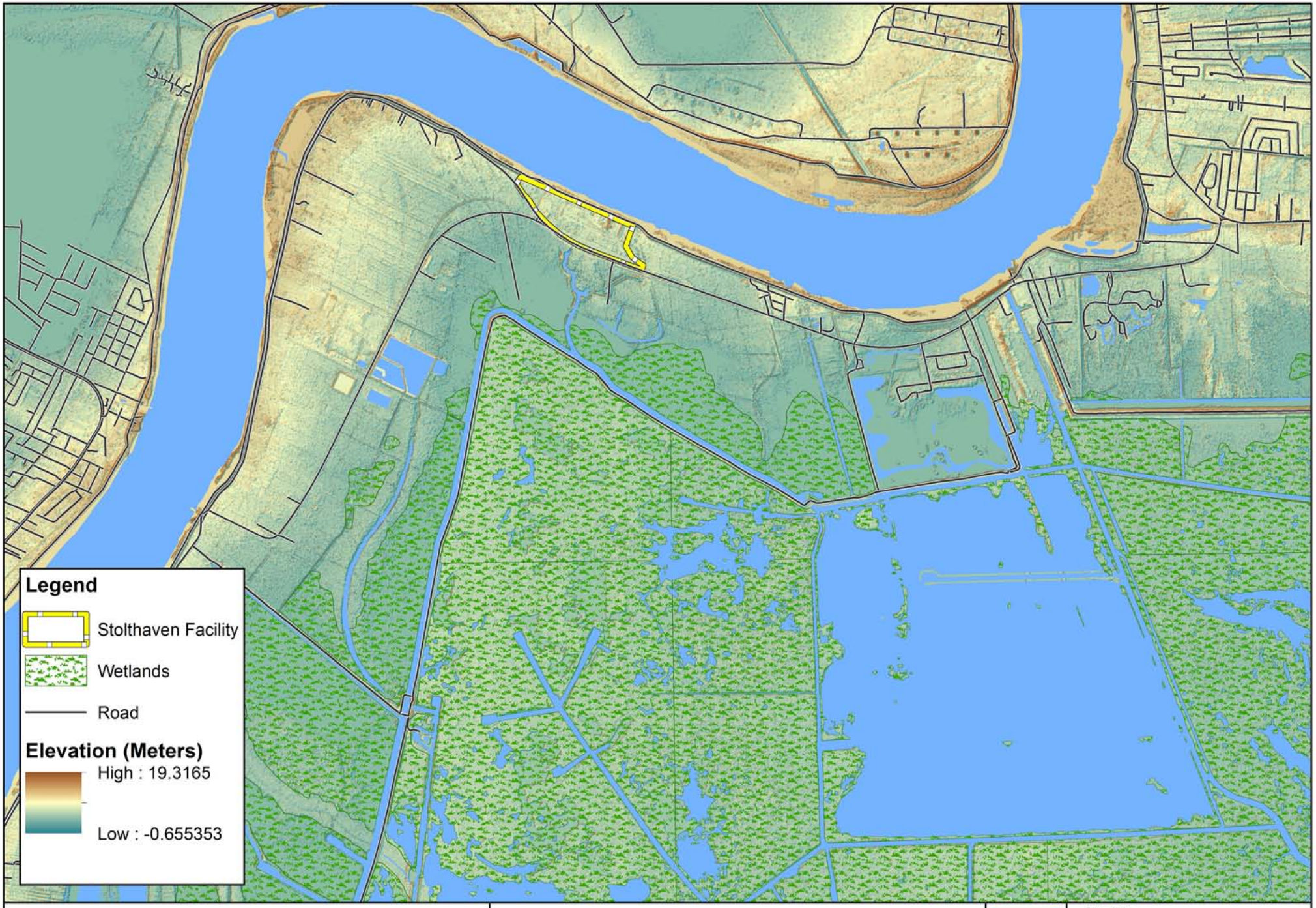
Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 14	LEL	5532	0	0 - 0 %
	VOC	5532	91	0.1 - 8.7 ppm
Unit 15	LEL	5198	0	0 - 0 %
	VOC	5198	8	0.2 - 0.3 ppm
Unit 16	LEL	5574	0	0 - 0 %
	VOC	5574	6	0.1 - 0.1 ppm
Unit 17	LEL	5515	1	0.1 - 0.1 %
	VOC	5515	8	0.1 - 1.3 ppm
Unit 18	LEL	5596	0	0 - 0 %
	VOC	5596	4	0.1 - 0.2 ppm
Unit 19	LEL	5638	0	0 - 0 %
	VOC	5638	353	0.1 - 0.7 ppm
Unit 20	LEL	5664	0	0 - 0 %
	VOC	5664	2	0.1 - 0.5 ppm
Unit 21	LEL	5571	0	0 - 0 %
	VOC	5571	8	0.1 - 10.3 ppm
Unit 22	LEL	5636	0	0 - 0 %
	VOC	5636	19	0.1 - 2.4 ppm
Unit 23	LEL	5567	0	0 - 0 %
	VOC	5567	170	0.1 - 1.6 ppm
Unit 24	LEL	5572	0	0 - 0 %
	VOC	5572	478	0.1 - 17.7 ppm
Unit 25	LEL	5207	0	0 - 0 %
	VOC	5207	4	0.1 - 1.6 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 – October 9th 00:00 – 23:59

Matrix	Number of Samples
Air	4
Product Quality	7

Appendix 1: Incident Maps



Stolthaven Facility
Shaded Relief of Elevation

0 1,000 2,000 4,000 6,000 8,000
Feet

N

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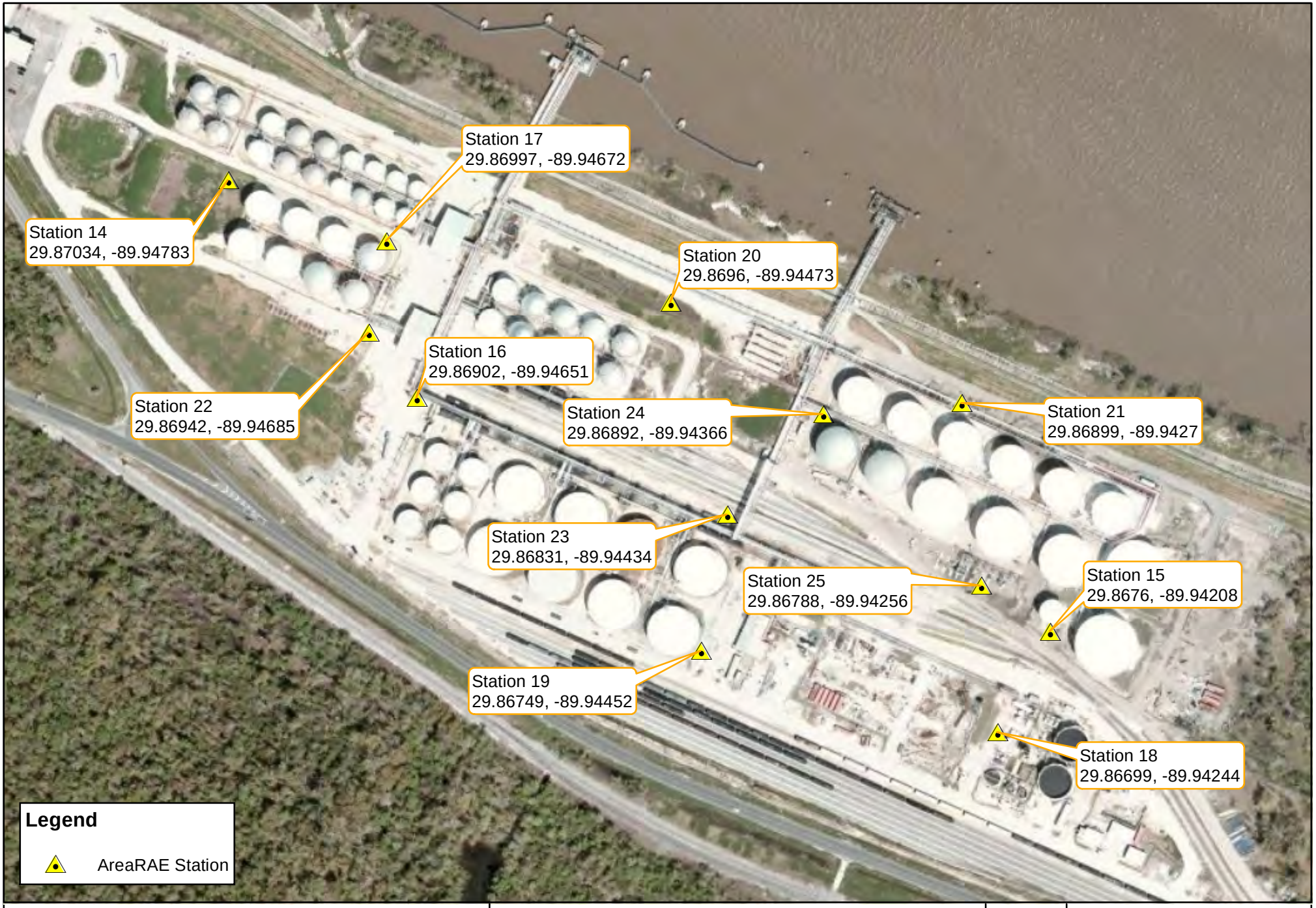
Project No.
40365

Stolthaven
Braithwaite, LA
Plaquemines Parish
Print Date: 10/6/2012



Work Area
AreaRAE Station Locations
September 21, 2012

0 50 100 200 300 400 500 600 700 800 900
Feet

N

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Ambient Air
Analytical Sampling Locations

0 0.1 0.2 0.4
Miles

N

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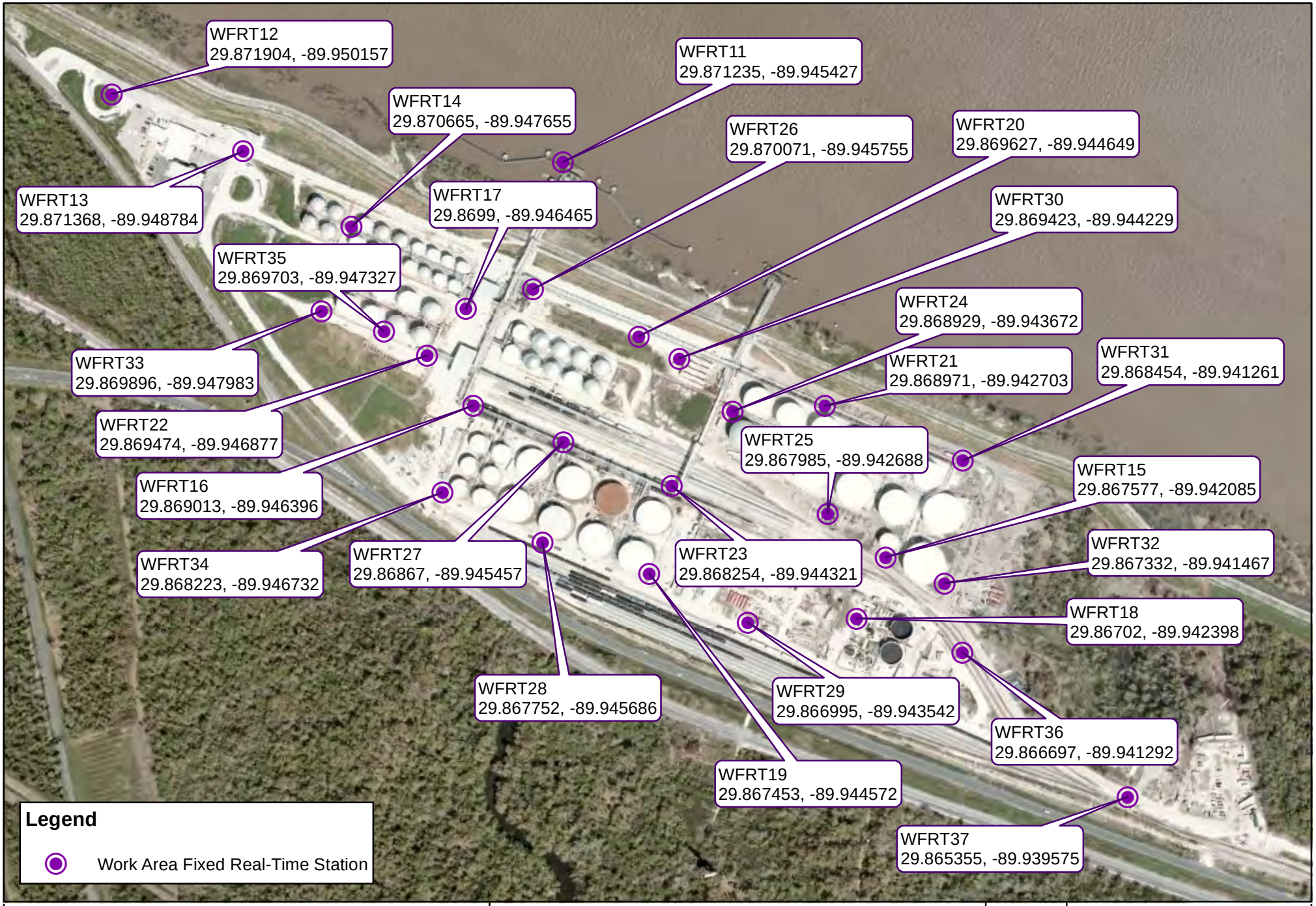

Work Area
Fixed Real-Time Station
September 21, 2012

0 125 250 500 750 1,000
Feet

N

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Work Area
Real-Time Monitoring Locations
10/09/2012

0 250 500 750 1,000 1,250
Feet

N

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Plaquemines Parish
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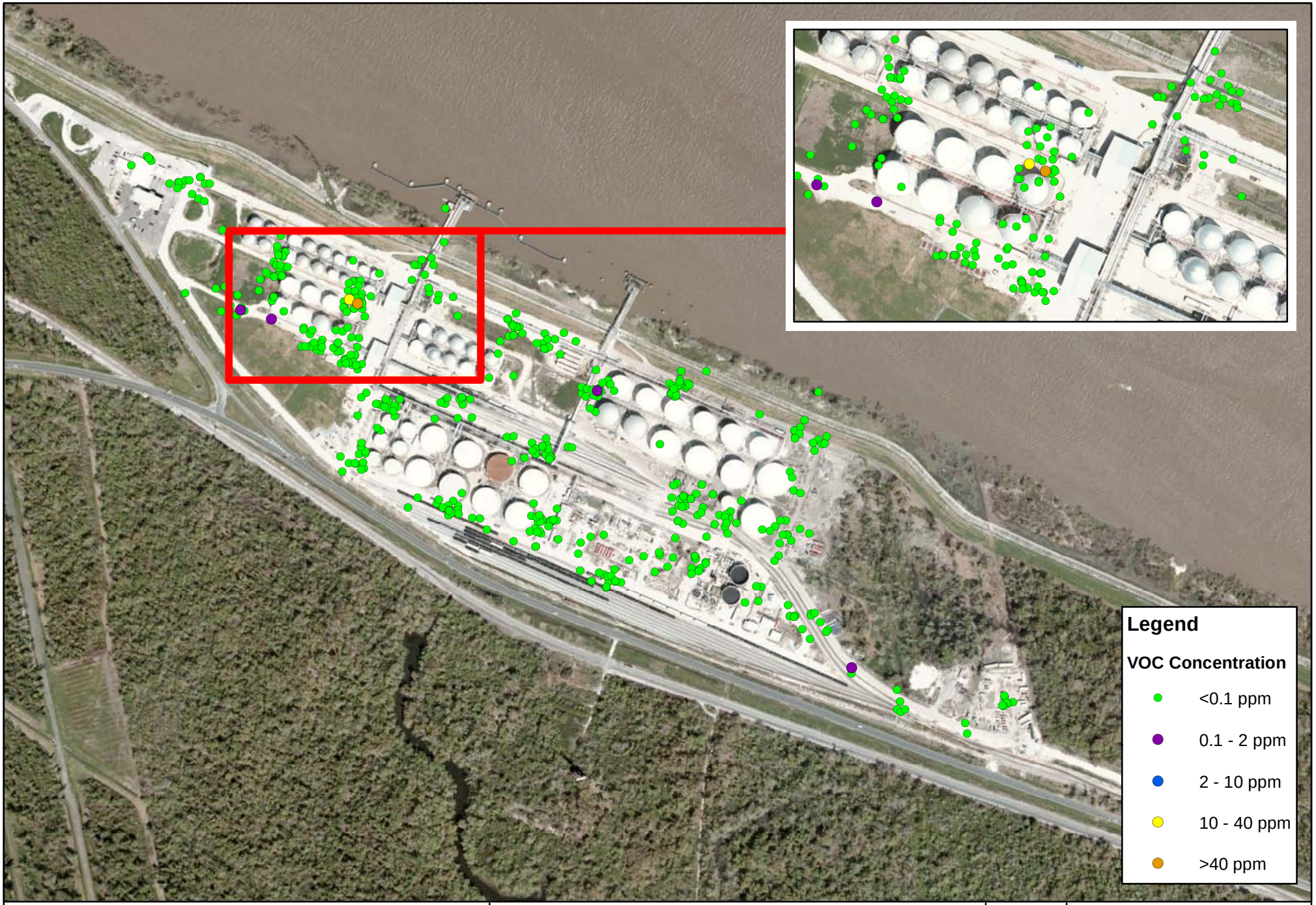

Manually-Logged Work Area VOC Concentrations

10/09/2012

0 125 250 500 750 1,000 1,250
Feet

N

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Print Date: 10/10/2012