Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/m^3			Wind Speed, Average, mph[3]	Wind Direction, 24-Hour Average[3]	Rain, Inches[3]
	North Location Primary Sampler [1]	North Location Collocated Sampler [1,2]	South Location Primary Sampler [2]			
March 1, 2016	<LOQ	<LOQ	<LOQ	13.9	NW	0.00
March 4, 2016	1.44		<LOQ	4.4	SE	0.05
March 7, 2016	8.00		<LOQ	10.9	S	0.00
March 10, 2016	0.31		No Data[4]	4.8	NNW	0.00
March 13, 2016	<LOQ	<LOQ	<LOQ	7.3	ENE	0.90

Note 1. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.
Note 2. The collocated sampler operates every 12 calendar days.
Note 3. All meteorological data are from the Davis South monitor.
Note 4. No data were recorded at the South Partisol on March 10, 2016 because power to the sampler was lost, and the sample was less than 23 hours in duration.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Average, mph[3]	Wind Direction, 24-Hour Average[3]	Rain, Inches[3]
	North Location Primary Sampler [1]	North Location Collocated Sampler [1,2]	South Location Primary Sampler [2]			
February 3, 2016	<LOQ		No Data[4]	14.5	W	0.00
February 6, 2016	1.56	1.69	<LOQ	4.8	SSW	0.00
February 9, 2016	<LOQ		<LOQ	13.4	WNW	0.00
February 12, 2016	<LOQ		<LOQ	12.2	WNW	0.00
February 15, 2016	0.44		<LOQ	3.9	ESE	0.00
February 18, 2016	1.94	1.00	<LOQ	11.5	ESE	0.00
February 21, 2016	<LOQ		<LOQ	6.7	NNE	0.00
February 24, 2016	<LOQ		<LOQ	19.0	NNE	0.01
February 27, 2016	3.00		<LOQ	10.9	SSW	0.00

Note 1. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.
Note 2. The collocated sampler operates every 12 calendar days.
Note 3. All meteorological data are from the Davis South monitor.
Note 4. No data were recorded at the South Partisol on February 3, 2016 because power to the sampler was lost and the sample was less than 23 hours in duration.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Average, mph[3]	Wind Direction, 24-Hour Average[3]	Rain, Inches[3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1,2]	South Location Primary Sampler [2]			
January 1, 2016	<LOQ	<LOQ	<LOQ	13.1	WSW	0
January 4, 2016	<LOQ		<LOQ	5.6	WNW	0
January 7, 2016	2.50		<LOQ	4.8	SE	0
January 10, 2016	<LOQ		<LOQ	15.3	W	0
January 13, 2016	1.63	1.63	<LOQ	6.7	SSW	0
January 16, 2016	<LOQ		<LOQ	12.5	W	0
January 19, 2016	0.44		<LOQ	3.3	E	0
January 22, 2016	<LOQ		<LOQ	10.6	NNE	0
January 25, 2016	3.06	3.00	<LOQ	8.8	SE	0.11
January 28, 2016	<LOQ		0.31	11.3	W	0
January 31, 2016	1.75		<LOQ	6.5	W	0

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. All meteorological data are from the Davis South monitor.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Average, mph[3]	Wind Direction, 24-Hour Average[3]	Rain, Inches[3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1]	South Location Primary Sampler [2]			
December 2, 2015	<LOQ		<LOQ	7.1	WNW	0.05
December 5, 2015	1.94		<LOQ	5.1	SE	0.01
December 8, 2015	6.19	6.38	<LOQ	7.8	SSE	0
December 11, 2015	1.13		<LOQ	4.9	SW	0
December 14, 2015	1.44		<LOQ	14.8	SSW	0.14
December 17, 2015	<LOQ		<LOQ	12.2	W	0
December 20, 2015	6.88[4]	6.88	<LOQ	14.9	SSW	0.05
December 23, 2015	8.75[5]		<LOQ	14.0	ESE	0.64
December 26, 2015	<LOQ		<LOQ	8.7	ENE	0.31
December 29, 2015	<LOQ		<LOQ	11.0	WSW	0

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. All meteorological data are from the Davis South monitor.

Note 4. Air Control Techniques, P.C. believes that sampler operator made several errors in charging and recovering filters between December 20th and December 23rd. The filter for December 20th was apparently recovered and then recharged for a second sampling period on December 23rd. The filter placed in the petri dish for December 20th was apparently an unused filter. Due to the problems with the primary sampler, the data provided by the collocated sampler is being used as primary data.

Note 5. The value reported on December 23rd is due to a double sampling run issue.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. mph	Wind Direction 24-Hour Average	Rain and Snow, Inches [3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1, 2]	South Location Primary Sampler [2]			
November 2, 2015	10.13	11.00	<LOQ	8.0	SW	0
November 5, 2015	9.44		<LOQ	6.7	S	0
November 8, 2015	0.81		<LOQ	12.3	W	0.17
November 11, 2015	6.19		<LOQ	2.8	ENE	0.05
November 14, 2015	4.69	4.94	<LOQ	23.6	W	3.56
November 17, 2015	2.94		<LOQ	8.8	SSW	0.54
November 20, 2015	<LOQ		<LOQ	18.7	SSW	0
November 23, 2015	1.31		No Data	4.1	N	0
November 26, 2015	4.38	5.06	<LOQ	5.5	ESE	0
November 29, 2015	<LOQ		<LOQ	14.6	NNE	0

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. The Met One rain gauge is operating,

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph	Wind Direction 24-Hour Average	Rain and Snow, Inches [3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1, 2]	South Location Primary Sampler [2]			
October 3, 2015	<LOQ		0.31	15.9	NE	0
October 6, 2015	0.44		<LOQ	5.1	ENE	0
October 9, 2015	<LOQ	<LOQ	0.50	8.8	E	0
October 12, 2015	1.75		0.69	14	WSW	0
October 15, 2015	1.88		0.56	9.0	WSW	0
October 18, 2015	2.00		0.44	5.1	SW	0
October 21, 2015	3.00	2.88	0.63	8.7	SW	0.01
October 24, 2015	0.94		<LOQ	13.0	W	0.15
October 27, 2015	0.75		<LOQ	10.4	E	0.5
October 30, 2015	3.13		<LOQ	4.7	SSW	0

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. The Met One rain gauge is still not operating, Wedron Silica is working with Murray and Trettel to swap out the data logger so that it will be compatible with the rain gauge. Rain data was gathered from the Davis Vantage Vue weather station located at the South Location.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph	Wind Direction 24-Hour Average	Rain and Snow, Inches [3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1, 2]	South Location Primary Sampler [2]			
September 3, 2015	1.19	1.19	<LOQ	6.2	SW	0
September 6, 2015	6.06		0.44	7.3	S	0
September 9, 2015	<LOQ		<LOQ	5.1	NE	0
September 12, 2015	<LOQ	<LOQ[4]	<LOQ	7.9	WSW	0
September 15, 2015	7.13	7.50	<LOQ	8.8	S	0
September 18, 2015	2.31		<LOQ	8	S	2.4
September 21, 2015	0.94		<LOQ	4.6	ESE	0
September 24, 2015	<LOQ		No Data [5]	6	ENE	0
September 27, 2015	1.31	1.25	<LOQ	4.2	SE	0
September 30, 2015	<LOQ		<LOQ	13.2	NNE	0

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. The Met One rain gauge is still not operating, Wedron Silica is working with Murray and Trettel to swap out the data logger so that it will be compatible with the rain gauge. Rain data was gathered from the Davis Vantage Vue weather station located at the South Location.

Note 4. September 12, 2015 was mistakenly sampled however it is not on the EPA 12 Day monitoring schedule.

Note 5. No data are available for the South Location on September 24, 2015 because the sampler was not left in the "Wait Mode;" therefore, it did not sample.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph [3]	Wind Direction 24-Hour Average [3]	Rain and Snow, Inches [3]
	North Location Primary Sampler [2]	North Location Collocated Sampler [1, 2]	South Location Primary Sampler [2]			
August 1, 2015	0.50		<LOQ	5.2	WSW	0
August 4, 2015	0.56		0.38	3.5	W	0
August 7, 2015	5.50		<LOQ	4.6	SSW	0
August 10, 2015	<LOQ	<LOQ	<LOQ	4.5	WNW	0.07
August 13, 2015	1.69		<LOQ	5.2	SW	0
August 16, 2015	2.38		<LOQ	4.3	SSW	0
August 19, 2015	1.81		<LOQ	11	WSW	0
August 22, 2015	3.44	3.38	<LOQ	5.4	SE	0
August 25, 2015	<LOQ		<LOQ	5.7	WNW	0
August 28, 2015	1.38		<LOQ	2.6	ESE	0
August 31, 2015	1.69	0.81	0.50	2.3	SSE	0.01

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/m^3.

Note 3. The meteorological tower was not operational during this time period. Meteorological data were obtained from a Davis Instruments Vantage Vue Wireless Weather Station at the South location while the meteorological station is being repaired.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph[3]	Wind Direction 24-Hour Average[3]	Rain and Snow, Inches[3]
	North Location Primary Sampler[2]	North Location Collocated Sampler[1]	South Location Primary Sampler[2]			
July 2, 2015	<LOQ		<LOQ	8.9	NE	0.00
July 5, 2015	2.88	3.06	<LOQ	3	SSW	0.00
July 8, 2015	0.44		<LOQ	4.2	NE	0.29
July 11, 2015	1.25		<LOQ	3.1	SE	0.07
July 14, 2015	<LOQ		<LOQ	7.8	NW	0.00
July 17, 2015	No Valid Data[4]	2.50	0.44	5.2	SSW	0.03
July 20, 2015	3.69[6]		No Data[5]	3.7	WSW	0.00
July 23, 2015	0.50		0.44	1.2	ENE	0.00
July 26, 2015	<LOQ		<LOQ	4.1	NE	0.02
July 29, 2015	0.81	0.81	<LOQ	7.4	WNW	0.05

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 $\mu g/m^3$.

Note 3. The meteorological tower was not operational during this time period. Meteorological data were obtained from a Davis Instruments Vantage Vue Wireless Weather Station at the South location while the meteorological station is being repaired.

Note 4. There are no data for the North primary sampler on July 17, 2015. The collocated sampler concentration is being used as primary data.

Note 5. No data is available for the South Location on July 20, 2015 because the sampler was not left in the "Wait Mode" and therefore it did not sample.

Note 6. This value might be biased to higher-than-true due to a probable filter double-sampling mistake.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph[3]	Wind Direction 24-Hour Average[3]	Rain and Snow, Inches[3]
	North Location Primary Sampler[2]	North Location Collocated Sampler[1]	South Location Primary Sampler[2]			
June 2, 2015	0.88		<LOQ	3.9	ESE	0.00
June 5, 2015	0.31		No Data[4]	9.4	NE	0.01
June 8, 2015	0.75		No Data[4]	7.5	SW	0.34
June 11, 2015	1.31	1.5	<LOQ	6	ENE	0.06
June 14, 2015	3.38		<LOQ	6.1	WSW	1.51
June 17, 2015	1.00		<LOQ	3.4	ENE	0.05
June 20, 2015	1.63		<LOQ	6.6	NE	0.98
June 23, 2015	<LOQ	<LOQ	<LOQ	6.0	WNW	0.01
June 26, 2015	<LOQ		<LOQ	9.1	NE	0.41
June 29, 2015	<LOQ		<LOQ	4.0	NE	0.00

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.31 µg/M^3.

Note 3. The meteorological tower was not operational during this time period. Meteorological data were obtained from a Davis Instruments Vantage Vue Wireless Weather Station at the South location while the meteorological station is being repaired.

Note 4. The power supply in the Partisol was destroyed as a results of a possible power surge. The power supply was replaced and the Partisol was audited to verify proper operation. No sampling was completed at the South location on June 5 and June 8 while the power supply was ordered, and installed by the sampling technician.

Appendix A Table 1. Wedron Silica Facility Ambient PM4 Crystalline Silica Data						
Date	PM4 Crystalline Silica, µg/M^3			Wind Speed, Avg. Mph[3]	Wind Direction 24-Hour Average[3]	Rain and Snow, Inches[3]
	North Location Primary Sampler[2]	North Location Collocated Sampler[1]	South Location Primary Sampler[2]			
May 3, 2015	5.25		0.50	9	SSW	0.32
May 6, 2015	3.19	3.5	<LOQ	4	SE	0
May 9, 2015	<LOQ		<LOQ	4	NE	0.01
May 12, 2015	<LOQ		<LOQ	17	WNW	0
May 15, 2015	2.81		<LOQ	10	SW	0.08
May 18, 2015	1.13	1.3	0.50	13	W	0
May 21, 2015	0.44		<LOQ	7	WNW	0.01
May 24, 2015	2.25		0.31	7	SE	0.37
May 27, 2015	0.31		<LOQ	12	W	0.06
May 30, 2015	0.38	0.4	<LOQ	6	NNW	0.48

Note 1. The collocated sampler operates every 12 calendar days.

Note 2. <LOQ indicates values below the minimum level of quantification of 0.30 µg/M^3.

Note 3. The meteorological tower was not operational during this time period. Meteorological data was obtained online from the Morris, Illinois airport (James Washburn Municipal Airport).