# CONSTRUCTION AIR SAMPLE DATA

#### PAMP PAHS SAMPLES ANALYTICAL RESULTS HONEYWELL HIGHLAND PARK HIGHLAND PARK, NEW JERSEY

			200-36875-1	Ĺ		
Analyte	<b>CAS Number</b>	Units	AMS-5-010517			
			01/05/2017	'		
PAHs				<u> </u>		
Acenaphthene	83-32-9	ug/m³ PUF	0.023	U		
Acenaphthylene	208-96-8	ug/m³ PUF	0.0071	J		
Anthracene	120-12-7	ug/m³ PUF	0.023	U		
Benzo[a]anthracene	56-55-3	ug/m³ PUF	0.0056	J		
Benzo[a]pyrene	50-32-8	ug/m <sup>3</sup> PUF	0.0092	J		
Benzo[b]fluoranthene	205-99-2	ug/m³ PUF	0.011	J		
Benzo[g,h,i]perylene	191-24-2	ug/m³ PUF	0.0076	J		
Benzo[k]fluoranthene	207-08-9	ug/m³ PUF	0.01	J		
Chrysene	218-01-9	ug/m³ PUF	0.011	J		
Dibenz(a,h)anthracene	53-70-3	ug/m³ PUF	0.023	J		
Fluoranthene	206-44-0	ug/m <sup>3</sup> PUF	0.026			
Fluorene	86-73-7	ug/m³ PUF	0.0032	J		
Indeno[1,2,3-cd]pyrene	193-39-5	ug/m³ PUF	0.0051	J		
Naphthalene	91-20-3	ug/m <sup>3</sup> PUF	0.088			
Phenanthrene	85-01-8	ug/m <sup>3</sup> PUF	0.019	J		
Pyrene	129-00-0	ug/m³ PUF	0.02	J		

U - The compound was not detected at the indicated concentration

Prepared By: US 1/19/2017 Reviewed By: NS 2/01/2017

Page 1 of 1 Page 21 of 28

J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.

# CONSTRUCTION ASBESTOS AIR DATA



#### **EMSL Analytical, Inc.**

1056 Stelton Road Piscataway, NJ 08854

Tel/Fax: (732) 981-0550 / (732) 981-0551 http://www.EMSL.com / piscatawaylab@emsl.com Customer ID: AMECEE25
Customer PO: C012904381

EMSL Order: 051700035

Project ID:

Attention: Andrew Shust

AMEC Foster Wheeler E & I 200 American Metro Blvd.

Suite 113

Hamilton, NJ 08619

Project: Honeywell Highland Park

Phone: (609) 689-2829

**Fax:** (609) 689-2838

Received Date: 01/04/2017 7:00 PM

**Analysis Date**: 01/04/2017 **Collected Date**: 01/04/2017

## Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm²	Fibers/ cc	Notes
AMS-01-010417	Perimeter Air Monitoring	1/04/2017	1780.00	<5.5	100	0.002	<7.01	<0.002	
051700035-0001	Sample (PCM Method)								
AMS-02-010417	Perimeter Air Monitoring	1/04/2017	1816.00	<5.5	100	0.001	<7.01	<0.001	
051700035-0002	Sample (PCM Method)								
AMS-03-010417	Perimeter Air Monitoring	1/04/2017	1823.00	6.5	100	0.001	8.28	0.002	
051700035-0003	Sample (PCM Method)								
AMS-04-010417	Perimeter Air Monitoring	1/04/2017	1850.00	5.5	100	0.001	7.01	0.001	
051700035-0004	Sample (PCM Method)								
AMS-05-010417	Perimeter Air Monitoring	1/04/2017	1277.00	<5.5	100	0.002	<7.01	<0.002	
051700035-0005	Sample (PCM Method)								

No discernable field blanks submitted with this sample set.

Analyst(s):

Nicholas Maslowski PCM (5)

Chaiyut Sae Lao, Laboratory Manager or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.28, 21-50 fibers = 0.24, 51-100 fibers = 0.18. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. The test results contained within this report meet the requirements of NELAP unless otherwise noted. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Initial report from: 01/05/2017 12:57:15

ASB\_PCM\_NoSig\_0003 Printed: 1/5/2017 12:57 PM

Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NJ NELAC 12037



AMEC Foster Wheeler E & I

200 American Metro Blvd.

Hamilton, NJ 08619

Attention: Andrew Shust

Suite 113

EMSL Order: 051700035 Customer ID: AMECEE25 Customer PO: C012904381

Project ID:

**Phone:** (609) 689-2829

Fax: (609) 689-2838

Received Date: 01/04/2017 7:00 PM

**Analysis Date**: 01/05/2017 **Collected Date**: 01/04/2017

Project: Honeywell Highland Park

Tost Poport: Ashostos Fiber Analysis by Transmission Floatron Microscopy (T

### Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

		Volume	Area Analyzed	Non	Asbestos	#Structures	Analytical Sensitivity		estos ntration
Sample	Location	(Liters)	(mm²)	Asb	Type(s)	≥0.5µ < 5µ ≥5µ	(S/cc)	(S/mm²)	(S/cc)
AMS-5-010417	Perimeter Air Monitoring Sample (TEM Method)	1773.00	0.0516	2	None Detected		0.0042	<19.00	<0.0042
051700035-0006	,								

Analyst(s)

David Moody (1)

Chaiyut Sae Lao, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NVLAP Lab Code 101048-2, NJ NELAC 12037, Philadelphia 289

Initial report from: 01/05/2017 12:57:23



**EMSL Order:** 051700051 **Customer ID:** AMECEE25 **Customer PO:** C012904381

Project ID:

 Attention:
 Andrew Shust
 Phone:
 (609) 689-2829

 AMEC Foster Wheeler E & I
 Fax:
 (609) 689-2838

 200 American Metro Blvd.
 Received Date:
 01/05/2017 6:12 F

Suite 113

Hamilton, NJ 08619 **Project:** Honeywell Highland Park

Received Date: 01/05/2017 6:12 PM Analysis Date: 01/06/2017 Collected Date: 01/05/2017

## Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm²	Fibers/ cc	Notes
AMS-01-010517	Perimeter Air Monitoring	1/05/2017	1801.00	<5.5	100	0.001	<7.01	<0.002	
051700051-0001	Sample/PCM Method)								
AMS-02-010517	Perimeter Air Monitoring	1/05/2017	1783.00	<5.5	100	0.002	<7.01	<0.002	
051700051-0002	Sample/PCM Method)								
AMS-03-010517	Perimeter Air Monitoring	1/05/2017	1795.00	<5.5	100	0.002	<7.01	<0.002	
051700051-0003	Sample/PCM Method)								
AMS-04-010517	Perimeter Air Monitoring	1/05/2017	1792.00	<5.5	100	0.002	<7.01	<0.002	
051700051-0004	Sample/PCM Method)								
AMS-05-010517	Perimeter Air Monitoring	1/05/2017	1628.00	<5.5	100	0.002	<7.01	<0.002	
051700051-0005	Sample/PCM Method)								
AMS-B-010517	Field Blank (PCM Method)	1/05/2017		<5.5	100		<7.01		Field Blank
051700051-0006									

	(10 min )	0.0
	$I/I(I) \sim A$	$C \setminus A \cap A$
	1// /2 01 - 4	

Analyst(s):

David Moody PCM (6)

Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NJ NELAC 12037

The results reported have been blank corrected as applicable.

Chaiyut Sae Lao, Laboratory Manager or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.28, 21-50 fibers = 0.24, 51-100 fibers = 0.18. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. The test results contained within this report meet the requirements of NELAP unless otherwise noted. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Initial report from: 01/06/2017 13:55:07



EMSL Order: 051700051 Customer ID: AMECEE25 Customer PO: C012904381

Project ID:

Phone: (609) 689-2829 Fax: (609) 689-2838

Received Date: 01/05/2017 6:12 PM

**Analysis Date:** 01/06/2017 **Collected Date:** 01/05/2017

Attention: Andrew Shust

AMEC Foster Wheeler E & I 200 American Metro Blvd.

Suite 113

Hamilton, NJ 08619

Project: Honeywell Highland Park

## Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

		Volume	Area Analyzed	Non	Asbestos	#Structures	Analytical Sensitivity		estos ntration
Sample	Location	(Liters)	(mm²)	Asb	Type(s)	≥0.5µ < 5µ ≥5µ	(S/cc)	(S/mm²)	(S/cc)
AMS-05-010517	Perimeter Air Monitoring Sample (TEM Method)	1789.00	0.0516	0	None Detected		0.0042	<19.00	<0.0042
051700051-0007	,								

Analyst(s)

Susan Pollack (1)

Chaiyut Sae Lao, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NVLAP Lab Code 101048-2, NJ NELAC 12037, Philadelphia 289

Initial report from: 01/06/2017 13:55:15



Attention: Andrew Shust

**EMSL Order:** 051700076 **Customer ID:** AMECEE25 **Customer PO:** C012904381

Project ID:

Phone: (609) 689-2829

Fax: (609) 689-2838

Received Date: 01/06/2017 5:07 PM

**Analysis Date**: 01/07/2017 **Collected Date**: 01/06/2017

200 American Metro Blvd. Suite 113 Hamilton, NJ 08619

Project: Honeywell Highland Park

AMEC Foster Wheeler E & I

## Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm²	Fibers/ cc	Notes
AMS-01-010617	Perimeter Air Monitoring	1/06/2017	1476.00	<5.5	100	0.002	<7.01	<0.002	
051700076-0001	Sample (PCM Method)								
AMS-02-010617	Perimeter Air Monitoring	1/06/2017	1476.00	<5.5	100	0.002	<7.01	<0.002	
051700076-0002	Sample (PCM Method)								
AMS-03-010617	Perimeter Air Monitoring	1/06/2017	1466.00	<5.5	100	0.002	<7.01	<0.002	
051700076-0003	Sample (PCM Method)								
AMS-04-010617	Perimeter Air Monitoring	1/06/2017	1445.00	<5.5	100	0.002	<7.01	<0.002	
051700076-0004	Sample (PCM Method)								
AMS-05-010617	Perimeter Air Monitoring	1/06/2017	1485.00	<5.5	100	0.002	<7.01	<0.002	
051700076-0005	Sample (PCM Method)								
AMS-06-010617	Field Blank (PCM Method)	1/06/2017		<5.5	100		<7.01		Field Blank
051700076-0006									

The results reported have been blank corrected as applicable.

Analyst(s):
Chaiyut Sae Lao PCM (6)
Chaiyut Sca Lao Labaratar Massas

Chaiyut Sae Lao, Laboratory Manager or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.28, 21-50 fibers = 0.24, 51-100 fibers = 0.18. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. The test results contained within this report meet the requirements of NELAP unless otherwise noted. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Initial report from: 01/07/2017 12:15:34

Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NJ NELAC 12037



EMSL Order: 051700076 Customer ID: AMECEE25 Customer PO: C012904381

Project ID:

Phone: (609) 689-2829

Fax: (609) 689-2838 Received Date: 01/06/2017 5:07 PM

**Analysis Date:** 01/07/2017

Collected Date: 01/06/2017

AMEC Foster Wheeler E & I

Attention: Andrew Shust

200 American Metro Blvd.

Suite 113

Hamilton, NJ 08619

Project: Honeywell Highland Park

#### Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

		Volume	Area Analyzed	Non	Asbestos	#Structures	Analytical Sensitivity		estos ntration
Sample	Location	(Liters)	(mm²)	Asb	Type(s)	≥0.5µ < 5µ ≥5µ	(S/cc)	(S/mm²)	(S/cc)
AMS-5-010617	Perimeter Air Monitoring Sample (TEM Method)	1488.00	0.0645	0	None Detected		0.0040	<16.00	<0.0040
051700076-0007	(TEM Method)								

Analyst(s)

Chaiyut Sae Lao (1)

Chaiyut Sae Lao, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Piscataway, NJ NYS ELAP 11423, NVLAP Lab Code 101048-2, NJ NELAC 12037, Philadelphia 289

Initial report from: 01/07/2017 12:15:42