CENTER FOR TOXICOLOGY
AND ENVIRONMENTAL HEALTH, LLC

CTEH® Project #40442
West Fertilizer Plant Explosion
Summary of Air Monitoring Results
April 23, 2013 07:00

This data report discusses real-time air monitoring data collected between 4/22/2013 16:00 and 4/23/2013 04:00 in support of remediation operations conducted near the West Fertilizer Plant Explosion in West, TX.

Real-time air monitoring was conducted for VOCs, ammonia (NH_3), nitrogen dioxide (NO_2), lower explosive limit (LEL) and oxygen (O_2) using remote-telemeting RAESystems® AreaRAEs and hand-held instruments such as RAESystems® MultiRAE.

Tables 1 and 2 (below) display data summaries for hand-held and AreaRAE instruments, respectively. Site maps and charts are available as attachments.

Table 1: Hand-held Real-time Air Monitoring Summary[1]
April 22, 2013 16:00 – April 23, 2013 04:00

Analyte	Instrument	Number of Readings	Number of Detections	Average of Detections	Range of Detections
Rail Right of Way					
VOC	MulitiRAE	2	0	NA	< 0.1 ppm

[1]*Please note: The data displayed here has not undergone complete QA/QC analysis and is presented in a preliminary format.*
PPM = Parts Per Million

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Appendix

Table 2
Stationary AreaRAE Monitoring Stations Data Logged
4/22/2013 16:00 to 4/23/2013 04:00

Unit	Analyte	Count of Readings	Count of Detections	Average of Detections	Max Detection
AR13	LEL	2801	0	NA	< 1 %
	NH3	2801	0	NA	< 1 ppm
	NO2	2801	0	NA	< 0.1 ppm
	O2	2801	2801	20.9 %	20.9 %
	VOC	2801	0	NA	< 0.1 ppm
AR14	LEL	2814	0	NA	< 1 %
	NH3	2814	0	NA	< 1 ppm
	NO2	2814	7	0.1 ppm	0.1 ppm
	O2	2814	2814	20.9 %	21.3 %
	VOC	2814	0	NA	< 0.1 ppm
AR16 Down Wind Mobile Unit	LEL	2717	0	NA	< 1 %
	NH3	2717	29	1 ppm	4 ppm
	NO2	2717	0	NA	< 0.1 ppm
	O2	2717	2717	20.9 %	20.9 %
	VOC	2717	150	0.5 ppm	1.2 ppm
AR17	LEL	2763	0	NA	< 1 %
	NH3	2763	1532	1 ppm	2 ppm
	NO2	2763	0	NA	< 0.1 ppm
	O2	2763	2763	20.9 %	20.9 %
	VOC	2763	19	0.2 ppm	0.4 ppm
AR18	LEL	2765	0	NA	< 1 %
	NH3	2765	0	NA	< 1 ppm
	NO2	2765	0	NA	< 0.1 ppm
	O2	2765	2765	20.9 %	21.3 %
	VOC	2765	0	NA	< 0.1 ppm

[1] *The data in this table may include electronic drift. 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. Additionally, the data has not undergone complete QAQC as of this time.*

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Appendix

Air Monitoring Zone Classifications[1]
April 23, 2013

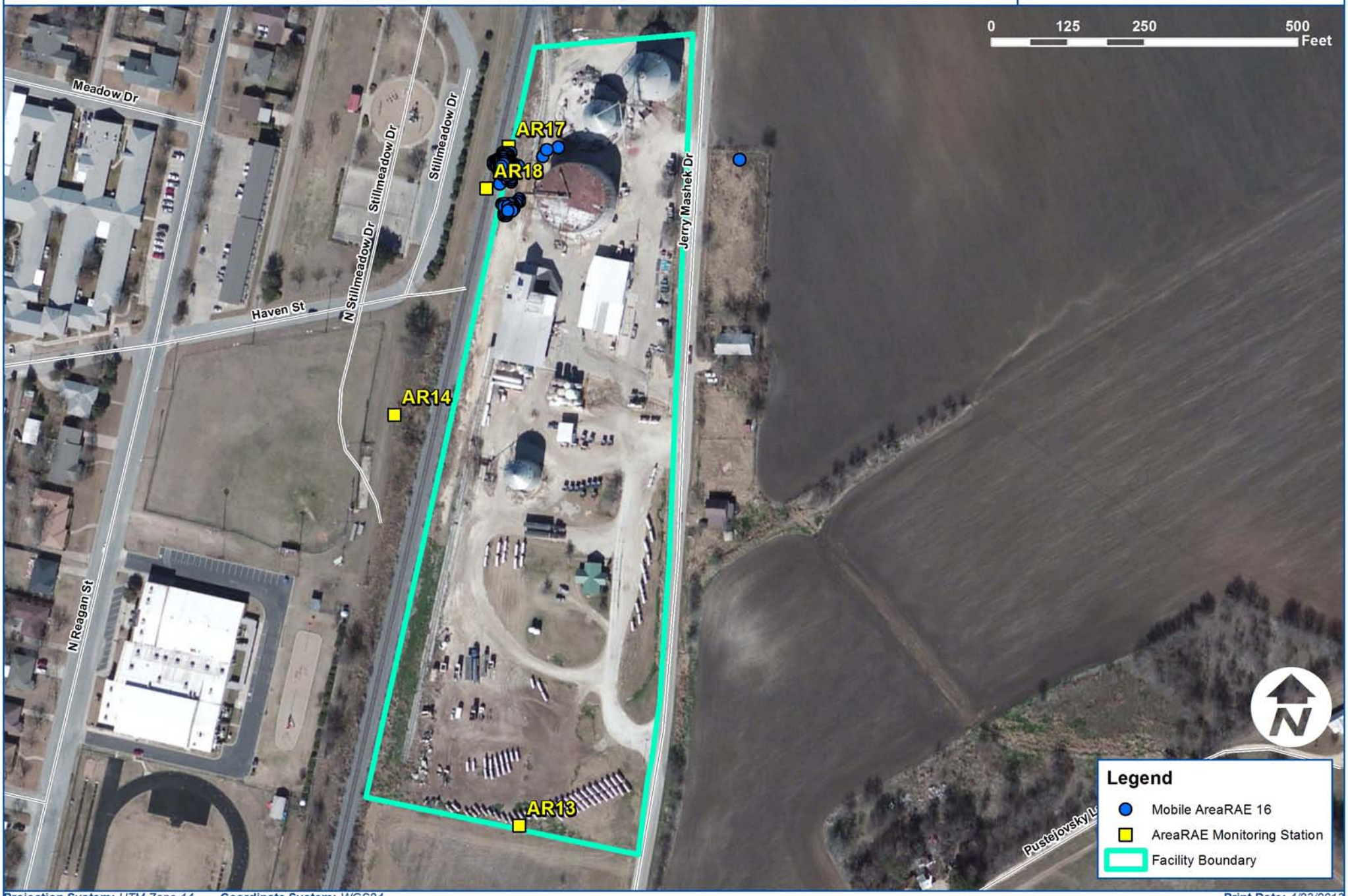
Project: 40442
Client: OMI
City: West, TX
County: McLennan

[1] All monitoring performed outside of the Work Area boundary and the Rail Road right of way is considered Community Monitoring.

Projection System: *UTM Zone 14* **Coordinate System:** *WGS84* **Print Date:** *4/23/2013*

AreaRAE Monitoring Station Locations
4/22/2013 16:00 to 4/23/2013 04:00

Project: 40442
Client: OMI
City: West, TX
County: McLennan



Projection System: *UTM Zone 14* **Coordinate System:** *WGS84* **Print Date:** *4/23/2013*

Manually Logged
Real-Time Readings
4/22/2013 16:00 to 4/23/2013 04:00

Project: 40442
Client: OMI
City: West, TX
County: McLennan

Projection System: *UTM Zone 14* Coordinate System: *WGS84*

Print Date: *4/23/2013*

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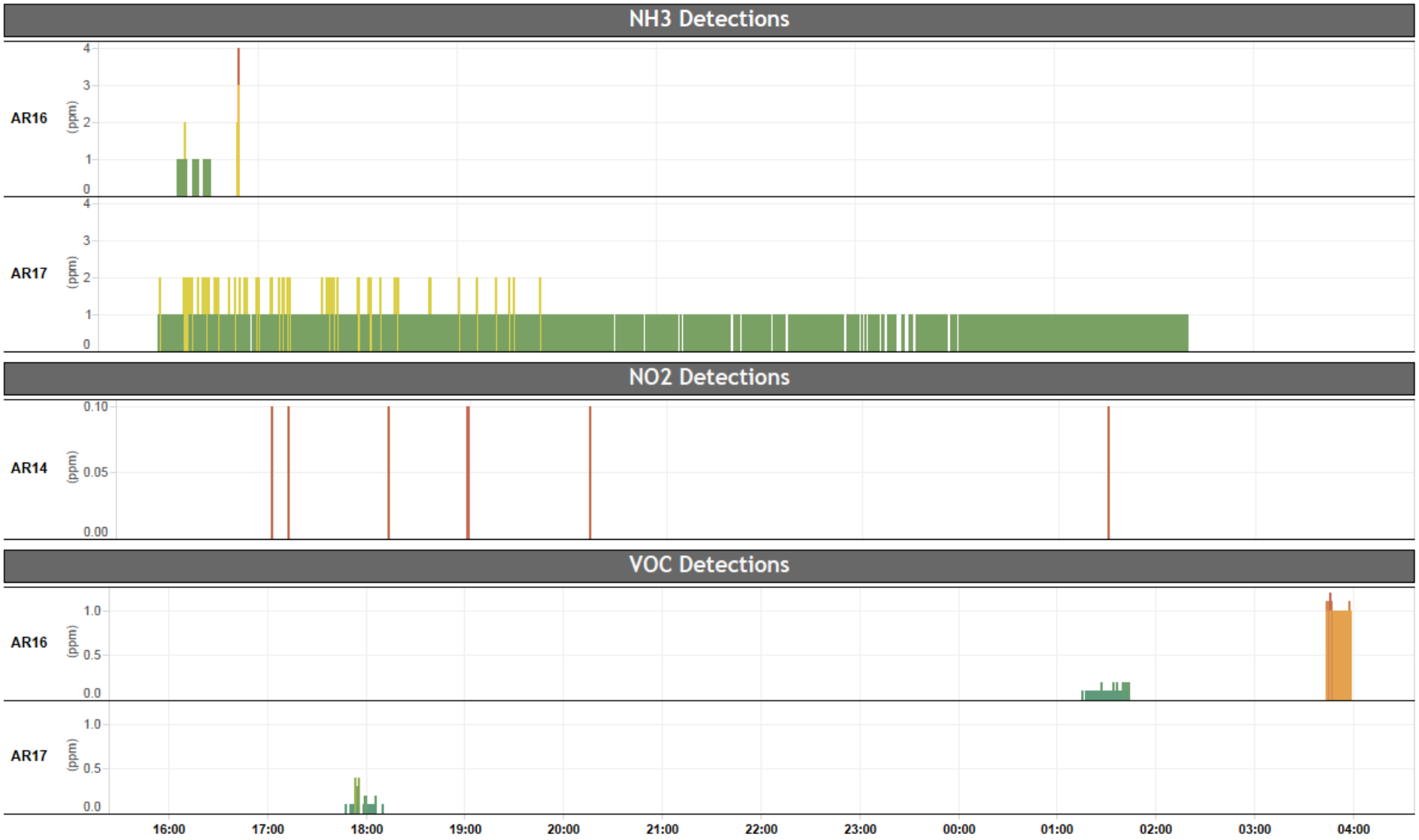
AreaRAE Detections
4/22/2013 16:00 to 4/23/2013 04:00

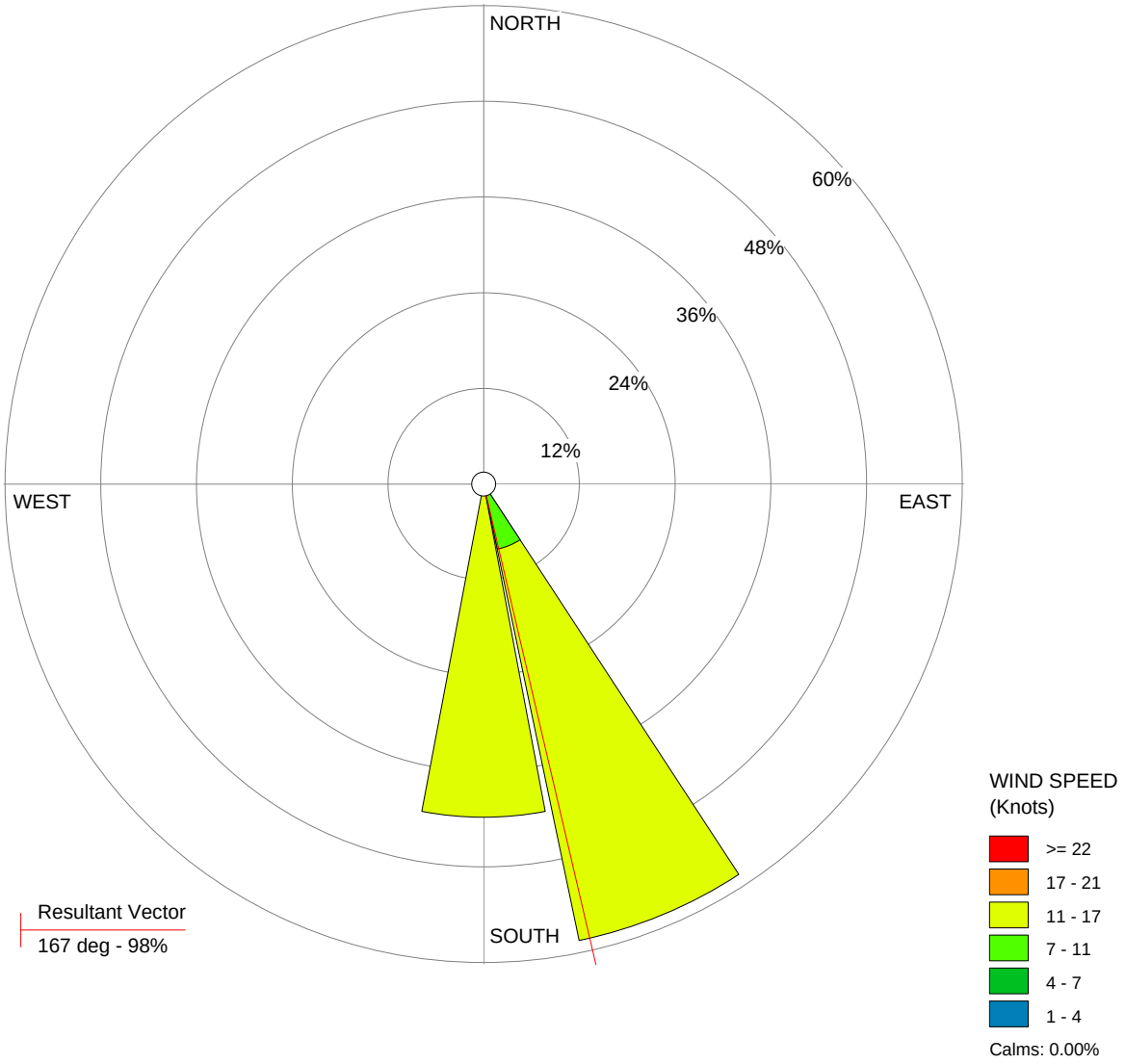


WIND ROSE PLOT:

Wind Speed and Direction 4/22/2013 16:00 to 4/22/2013 04:00
West, Tx

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Met Station: KACT Waco, TX

COMPANY NAME:

CTEH

MODELER:

Jason Callahan

CALM WINDS:

0.00%

AVG. WIND SPEED:

14.75 Knots

PROJECT NO.:

40442 - OMI

WRPLOT View - Lakes Environmental Software