

IEI Plastics Fire
Parkersburg, WV
Preliminary Air Monitoring Summary
October 27, 2017

Prepared by
Center for Toxicology and Environmental Health, L.L.C. (CTEH)
On Behalf of Wood County



Introduction

On October 23, 2017 the Center for Toxicology and Environmental Health, LLC (CTEH) initiated air monitoring following a fire at the IEI Plastics facility in Parkersburg, WV. Real-time air monitoring consisted of roaming hand-held air monitoring. Analytical sampling locations were also established for the collection of air samples to be analyzed at an offsite laboratory for volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs). Those results will be included in these summaries after they are received from the laboratory. Appendix I contains incident site maps and closest available meteorological data.

Real-time Air Monitoring¹

Real-time air monitoring was conducted to document and quantify the potential release of hazardous compounds. All instrumentation was calibrated at least once per day or per manufacturer's recommendations. Target analytes were measured as total VOCs, acrolein, carbon monoxide, formaldehyde, hydrogen chloride, hydrogen cyanide, nitrogen dioxide, nitrogen oxide, particulate matter (PM and Total Dust), and sulfur dioxide using handheld instruments, such as RAESystems[®] MultiRAE Plus/Pro instruments, TSI AM510 and DustTrak DRX aerosol/particle monitors, and Gastec colorimetric tubes.

Table 1, presented below, summarizes data for hand-held instruments.

¹ Real-time air monitoring provides near instantaneous measurements for concentrations in air without the need for laboratory analysis.

*Table 1: Hand-held Real-time Air Monitoring Summary¹
October 26, 2017 07:00 to October 27, 2017 07:00*

Location Category	Analyte	Instrument	Number of Readings	Number of Detections	Range of Detections ²
Community Exposure Monitoring	Acrolein	Gastec 93	34	0	< 2 ppm
	Carbo Monoxide	MultiRAE Plus	100	0	< 1 ppm
	Carbo Monoxide	MultiRAE Pro	55	1	4 ppm
	Formaldehyde	Gastec 91L	30	0	< 0.05 ppm
	Formaldehyde	Gastec 91	1	0	< 0.5 ppm
	Hydrogen Chloride	Gastec 14L	35	0	< 0.05 ppm
	Hydrogen Cyanide	Gastec 12L	25	0	< 0.1 ppm
	Nitrogen Dioxide	Gastec 9L	29	0	< 0.1 ppm
	Nitrogen Oxide	Gastec 10	33	0	< 1 ppm
	PM ₁₀	AM510	16	16	0.007 - 0.084 mg/m ³
	PM _{2.5}	AM510	83	83	0.002 - 0.941 mg/m ³
	PM _{2.5}	DustTrak DRX	65	65	0 - 2.76 mg/m ³
	Sulfur Dioxide	Gastec 5Lb	1	0	< 0.01 ppm
	Sulfur Dioxide	MultiRAE Plus	101	0	< 0.1 ppm
	Sulfur Dioxide	MultiRAE Pro	54	3	0.1 - 0.1 ppm
	VOCs	MultiRAE Plus	100	0	< 0.1 ppm
	VOCs	MultiRAE Pro	54	3	0.1 - 0.2 ppm

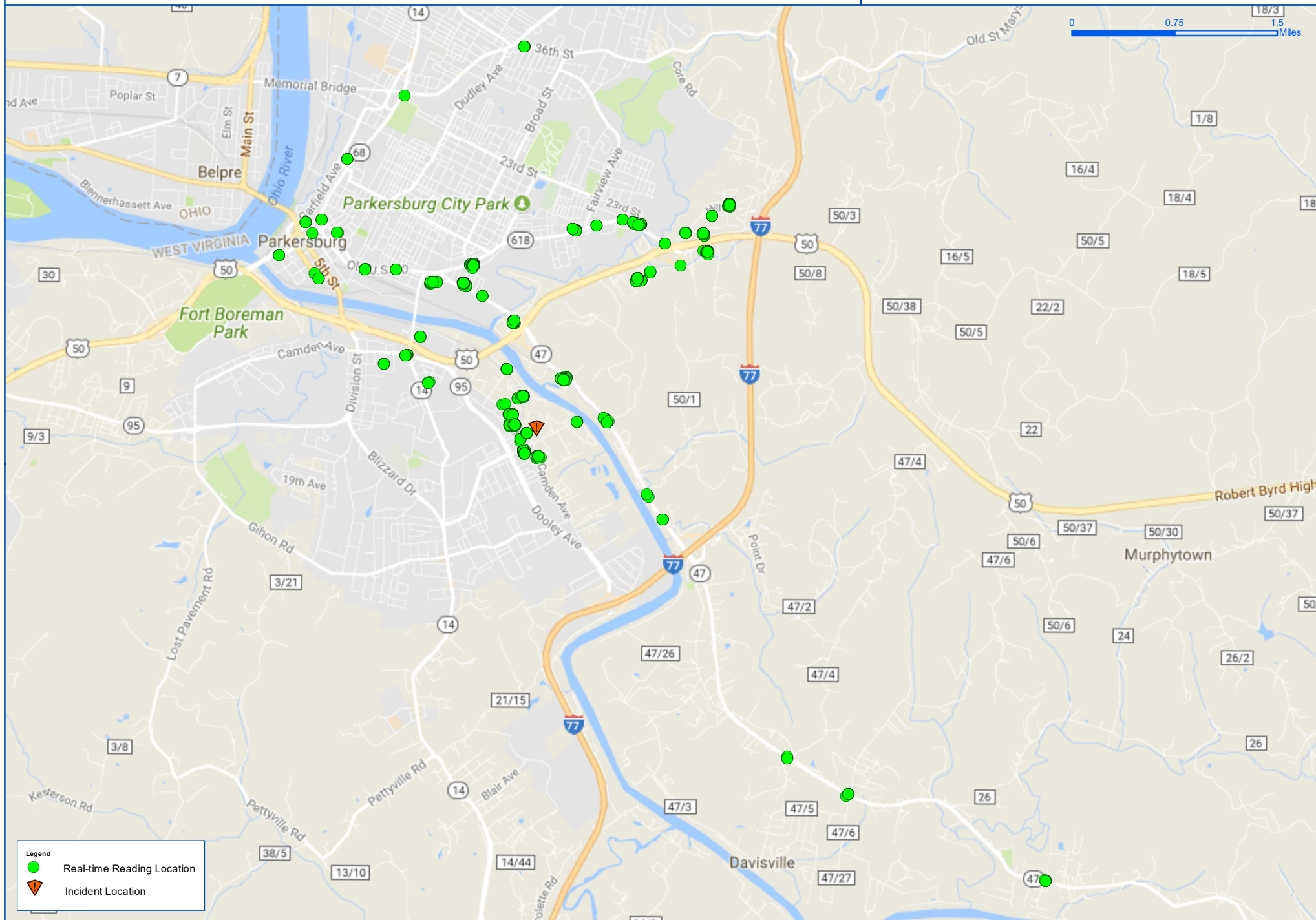
¹Please Note: The data displayed in the above table has not undergone complete QC analysis and is presented in preliminary format.

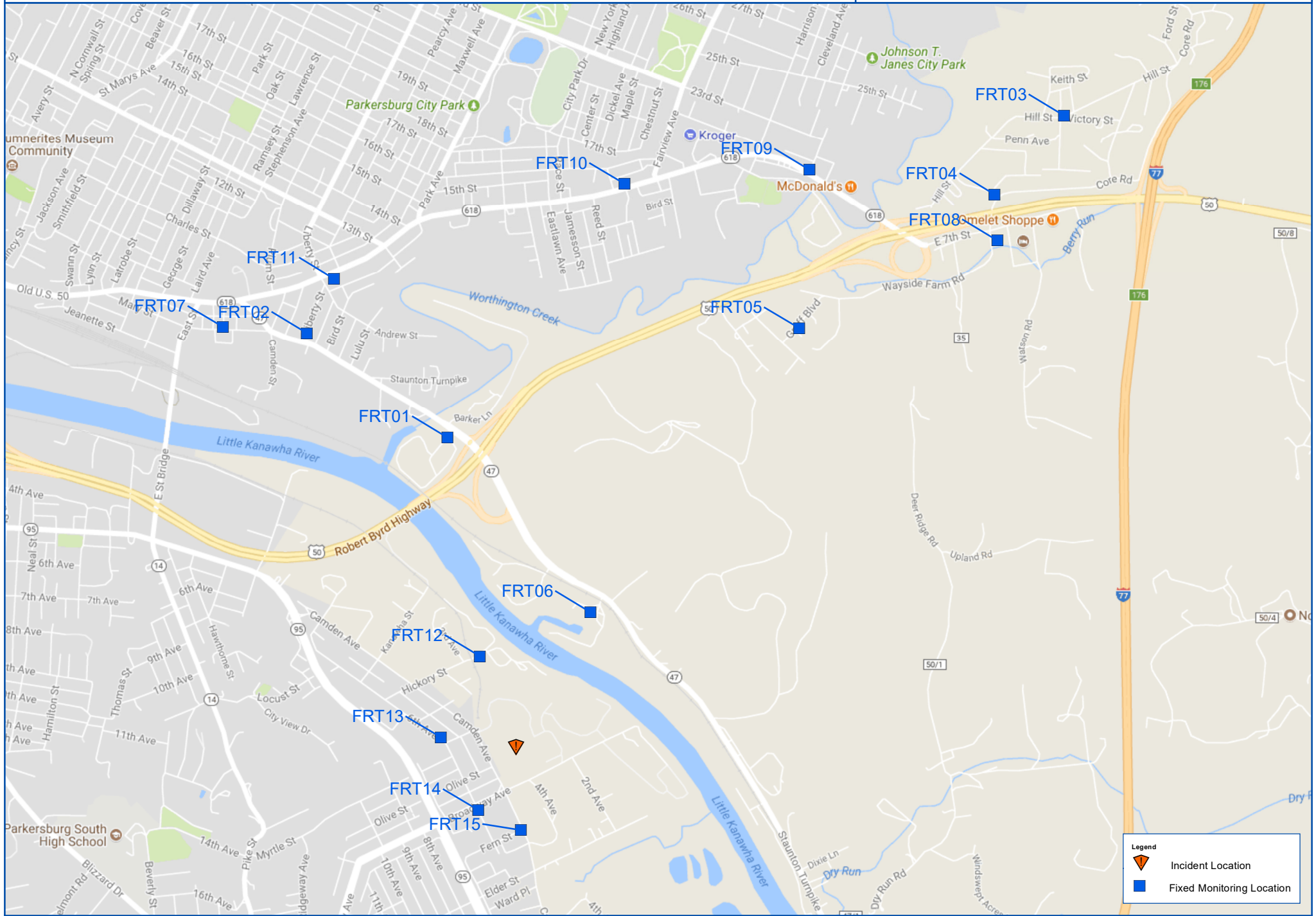
²Maximum detections preceded by the "<" symbol are considered non-detections at the limit of detection (LoD) value to the right.

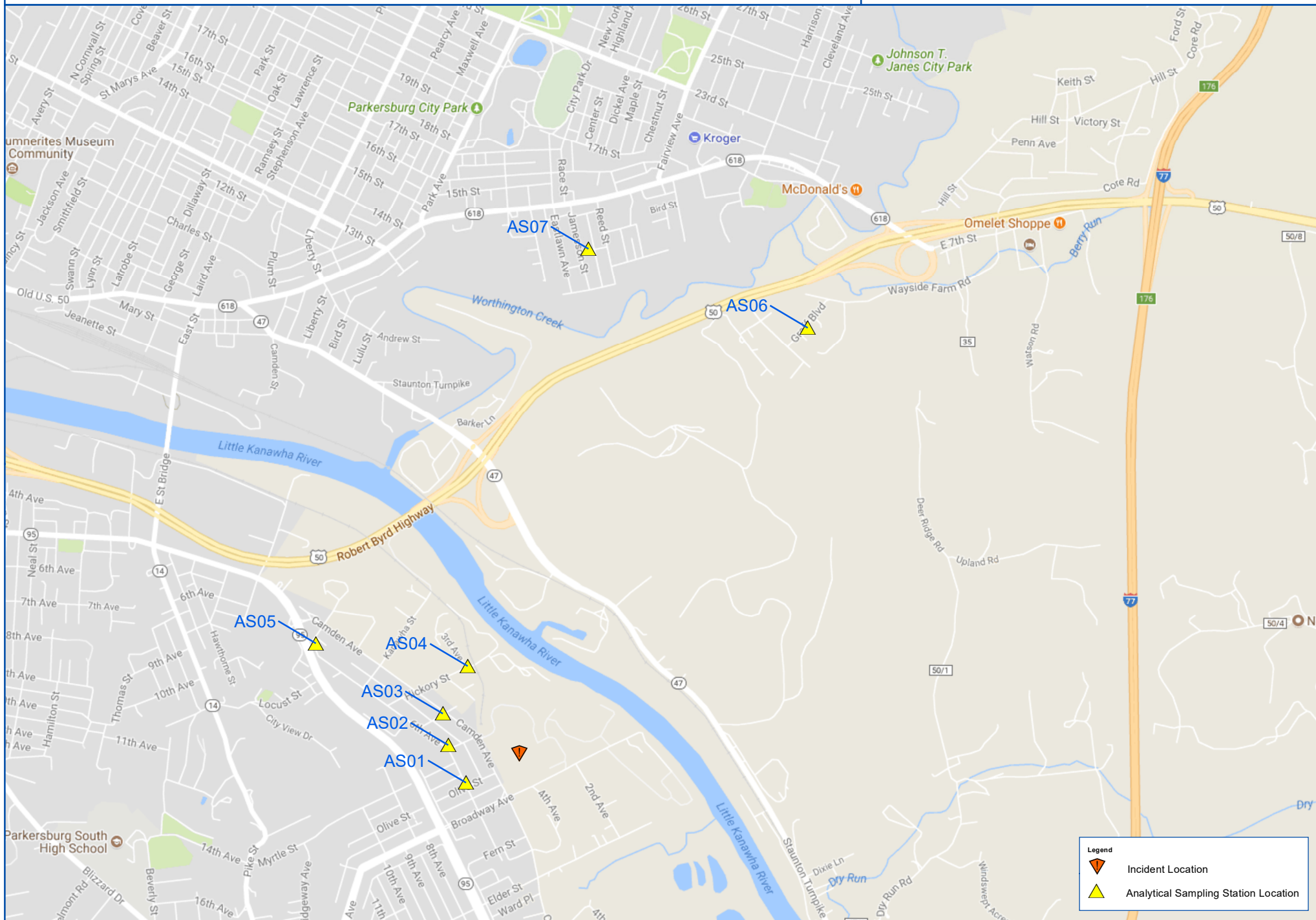
³Sulfur Dioxide readings have not had the correction factor applied, a correction factor of 0.25 should be applied, showing a range of detections from 0.05 – 0.125 ppm, respectively.

Appendix I:

Incident Site Maps and Meteorological Data

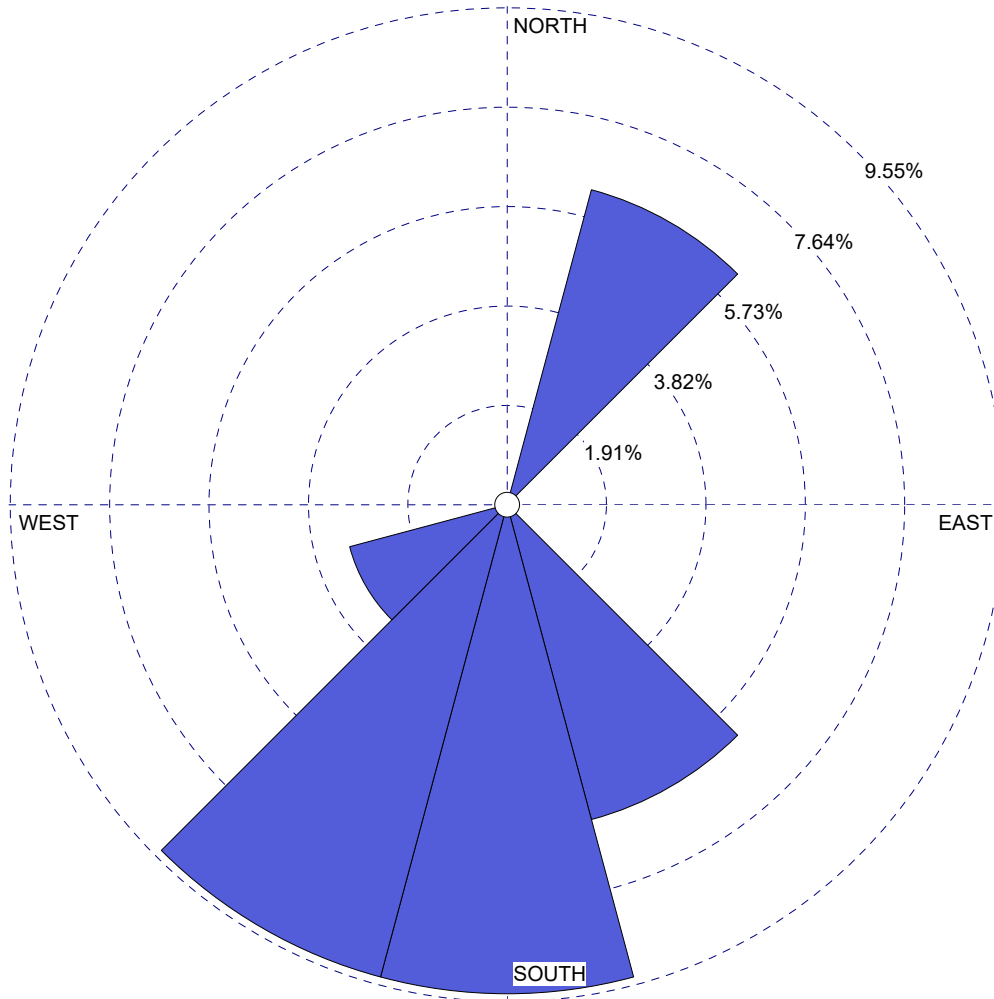




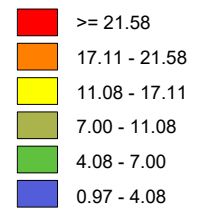


WIND ROSE PLOT:
Wood County, WV


DISPLAY:
Wind Speed
Direction (blowing from)



WIND SPEED
(Knots)



Calms: 65.63%

COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 10/26/2017 - 00:00 End Date: 10/27/2017 - 07:00	MODELER:	
	CALM WINDS:	TOTAL COUNT:	
	65.63%	32 hrs.	
	AVG. WIND SPEED:	DATE:	PROJECT NO.:
	0.69 Knots	10/27/2017	109708