ADVANTAGE
Environmental INC.

FINAL ASBESTOS MATERIAL INSPECTION REPORT

Conducted at:
1300 N River St
Portland, OR 97227

Conducted for:
Environmental Quality Management
1800 Carillon Blvd
Cincinnati, OH 45240

Prepared By:
Advantage Environmental Inc.
9317 NE Hwy 99, Suite A
Vancouver, WA 98665

ADVANTAGE Environmental INC.

Clean your world.

March 22, 2018

Jerry Wade
1800 Carillon Blvd
Cincinnati, OH 45240
503-953-5263
wade1109@msn.com

RE: Final asbestos material inspection report: 1300 N River St, Portland, OR

Dear Mr. Wade,

Advantage Environmental, Inc., (AEI) has completed the final asbestos material inspection of the burn cell located at 1300 N River St in Portland, OR. The results of the inspection are provided in the accompanying report.

Thank you for choosing AEI for this project. Please feel free to contact us at (360) 356-7628 if you have any questions.

Respectfully,
Advantage Environmental, Inc.

Sidney Carter
Senior Project Manager

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Summary of Events

- Commencement of phase 2, September 19,2017
- Negative exposure assement performed on workers at the burn site.
- Site specific work plan created for burn site.
- Asbestos awareness training for workers to be on site
- Daily personnel air sampling and area air sampling.
- Survey of decking material to isolate area of asbestos containing materials.
- Daily inspections of regulated area and of the river within the catch system.
- Daily oversite of the burn site to maintain work practices and to verify visible emissions are not being released.
- Preliminary walk through and inspection of the burn site by three AHERA inspectors and one industrial hygienist.
- Final walk through and inspection of the burn site by three ASHERA inspectors and one industrial hygienist.
- Final survey inspection and sampling of suspect materials by tow AHERA inspectors.
- Sampling protocol was performed by dividing the burn site into grids and using a random number generator for sample locations.

9317 N.E. Hwy 99, STE A
Vancouver, Washington 98665

1. INTRODUCTION

Advantage Environmental, Inc. (AEI) was retained by Environmental Quality Management to perform a final asbestos material inspection of the property located at 1300 N River St in Portland, OR. The on-site inspection was performed by EPA/AHERA accredited building inspectors Sidney Carter, Denis Dooley, Ronnie Carter, and Industrial hygienist Jibri Johnson on March 23, 24, 26, 27, and 28, 2018.

2. SITE DESCRIPTION

The structure is a former 75,000 sq. ft. commercial warehouse on pier foundation consisting of wood pilings. Interior walls and ceilings consisted of primarily wood with some drywall located in minimal areas and flooring was comprised of wood with asphalt overlay. At time of mobilization, the structure was no longer standing and Asbestos Containing debris and contamination remained on the deck of the structure.

3. PURPOSE AND SCOPE

The purpose of this inspection was to identify the location of any asbestos containing material that may remain after the completion of the removal of the deck, asbestos containing materials and contaminated debris from the site. The scope of work included two walk-through inspections, and final sampling inspection of the area under the former warehouse and the surrounding areas. Bulk sampling analysis of specific suspect asbestos-containing materials from the beach and surrounding area was performed, excluding areas further than two feet into the river, and a written report documenting the results of the inspection. Materials are identified within appendix A.

The sampling team identified areas with suspect materials to be sampled for asbestos by a random number generator. Materials that might be suspect for asbestos may include, but are not limited to, thermal system insulation, joint compound, roofing material, tar, gaskets, floor coverings, decorative coatings, and wire insulation. The sampler used a sampling tool appropriate for each kind of material and collect samples in airtight containers for subsequent laboratory analysis.

Statistically random bulk-samples representative of the suspect Asbestos Containing Materials (ACM) of each homogeneous area were collected according to the guidelines published as EPA Final Rule: Title II of the Toxic Substances Control Act (TSCA), 15 USC, Sections 2641 through 2654 and in compliance with 40 CFR, Part 763. AEI has collected the appropriate number of bulk-samples to meet all regulatory requirements.

4. VISUAL ASSEMENT AND FINDINGS

Our survey activities began with visual observation of the area to identify homogeneous areas of suspect asbestos containing material. The burn site was broken into grids for the preliminary inspection and final inspection. Performance Abatement Services (PAS) was onsite and had certified workers walk the site with the inspectors in the event that suspect ACM material was located. Inspectors worked each grid with a PAS employee. Cross inspections were completed so no inspector inspected the same grid twice.

At the time of the final inspection completed at 3PM on February 28th, 2018 there was no visible suspect ACM on the burn site or surrounding areas.

Building material identified as glass, metal or rubber were not considered suspect asbestos containing material. Unidentified asbestos-containing materials may be in other areas inaccessible at the time of this inspection.

A table indicating sample numbers, material description, material location, material condition and asbestos content of each material sampled is included in Appendix A. Laboratory analytical results and chain of custody documentation are included in Appendix B. AHERA Building inspector credentials are included in Appendix C.

Suspect asbestos-containing material sampled and analyzed included:

- Black wood debris
- Black asphalt
- Brown wood debris
- Brown soil
- Gray debris
- Black/gray asphalt
- Tan drywall
- Brown debris
- Black/brown soil

Laboratory results indicate "ASBESTOS NOT PRESENT" for all samples analyzed.

***Note**: A diligent inspection was conducted and every effort was made to inspect and investigate all areas of the building(s) previously mentioned. However, unidentified asbestos-containing material may still be in place that was inaccessible or under water at the time.*

5. SAMPLING METHODOLOGY

A walk-through of the property was conducted by an EPA/AHERA accredited building inspectors to identify the location of suspect asbestos-containing material. The location, approximate quantity and condition of each material were recorded on field data sheets. Bulk samples of each suspect material were then collected and submitted to the laboratory under chain of custody documentation for analysis of asbestos content.

During this inspection, samples were always collected with a clean too, and special attention was paid to avoid creation of airborne dust. This method was intended to provide material to a laboratory where the fibers can be quantified and qualitatively identified as a specific type of asbestos.

Samples were collected from selected homogeneous material to evaluate the presence or absence of asbestos in each material. Determination of homogeneous material included material type, texture, pattern, color, and size. A total of 35 suspect asbestos-containing material samples were analyzed including sub-layers.

All samples collected by AEI were placed into pre-labeled airtight containers and shipped to Quantem Laboratories for analysis of asbestos content. Quantem Laboratories a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory via Polarized Light Microscopy (PLM) for asbestos content analyzed with dispersion staining to identify asbestos constituents as required by EPA regulation 40 CFR, Part 763.

6. DISCUSSION & RECOMMENDATIONS

Project Overview

From the commencement of the project, air data was collected and compiled for both area air sampling as well as personnel air sampling. Advantage Environmental was on site at all times monitoring the employees and area air sampling as well as observing the work practices and performing inspections. At no time did employees or area sampling exceed the PEL. There were two isolated events where we encountered overloaded samples, those samples were over loaded with non-ACM debris from the processing plant to the South of the burn site.

A negative exposure assement was performed at the start of the project to get a base line of what employees may be exposed to on the site. After the negative exposure assement was completed a work plan was designed and implemented at the site. At all times employees followed the work plan and no issues were found. Certified abatement workers and supervisors were on site at all times during the removal and packaging of suspect ACM.

The burn site was regulated at all times during debris and deck removal. The regulated area continued to change throughout the project with the installation of Trestle #1 and Trestle #2, as well as when moving of suspect ACM was being performed. Advantage Environmental assisted in making sure all workers we in compliance with the regulated areas at all times.

All waste was placed into plastic lined dumpsters or high side trailers for transport to the landfill. All work in loading the dumpsters and trailers was performed in regulated areas at all times.

A survey of the deck of the burn site was completed after gross removal of debris to establish where the potential of ACM could be located on the structure. Holes were cut through the asphalt decking and all layers of wood substrates to ascertain if there was ACM in any areas of the deck. Sampling of the debris was collected after initial cleaning of the deck had been completed. Laboratory results indicated less than 1% chrysotile asbestos content for the debris samples. This material appeared to be throughout the deck where sampled and is debris based, mixed with the residual material that is remaining on the deck. Laboratory results indicated less than 1% asbestos content, and was no longer regulated by DEQ (Department of Environmental Quality)

Roofing was found on the North bank of the burn site. This roofing appeared to be in place prior to the fire and was not part of the fire debris. It was agreed to remove the roofing while on site to best leave the site of any ACM or suspect ACM. That work was performed at the end of the project.

At the completion of the removal of the deck and final cleaning of the burn site. Advantage Environmental performed a preliminary inspection of the burn site with Performance Abatement Services Employees. AHERA certified inspectors worked the site in grid patterns and any suspect material was removed by Certified abatement workers. At the completion of the initial in inspection AHERA inspectors performed a secondary inspection of the site looking for suspect ACM. During the final inspection AHERA inspectors never inspected the same grids that were previously inspected. At the completion of the final inspection, no ACM, or suspect ACM was found.

At the completion of the final inspection AHERA inspector completed the final survey and inspection of the burn site. AHERA inspectors used a random number generator and grid pattern to randomly pull samples of any suspect materials that may be found. Inspectors again walked the grid patterns and took samples.

At the completion of the final inspection and with the results of the analyzed samples that were taken from the site during that inspection, there was no ACM found.

7. WARRANTY

Advantage Environmental Inc. warrants that this report has been prepared in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. No other warranties are implied or expressed.

APPENDIX A
Material Summary Table

1300 N River St-Portland, OR

Material Summary Table

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
1	Black wood debris	Grid D2		Asbestos Not Present
2	Black asphalt	Grid K2		Asbestos Not Present
3	Black asphalt	Grid C5		Asbestos Not Present
4	Brown wood debris	Grid J10		Asbestos Not Present
5	Brown soil	North Bank of Grid J14		Asbestos Not Present
6	Brown soil	Grid C12		Asbestos Not Present
7	Brown soil	Grid F3		Asbestos Not Present
8	Gray debris	Grid G11		Asbestos Not Present
9	Brown wood debris	Grid H10		Asbestos Not Present
10	Black asphalt	Grid D1		Asbestos Not Present
11	Brown soil	Grid G5		Asbestos Not Present
12	Brown soil	North Bank of Grid D14		Asbestos Not Present
13	Black asphalt	Grid J7		Asbestos Not Present
14	Brown wood debris	Grid I4		Asbestos Not Present
15	Brown soil	Grid E7		Asbestos Not Present
16	Brown soil	Grid J1		Asbestos Not Present
17	Brown soil	Grid B13		Asbestos Not Present
18	Black/gray asphalt	Grid J3		Asbestos Not Present
19	Black asphalt	South Bank of Grid H1		Asbestos Not Present

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
20	Tan drywall	Grid H11		Asbestos Not Present
21	Brown wood debris	Grid H6		Asbestos Not Present
22	Black asphalt	Grid J11		Asbestos Not Present
23	Brown wood debris	Grid F9		Asbestos Not Present
24	Black asphalt	Grid J6		Asbestos Not Present
25	Brown soil	Grid F14		Asbestos Not Present
26	Black asphalt	Grid C9		Asbestos Not Present
27	Brown wood debris	Grid H8		Asbestos Not Present
28	Black asphalt	Grid B2		Asbestos Not Present
29	Black asphalt	Grid E12		Asbestos Not Present
30	Brown soil	Grid F1		Asbestos Not Present
31	Brown soil	South Bank of Grid G1		Asbestos Not Present
32	Brown wood debris	Grid H14		Asbestos Not Present
33	Black asphalt	North Bank of Grid J14		Asbestos Not Present
34	Brown soil	Grid E14		Asbestos Not Present
35	Brown wood debris	Grid B11		Asbestos Not Present
36	Brown soil	Grid I12		Asbestos Not Present
37	Tan drywall	Grid G2		Asbestos Not Present
38	Brown soil	North Bank of Grid G14		Asbestos Not Present
39	Black/brown soil	South Bank of Grid C1		Asbestos Not Present

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
40	Brown wood debris	Grid E5		Asbestos Not Present
41	Black asphalt Brown soil	Grid C14 Grid C14		Asbestos Not Present Asbestos Not Present
42	Brown soil	Grid D10		Asbestos Not Present

APPENDIX B
Laboratory Analytical Results
Chain of Custody

QUANTEM LABORATORIES
2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 291397
Account Number: B513
Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	X2281801	Homogeneous	Black Debris	Asbestos Not Present	Cellulose	90	Clay Sand
002	X2281802	Homogeneous	Black Asphalt	Asbestos Not Present	NA		Tar Sand CaCO3
003	X2281803	Homogeneous	Black Asphalt	Asbestos Not Present	NA		Tar Sand CaCO3
004	X2281804	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose	95	Clay Sand
005	X2281805	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	3	Clay Sand
006	X2281806	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	<1	CaCO3 Sand
007	X2281807	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	2	CaCO3 Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

QUANTEM LABORATORIES
2033 HERITAGE PARK DR., OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 291397
Account Number: B513
Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
008	X2281808	Homogeneous	Gray Debris	Asbestos Not Present	NA	CaCO3 Gypsum
009	X2281809	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 100	
010	X2281810	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
011	X2281811	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose 10	CaCO3 Sand
012	X2281812	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose 5	Clay Sand
013	X2281813	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3

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QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 291397
Account Number: B513
Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
014	X2281814	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 90	Clay Sand
015	X2281815	Homogeneous	Brown Soil	Asbestos Not Present	NA	Clay Sand
016	X2281816	Homogeneous	Brown Soil	Asbestos Not Present	NA	Clay Sand
017	X2281817	Homogeneous	Brown Soil	Asbestos Not Present	NA	Clay Sand
018	X2281818	Homogeneous	Gray Asphalt	Asbestos Not Present	NA	CaCO3 Gypsum
019	X2281819	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
020	X2281820	Homogeneous	Tan Sheetrock	Asbestos Not Present	Cellulose 5 Glass Fiber 5	Gypsum

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QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 291397
Account Number: B513
Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
021	X2281821	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 90	Clay Sand
022	X2281822	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
023	X2281823	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 90	Clay Sand
024	X2281824	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
025	X2281825	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose 2	Clay Sand
026	X2281826	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3

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Polarized Light Microscopy Asbestos Analysis Report

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Account Number: B513

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
027	X2281827	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 100	
028	X2281828	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
029	X2281829	Homogeneous	Black Asphalt	Asbestos Not Present	Cellulose 60	Clay Sand
030	X2281830	Homogeneous	Brown Soil	Asbestos Not Present	NA	Clay Sand
031	X2281831	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose 2	Clay Sand
032	X2281832	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 90	Clay Sand
033	X2281833	Homogeneous	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3

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QUANTEM LABORATORIES
2033 Heritage Park Dr, Oklahoma City, OK 73120 | 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

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Account Number: B513
Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
034	X2281834	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	5	Clay Sand
035	X2281835	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose	100	
036	X2281836	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	5	Clay Sand
037	X2281837	Homogeneous	Tan Sheetrock	Asbestos Not Present	Cellulose Glass Fiber	5 2	Gypsum
038	X2281838	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	5	Clay Sand
039	X2281839	Homogeneous	Brown Soil	Asbestos Not Present	Cellulose	5	Clay Sand

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Date Received: 03/02/2018
Received By: Amber Bassett
Date Analyzed: 03/05/2018
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Project: EPA/EQM
Project Location: 1300 North River Street Portland, OR
Project Number: NA

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
040	X2281840	Homogeneous	Brown Debris	Asbestos Not Present	Cellulose 100	
041	X2281841	Layered	Black Asphalt	Asbestos Not Present	NA	Tar Sand CaCO3
041a		Layered	Brown Soil	Asbestos Not Present	Cellulose 3	Clay Sand
042	X2281842	Homogeneous	Brown Soil	Asbestos Not Present	NA	Clay Sand

Dee Ammerman, Analyst

3/5/2018
Date of Report

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ASBESTOS CHAIN OF CUSTODY

QuanTEM LABORATORIES
www.QuanTEM.com
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No.	291397
Accept	Reject

Contact Information			Project Information		Report Results (☑ one box)	
Company:	Advantage Environmental	Phone:	Project Name:	EPA/EQM	☐	QuanTEM Website
Contact:	Sidney Carter	Cell Phone: (503) 522-1369	Project Location:	1300 North River Street Portland, OR	☐	Email sid.carter@advantage-enviro.com
Account #:	B513	E-mail: sid.carter@advantage-enviro.com	Project ID:		☐	Other _____
SAMPLED BY:	Name: Sidney Carter	Date: 2/28/2018	P.O. Number:			

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	3/1/18 3pm	FedEx	Amber Bassett 10am	3-2-18

Per S. Carter 3-2-18 10:30

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM		PLM		TEM		TEM		TURNAROUND TIME	
☒	Bulk Analysis (EPA 600/R-93/116)	☐	Vermiculite Attic Insulation (EPA 600/R-04/004)	☐	Air- AHERA	☐	Bulk- Presence / Absence EPA600/R-93/116	☐	Rush
☐	400 Point Count	☐	Other	☐	Air- NIOSH 7402	☐	Bulk- Quantitative [weight%]- Chatfield	☐	Same Day
☐	1000 Point Count	PCM		☐	Air- ISO 10312	☐	Dust- Presence / Absence	☑	24 - Hour
☐	Gravimetric Preparation	☐	NIOSH 7400	☐	Drinking Water- EPA 100.2	☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755	☐	3 - Day
☐	Particle ID			☐	Waste Water- EPA 600/4-83-043	☐	Other	☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	X2281801	☑	Black	Wood Debris		Grid D2
2	X2281802	☑	Black	Asphalt		Grid K2
3	X2281803	☑	Black	Asphalt		Grid C5
4	X2281804	☑	Brown	Wood Debris		Grid J10
5	X2281805	☑	Brown	Soil		North Bank of Grid J14
6	X2281806	☑	Brown	Soil		Grid C12
7	X2281807	☑	Brown	Soil		Grid F3
8	X2281808	☑	Gray	Debris		Grid G11
9	X2281809	☑	Brown	Wood Debris		Grid H10
10	X2281810	☑	Black	Asphalt		Grid D1

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are **NOT** available for Saturday Delivery

QuanTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 291397
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EPA/EQM | Project Location: 1300 North River Street Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	X2281811	✓	Brown	Soil		Grid G5
12	X2281812	✓	Brown	Soil		North Bank of Grid D14
13	X2281813	✓	Black	Asphalt		Grid J7
14	X2281814	✓	Brown	Wood Debris		Grid I4
15	X2281815	✓	Brown	Soil		Grid E7
16	X2281816	✓	Brown	Soil		Grid J1
17	X2281817	✓	Brown	Soil		Grid B13
18	X2281818	✓	Black	Asphalt		Grid J3
19	X2281819	✓	Black	Asphalt		South Bank of Grid H1
20	X2281820	✓	Tan	Drywall		Grid H11
21	X2281821	✓	Brown	Wood Debris		Grid H6
22	X2281822	✓	Black	Asphalt		Grid J11
23	X2281823	✓	Brown	Wood Debris		Grid F9
24	X2281824	✓	Black	Asphalt		Grid J6
25	X2281825	✓	Brown	Soil		Grid F14
26	X2281826	✓	Black	Asphalt		Grid C9
27	X2281827	✓	Brown	Wood Debris		Grid H8
28	X2281828	✓	Black	Asphalt		Grid B2
29	X2281829	✓	Black	Aspahlt		Grid E12
30	X2281830	✓	Brown	Soil		Grid F1

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are **NOT** available for Saturday Delivery

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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 291397
Accept Reject

Project Information		
Company: Advantage Environmental	Project Name: EPA/EQM	Project Location: 1300 North River Street Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
31	X2281831	☑	Brown	Soil		South Bank of Grid G1
32	X2281832	☑	Brown	Wood Debris		Grid H14
33	X2281833	☑	Black	Asphalt		North Bank of Grid J14
34	X2281834	☑	Brown	Soil		Grid E14
35	X2281835	☑	Brown	Wood Debris		Grid B11
36	X2281836	☑	Brown	Soil		Grid I12
37	X2281837	☑	Tan	Drywall		Grid G2
38	X2281838	☑	Brown	Soil		North Bank of Grid G14
39	X2281839	☑	Black	Soil		South Bank of Grid C1
40	X2281840	☑	Brown	Wood Debris		Grid E5
41	X2281841	☑	Black	Asphalt/Soil		Grid C14
42	X2281842	☑	Brown	Soil		Grid D10
43		☐				
44		☐				
45		☐				
46		☐				
47		☐				
48		☐				
49		☐				
50		☐				

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are **NOT** available for Saturday Delivery

APPENDIX C
AHERA Building Inspector Certification

Certificate of Completion

This is to certify that

Sidney Carter

has satisfactorily completed
4 hours of training as a

AHERA Building Inspector

to comply with the training requirements of

TSCA Title II, 40 CFR 763 (AHERA)

1627809
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Jun 14, 2017 Expires in 1 year.
Date(s) of Training

Exam Score:
If appropriate:

Instructor

ARGUS PACIFIC, INC / 1900 WEST NICKERSON ST, SUITE 315 / SEATTLE, WASHINGTON 98119 / 206.285.3373 / ARGUSPACIFIC.COM

THIS IS TO CERTIFY THAT

DENIS DOOLEY

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR / MANAGEMENT PLANNER REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 07/07/2017

Course Location: Portland, OR

Certificate: IMR-17-6366A

PBS

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 07/07/2018

For verification of the authenticity of this certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

Greg Baker, Instructor

Certificate of Completion

This is to certify that

Ronnie Carter

has satisfactorily completed
4 hours of refresher training as an

AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

165790
Certificate Number

Feb 21, 2018 — Expires in 1 year.
Date(s) of Training

Exam Score:
If appropriate:

Instructor

ARGUS PACIFIC, INC. // 1900 WEST NICKERSON ST. SUITE 315 // SEATTLE, WASHINGTON 98119 // 206.285.3373 // ARGUSPACIFIC.COM

APPENDIX D
Preliminary Deck Survey

ADVANTAGE Environmental INC.

PRELIMINARY ASBESTOS BUILDING MATERIAL SURVEY

Conducted at:
1300 N River St
Portland, OR 97227

Conducted for:
Environmental Quality Management
1800 Carillon Blvd
Cincinnati, OH 45240

Prepared By:
Advantage Environmental Inc.
9317 NE Hwy 99, Suite A
Vancouver, WA 98665

ADVANTAGE Environmental INC.

Clean your world.

November 14, 2017

Jerry Wade
1800 Carillon Blvd
Cincinnati, OH 45240
503-953-5263
wade1109@msn.com

RE: Preliminary asbestos building material survey: 1300 N River St, Portland, OR

Dear Mr. Wade,

Advantage Environmental, Inc., (AEI) has completed a preliminary asbestos building material survey of the burn cell located at 1300 N River St in Portland, OR. The results of the survey are provided in the accompanying report.

Thank you for choosing AEI for this project. Please feel free to contact us at (360) 356-7628 if you have any questions.

Respectfully,
Advantage Environmental, Inc.

Pete Coleman
Office Manager

1. INTRODUCTION

Advantage Environmental, Inc. (AEI) was retained by Environmental Quality Management to perform a preliminary asbestos building material survey of the property located at 1300 N River St in Portland, OR. The on-site inspection was performed by EPA/AHERA accredited building inspector Sidney Carter on October 26, 2017, October 27, 2017 and November 1, 2017.

2. BUILDING DESCRIPTION

The structure is a former ~75,000 sq. ft. commercial warehouse on pier foundation consisting of wood pilings. Interior walls and ceilings consisted of wood and flooring was comprised of wood with asphalt overlay.

3. PURPOSE AND SCOPE

The purpose of this survey was to identify the location of asbestos containing material prior to removal and disposal of the remaining deck. The scope of work included a walk-through inspection, bulk sampling and analysis of specific suspect asbestos-containing materials from the deck and face of the deck with a written report documenting the results of the materials in the survey.

This survey is a preliminary survey and additional sampling/investigation may be required. Materials are identified within appendix A. This is not a bidding document and all quantities of asbestos containing material should be verified by the abatement contractor prior to submitting their bid.

4. VISUAL ASSEMENT AND FINDINGS

Our survey activities began with visual observation of the area to identify homogeneous areas of suspect asbestos containing material. Assessments were conducted throughout visually accessible areas of the area.

Building material identified as concrete, glass, wood, masonry, metal or rubber were not considered suspect asbestos containing material.

Unidentified asbestos-containing materials may be in other areas not yet tested or may be in inaccessible areas.

A table indicating sample numbers, material description, material location, material condition and asbestos content of each material sampled is included in Appendix A. Laboratory analytical results and chain of custody documentation are included in Appendix B. AHERA Building inspector credentials are included in Appendix C.

Suspect asbestos-containing material sampled and analyzed included:

- Black asphalt
- Black mastic/tar
- Gray coating
- Black debris

The following material contains less than 1% asbestos content when analyzed.

Material Type	Material Location
Black debris	Presumed throughout the surface of the deck

***Due to high risk of personnel and/or environmental exposure/contamination; regulatory agencies advise use of licensed asbestos abatement contractors for removal of <1% asbestos containing material. Material containing less than 1% asbestos content are not quantified.*

Of the suspect asbestos-containing material sampled, laboratory analysis indicated the following material contained asbestos content of 1% or greater. These materials will need to be removed prior to disturbance, or demolition activities that may impact these materials.

Material Type	**Material Location**	**Approximate Quantity****	**Friable** Yes / No*
Black mastic/tar	Presumed to be on the east perimeter of the deck. (front and sides of trusses)	~Not Quantified	No

***Note:** A diligent inspection was conducted and every effort was made to inspect and investigate all areas of the deck previously mentioned herein. However, unidentified asbestos-containing material may still be in place in other areas of the structure inspected that were inaccessible/not included at the time of this survey.*

**Friability based on material condition at time of inspection.*

5. SAMPLING METHODOLOGY

A walk-through of the property was conducted by an EPA/AHERA accredited building inspector to identify the location of suspect asbestos-containing material. The location, approximate quantity and condition of each material were recorded on field data sheets. Bulk samples of each suspect material were then collected and submitted to the laboratory under chain of custody documentation for analysis of asbestos content.

Samples were collected from selected homogeneous material to evaluate the presence or absence of asbestos in each material. Determination of homogeneous material included material type, texture, pattern, color, and size. A total of 35 suspect asbestos-containing material samples were analyzed including sub-layers.

All samples collected by AEI were placed into pre-labeled airtight containers and shipped to Quantem Laboratories for analysis of asbestos content. Quantem Laboratories analyzed the samples using Polarized Light Microscopy (PLM) with dispersion staining to identify asbestos constituents as required by EPA regulation 40 CFR, Part 763.

6. DISCUSSION & RECOMMENDATIONS

Mastic
Samples of the mastic were collected from the Front/East side of the trusses and beneath the asphalt deck. Laboratory results indicate samples 1D,1E,1H contain 10% chrysotile asbestos content and has been identified at the Front/East side of the structure. The material is a tar based mastic and is applied to the fronts and top portions of some of the trusses. This material is present approximately one foot inside the Front/East side edge of the deck. Additional destructive sampling/investigation should be performed to confirm that this material is not present in other areas of the structure/deck. The additional sampling for the mastic that is under the asphalt flooring of the deck has shown to be negative for asbestos. Additional sampling should be performed to confirm that the material is negative as well.

Debris
Sampling of the debris was collected after initial cleaning of the deck had been completed. Laboratory results indicated less than 1% chrysotile asbestos content for the debris samples 15A-27A. This material appears to be throughout the deck where sampled and is debris based, mixed with the residual material that is remaining on the deck. Laboratory results indicated less than 1% asbestos content.

Oregon Department of Environmental Quality (DEQ) does not regulate materials containing less than 1% asbestos content, but DEQ recommends certified asbestos abatement workers and supervisors handle and dispose of materials containing any amounts of asbestos. Oregon OSHA regulations (29 CFR 1926.1001) states that if asbestos containing material, containing less than 1% asbestos is to be removed by construction personnel; the employer shall provide awareness training, a written respirator protection program, respirators and a negative exposure assessment. AEI recommends additional sampling/investigation be performed in other areas of the deck to ensure that the debris is less than one percent asbestos.

Cleaning
AEI recommended that the Front/East side of the deck which contains asbestos mastics be removed and loaded out as Asbestos Containing Material by certified workers and supervisors on-site. AEI also recommended that after the initial cleaning is completed, vacuuming of the deck be performed and additional testing be completed at that time.

Asbestos-containing material must be removed by a licensed asbestos abatement contractor prior to any demolition or repair work that will impact those materials.

Any material encountered that is not specifically mentioned in this report should be considered asbestos containing until sufficient sampling has been completed to determine that these materials are non-asbestos containing.

The Occupational Safety and Health Administration (OSHA) classify the removal or disturbance of asbestos containing material as Class I and Class II asbestos abatement projects. The removal of asbestos containing material requires the use of appropriate engineering controls by a contractor licensed by the State of Oregon. The work methods utilized must include the use of wet methods.

OSHA regulations (29 CFR 1926.1001) states that if asbestos containing material, containing <1% asbestos is to be removed by construction personnel; the employer shall provide awareness training, a written respirator protection program, respirators and a negative exposure assessment.

Additionally, OSHA regulations (29 CFR 1926.1101) require employers to meet standards regarding personal protection, labeling, signs, daily air monitoring, use of engineering controls, notification, and respiratory protection for all activities related to the removal or disturbance of asbestos containing building material.

***EPA recommends that bulk material found negative for asbestos or less than one percent asbestos by polarized light microscopy be reanalyzed by and additional method such as transmission electron microscopy.*

7. WARRANTY

Advantage Environmental Inc. warrants that this report has been prepared in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. No other warranties are implied or expressed.

APPENDIX A
Material Summary Table

1300 N River St-Portland, OR

Material Summary Table

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
1A	Black asphalt	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1B	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1C	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1D	**Black mastic/tar**	**A9-Southside of pit on face of beam**	**Good**	**10% Chrysotile**
1E	**Black mastic/tar**	**A9-Southside of pit on top of beam under deck**	**Good**	**10% Chrysotile**
1F	Gray coating	A9-loadout on top of bottom plate		Asbestos Not Present
	Black mastic/tar	A9-loadout on top of bottom plate		Asbestos Not Present
1G	Black mastic/tar	A6-on top of deck at leading edge		Asbestos Not Present
1H	**Black mastic/tar**	**A6-on top of beam**	**Good**	**10% Chrysotile**
2A	Black asphalt	A13-on deck leading edge		Asbestos Not Present
	Black mastic/tar	A13-on deck leading edge		Asbestos Not Present
2B	Black mastic/tar	A13-on deck below asphalt		Asbestos Not Present
3A	Black mastic/tar	C5-at opening to piling below 1st layer of asphalt		Asbestos Not Present
3B	Black mastic/tar	C5-at opening to piling below asphalt on deck		Asbestos Not Present
4A	Black mastic/tar	J5-at opening to piling below asphalt on deck		Asbestos Not Present
5A	Black mastic/tar	J6-below asphalt on deck		Asbestos Not Present
6A	Black mastic/tar	H6-below asphalt on deck		Asbestos Not Present
7A	Black mastic/tar	D6-below asphalt on deck		Asbestos Not Present
8A	Black mastic/tar	D5-at opening to piling below asphalt on deck		Asbestos Not Present
8B	Black mastic/tar	D5-at opening to piling below 1st layer of asphalt		Asbestos Not Present
9A	Black asphalt	D13-below asphalt on deck		Asbestos Not Present
	Black mastic/tar	D13-below asphalt on deck		Asbestos Not Present
15A	**Black debris**	**1st piling on deck**	**Good**	**<1% Chrysotile**
16A	**Black debris**	**E6-on deck**	**Good**	**<1% Chrysotile**

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
17A	Black debris	G7-on deck	Good	<1% Chrysotile
18A	Black debris	C3-on deck	Good	<1% Chrysotile
19A	Black debris	3rd piling	Good	<1% Chrysotile
20A	Black debris	4th piling	Good	<1% Chrysotile
21A	Black debris	Mid-span of trestle-2 to 3 pilings	Good	<1% Chrysotile
22A	Black debris	A9-on deck	Good	<1% Chrysotile
24A	Black debris	A10-on deck	Good	<1% Chrysotile
25A	Black debris	F5-on deck	Good	<1% Chrysotile
26A	Black debris	Next to 1st piling	Good	<1% Chrysotile
27A	Black debris	Next to ramp	Good	<1% Chrysotile

APPENDIX B
Laboratory Analytical Results
Chain of Custody

QUANTEM LABORATORIES
2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	1A	Layered	Black Asphalt	Asbestos Not Present	NA	Clay Sand Tar
001a		Layered	Black Mastic	Asbestos Not Present	NA	Tar
002	1B	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose 20	Tar
003	1C	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose 80	Tar
004	1D	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
005	1E	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
006	1F	Layered	Gray Coating	Asbestos Not Present	NA	Vinyl

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
006a		Layered	Black Mastic	Asbestos Not Present	NA	Tar Sand
007	1G	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand
008	1H	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
009	2A	Layered	Black Asphalt	Asbestos Not Present	NA	Clay Sand Tar
009a		Layered	Black Mastic	Asbestos Not Present	NA	Tar
010	2B	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
011	3A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
012	3B	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
013	4A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
014	5A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
015	6A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
016	7A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
017	8A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018	8B	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand
019	9A	Layered	Black Asphalt	Asbestos Not Present	NA	Tar Sand
019a		Layered	Black Mastic	Asbestos Not Present	NA	Tar

Cassie Sanborn

Cassie Sanborn, Analyst

10/31/2017
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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Lab No.	236893
	(Accept) Reject

Contact Information			
Company:	Advantage Environmental	Phone:	
Contact:	Sidney Carter	Cell Phone:	(503) 522-1369
Account #:	B513	E-mail:	sid.carter@advantage-enviro.com
Sampled By:	Name: Sidney Carter	Date:	10/26-27/2017

Project Information	
Project Name:	EQM
Project Location:	1525 North River Street Portland, OR
Project ID:	
P.O. Number:	

Report Results (☑ one box)	
☐	QuanTEM Website
☐	Email sid.carter@advantage-enviro.com
☐	Other _____

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	10/30/17 3pm	FedX	K Bradley	10-31-17 10:10

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM	
☑	Bulk Analysis (EPA 600/R-93/116)
☐	400 Point Count
☐	1000 Point Count
☐	Gravimetric Preparation
☐	Particle ID

PLM	
☐	Vermiculite Attic Insulation (EPA 600/R-04/004)
☐	Other

PCM	
☐	NIOSH 7400

TEM	
☐	Air- AHERA
☐	Air- NIOSH 7402
☐	Air- ISO 10312
☐	Drinking Water- EPA 100.2
☐	Waste Water- EPA 600/4-83-043

TEM	
☐	Bulk- Presence / Absence EPA600/R-93/116
☐	Bulk- Quantitative [weight%]- Chatfield
☐	Dust- Presence / Absence
☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755
☐	Other

TURNAROUND TIME	
☐	Rush
☒	Same Day *
☑	24 - Hour
☐	3 - Day
☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	1A	☑	Black	Asphalt With mastic/Tar		A10 South side of pit top of deck leading edge
2	1B	☑	Black	Mastic/Tar		A10 South side of pit top of deck leading edge
3	1C	☑	Black	Mastic/Tar		A10 South side of pit on top of beam debris
4	1D	☑	Black	Mastic/Tar		A9 South side of pit on face of beam
5	1E	☑	Black	Mastic/Tar		A9 South side of pit on top of beam under deck
6	1F	☑	Gray	Gray coating		A9 at load out on top of bottom plate
7	1G	☑	Black	Mastic/Tar		A6 on top of deck at leading edge
8	1H	☑	Black	Mastic/Tar		A6 on top of beam
9	2A	☑	Black	Asphalt With mastic/Tar		A13 on deck leading edge
10	2B	☑	Black	Mastic/Tar		A13 on deck under asphalt

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are NOT available for Saturday Delivery

KB 10-31-17 S/W Sidney - he ad. Change THT to Same day + disregard extra 8A+8B + missing 10,11,12 - he ad Voi'd them as not sent.

QUANTEM LABORATORIES
www.QuanTEM.com

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(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

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For Lab Use Only
Lab No. 286893
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EQM | Project Location: 1525 North River Street Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	3A	☑	Black	Mastic/Tar		C5 at opening to piling under 1st layer of asphalt
12	3B	☑	Black	Mastic/Tar		C5 at opening to piling under asphalt on deck
13	4A	☑	Black	Mastic/Tar		J5 at opening to piling under asphalt on deck
14	5A	☑	Black	Mastic/Tar		J6 under asphalt on deck
15	6A	☑	Black	Mastic/Tar		H6 under asphalt on deck
16	7A	☑	Black	Mastic/Tar		D6 under asphalt on deck
17	8A	☑	Black	Mastic/Tar		D5 at opening to piling under asphalt on deck
18	8B	☑	Black	Mastic/Tar		D5 at opening to piling under 1st layer of asphalt
19	9A	☑	Black	Asphalt With Mastic/Tar		D13 under asphalt on deck
* 20	10A	☑	Black	Mastic/Tar		E13 under asphalt on deck
* 21	11A	☑	Black	Mastic/Tar		F13 under asphalt on deck
* 22	12A	☑	Black	Mastic/Tar		G13 under asphalt on deck
23		☐				
24		☐				
25		☐				
26		☐				
27		☐				
28		☐				
29		☐				
30		☐				

* # 20 - 22 = 10A, 11A & 12A = do not send

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QUANTEM LABORATORIES
2033 HERITAGE PARK DR., OKLAHOMA CITY, OK 73120 | 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513
Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
001	15A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
002	16A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	3	Tar Sand
003	17A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
004	18A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
005	19A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
006	20A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	8 2	Tar Sand
007	21A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513
Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
008	22A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	8	Tar Sand
009	VOID	**	** **	**		Not Analyzed		
No Sample Received								
010	24A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
011	25A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
012	26A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
013	27A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	8 2	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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2033 Heritage Park Dr., Oklahoma City, OK 73120 | 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513
Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous

Dee Ammerman, Analyst

11/6/2017
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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ASBESTOS CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No.	287116
	(Accept) Reject

Report Results (☑ one box)	
☐	QuanTEM Website
☐	Email sid.carter@advantage-enviro.com
☐	Other

Contact Information		Project Information	
Company: Advantage Environmental	Phone:	Project Name: EQM EPA	
Contact: Sidney Carter	Cell Phone: (503) 522-1369	Project Location: 1525 North River St. Portland, OR	
Account #: B513	E-mail: sid.carter@advantage-enviro.com	Project ID:	
SAMPLED BY: Name: Sidney Carter	Date: 11/1/2017	P.O. Number:	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	11/3/17 3pm	FedX	K. Braley	11-6-17 9:45

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM	
☑	Bulk Analysis (EPA 600/R-93/116)
☐	400 Point Count
☐	1000 Point Count
☐	Gravimetric Preparation
☐	Particle ID

PLM	
☐	Vermiculite Attic Insulation (EPA 600/R-04/004)
☐	Other

PCM	
☐	NIOSH 7400

TEM	
☐	Air- AHERA
☐	Air- NIOSH 7402
☐	Air- ISO 10312
☐	Drinking Water- EPA 100.2
☐	Waste Water- EPA 600/4-83-043

TEM	
☐	Bulk- Presence / Absence EPA600/R-93/116
☐	Bulk- Quantitative [weight%]- Chatfield
☐	Dust- Presence / Absence
☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755
☐	Other

TURNAROUND TIME	
☐	Rush
☐	Same Day
☑	24 - Hour
☐	3 - Day
☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	15A	☑	Black	Debris		1st piling on deck
2	16A	☑	Black	Debris		E6 on deck
3	17A	☑	Black	Debris		G7 on deck
4	18A	☑	Black	Debris		C3 on deck
5	19A	☑	Black	Debris		3rd piling
6	20A	☑	Black	Debris		4th piling
7	21A	☑	Black	Debris		Mid span of trestle 2-3 pilings
8	22A	☑	Black	Debris		A9 on deck
9	23A	☑	Black	Debris		A10 on deck
10	24A	☑	Black	Debris		C7 on deck

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Missing #9 = 23A

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ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 28716
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EQM EPA | Project Location: 1525 North River St. Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	25A	☑	Black	Debris		F5 on deck
12	26A	☑	Black	Debris		Next to first piling
13	27A	☑	Black	Debris		Next to ramp
14		☑				
15		☐				
16		☐				
17		☐				
18		☐				
19		☐				
20		☐				
21		☐				
22		☐				
23		☐				
24		☐				
25		☐				
26		☐				
27		☐				
28		☐				
29		☐				
30		☐				

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APPENDIX C
AHERA Building Inspector
Certification

Certificate of Completion

This is to certify that

Sidney Carter

has satisfactorily completed
4 hours of training as a

AHERA Building Inspector

to comply with the training requirements of

TSCA Title II, 40 CFR 763 (AHERA)

1627809
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Jun 14, 2017 Expires in 1 year.
Date(s) of Training

Exam Score:
If appropriate:

Instructor

ARGUS PACIFIC, INC / 1900 WEST NICKERSON ST, SUITE 315 / SEATTLE, WASHINGTON 98119 / 206.285.3373 / ARGUSPACIFIC.COM

APPENDIX E
Deck Survey

ADVANTAGE Environmental INC.

COMPLETED ASBESTOS BUILDING MATERIAL SURVEY

Conducted at:
1300 N River St
Portland, OR 97227

Conducted for:
Environmental Quality Management
1800 Carillon Blvd
Cincinnati, OH 45240

Prepared By:
Advantage Environmental Inc.
9317 NE Hwy 99, Suite A
Vancouver, WA 98665

ADVANTAGE Environmental INC.

Clean your world.

December 11, 2017

Jerry Wade
1800 Carillon Blvd
Cincinnati, OH 45240
503-953-5263
wade1109@msn.com

RE: Asbestos building material survey: 1300 N River St, Portland, OR

Dear Mr. Wade,

Advantage Environmental, Inc., (AEI) has completed the asbestos building material survey of the burn cell located at 1300 N River St in Portland, OR. The results of the survey are provided in the accompanying report.

Thank you for choosing AEI for this project. Please feel free to contact us at (360) 356-7628 if you have any questions.

Respectfully,
Advantage Environmental, Inc.

Pete Coleman
Office Manager

1. INTRODUCTION

Advantage Environmental, Inc. (AEI) was retained by Environmental Quality Management to perform an asbestos building material survey of the property located at 1300 N River St in Portland, OR. The on-site inspection was performed by EPA/AHERA accredited building inspector Sidney Carter on October 26, October 27, November 1, and December 6 2017.

2. BUILDING DESCRIPTION

The structure is a former 75,000 sq. ft. commercial warehouse on pier foundation consisting of wood pilings. Interior walls and ceilings consisted of wood and flooring was comprised of wood with asphalt overlay.

3. PURPOSE AND SCOPE

The purpose of this survey was to identify the location of asbestos containing material prior to removal disposal of the remaining deck. The scope of work included a walk-through inspection, bulk sampling and analysis of specific suspect asbestos-containing materials from the deck and face of the deck, a written report documenting the results of the materials in the survey. This survey is a preliminary survey and added sampling may be required. Materials are identified within appendix A.

This is not a bidding document and all quantities of asbestos containing material should be verified by the abatement contractor prior to submitting their bid.

4. VISUAL ASSEMENT AND FINDINGS

Our survey activities began with visual observation of the area to identify homogeneous areas of suspect asbestos containing material. Assessments were conducted throughout visually accessible areas of the area.

Building material identified as concrete, glass, wood, masonry, metal or rubber were not considered suspect asbestos containing material.

Unidentified asbestos-containing materials may be in other areas not yet tested or may be in inaccessible areas.

A table indicating sample numbers, material description, material location, material condition and asbestos content of each material sampled is included in Appendix A. Laboratory analytical results and chain of custody documentation are included in Appendix B. AHERA Building inspector credentials are included in Appendix C.

Suspect asbestos-containing material sampled and analyzed included:

- Black asphalt
- Black mastic/tar
- Gray coating
- Black debris

Laboratory results indicate the following material contains less than 1% asbestos content.

Material Type	Material Location
Black debris	Presumed throughout the surface of the deck

***Due to high risk of personnel and/or environmental exposure/contamination; regulatory agencies advise use of licensed asbestos abatement contractors for removal of <1% asbestos containing material. Material containing less than 1% asbestos content are not quantified.*

Of the suspect asbestos-containing material sampled, laboratory analysis indicated the following material contained asbestos content of 1% or greater. These materials will need to be removed prior to disturbance, or demolition activities that may impact these materials.

Material Type	**Material Location**	**Approximate Quantity****	**Friable** Yes / No*
Black mastic/tar	Presumed to be on the east perimeter of the deck. (front and sides of trusses)	~Not Quantified	No

***Note**: A diligent inspection was conducted and every effort was made to inspect and investigate all areas of the deck previously mentioned herein. However, unidentified asbestos-containing material may still be in place in other areas of the structure inspected that were inaccessible/not included at the time of this survey.*

**Friability based on material condition at time of inspection.*

5. SAMPLING METHODOLOGY

A walk-through of the property was conducted by an EPA/AHERA accredited building inspector to identify the location of suspect asbestos-containing material. The location, approximate quantity and condition of each material were recorded on field data sheets. Bulk samples of each suspect material were then collected and submitted to the laboratory under chain of custody documentation for analysis of asbestos content.

Samples were collected from selected homogeneous material to evaluate the presence or absence of asbestos in each material. Determination of homogeneous material included material type, texture, pattern, color, and size. A total of 47 suspect asbestos-containing material samples were analyzed including sub-layers.

All samples collected by AEI were placed into pre-labeled airtight containers and shipped to Quantem Laboratories for analysis of asbestos content. Quantem Laboratories analyzed the samples using Polarized Light Microscopy (PLM) with dispersion staining to identify asbestos constituents as required by EPA regulation 40 CFR, Part 763.

6. DISCUSSION & RECOMMENDATIONS

MASTIC

Samples of the mastic were collected from the Front/East side of the trusses and beneath the asphalt deck. Laboratory results indicate samples 1D,1E,1H contain 10% chrysotile asbestos content and has been identified at the Front/East side of the structure. The material is a tar based mastic and is applied to the fronts and top portions of some of the trusses.

This material (mastic) is present approximately one foot inside the Front/East side edge of the deck. Additional destructive sampling/investigation should be performed to confirm that this material is not present in other areas of the structure/deck. The additional sampling for the mastic that is under the asphalt flooring of the deck has shown to be negative for asbestos. Additional sampling should be performed to confirm that the material is negative as well.

DEBRIS

Sampling of the debris were collected after initial cleaning of the deck had been completed. Laboratory results indicated less than 1% chrysotile asbestos content for the debris samples 15A-27A. This material appears to be throughout the deck where sampled and is debris based, mixed with the residual material that is remaining on the deck. Laboratory results indicated less than 1% asbestos content, it would no longer be regulated by Oregon Department of Environmental Quality.

Oregon Department of Environmental Quality (DEQ) recommends certified asbestos abatement workers and supervisors handle and dispose of materials containing any amounts of asbestos. Oregon OSHA regulations (29 CFR 1926.1001) states that if asbestos containing material, containing less than 1% asbestos is to be removed by construction personnel; the employer shall provide awareness training, a written respirator protection program, respirators and a negative exposure assessment. AEI recommends additional sampling/investigation be performed in other areas of the deck to ensure that the debris is less than one percent asbestos.

CLEANING

AEI recommended that the Front/East side of the deck that contains asbestos mastics be removed and loaded out as Asbestos Containing Material, with certified workers and supervisors on site. AEI also recommended that after the initial cleaning is completed, that vacuuming of the deck be performed and additional testing be completed at that time.

DECK REMOVAL

Current sampling results indicate that the deck is still contaminated with <1% asbestos containing debris and it is AEI's recommendation that all of the decking material be treated as asbestos containing materials and placed into poly lined dumpsters or trucks for transport. Further AEI recommends the certified asbestos workers and supervisors be on site during removal of all asbestos containing materials. During the removal of the decking material, perimeter area air sampling and personal air sampling should be performed on a daily basis. Asbestos-containing material must be removed by a licensed asbestos abatement contractor prior to any demolition or repair work that will impact those material.

Any material encountered that is not specifically mentioned in this report should be considered asbestos containing until sufficient sampling has been completed to determine that these materials are non-asbestos containing.

The Occupational Safety and Health Administration (OSHA) classify the removal or disturbance of asbestos containing material as Class I and Class II asbestos abatement projects. The removal of asbestos containing material requires the use of appropriate

engineering controls, by a contractor licensed by the State of Oregon. The work methods utilized must include the use of wet methods.

OSHA regulations (29 CFR 1926.1001) states that if asbestos containing material, containing <1% asbestos is to be removed by construction personnel; the employer shall provide awareness training, a written respirator protection program, respirators and a negative exposure assessment.

Additionally, OSHA regulations (29 CFR 1926.1101) require employers to meet standards regarding personal protection, labeling, signs, daily air monitoring, use of engineering controls, notification, and respiratory protection for all activities related to the removal or disturbance of asbestos containing building material.

***EPA recommends that bulk material found negative for asbestos or less than one percent asbestos by polarized light microscopy be reanalyzed by and additional method such as transmission electron microscopy.*

7. WARRANTY

Advantage Environmental Inc. warrants that this report has been prepared in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. No other warranties are implied or expressed.

APPENDIX A
Material Summary Table

Material Summary Table

1300 N River St-Portland, OR

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
1A	Black asphalt	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1B	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1C	Black mastic/tar	A10 Southside of pit/top of deck leading edge		Asbestos Not Present
1D	**Black mastic/tar**	**A9-Southside of pit on face of beam**	**Good**	**10% Chrysotile**
1E	**Black mastic/tar**	**A9-Southside of pit on top of beam under deck**	**Good**	**10% Chrysotile**
1F	Gray coating	A9-loadout on top of bottom plate		Asbestos Not Present
	Black mastic/tar	A9-loadout on top of bottom plate		Asbestos Not Present
1G	Black mastic/tar	A6-on top of deck at leading edge		Asbestos Not Present
1H	**Black mastic/tar**	**A6-on top of beam**	**Good**	**10% Chrysotile**
2A	Black asphalt	A13-on deck leading edge		Asbestos Not Present
	Black mastic/tar	A13-on deck leading edge		Asbestos Not Present
2B	Black mastic/tar	A13-on deck below asphalt		Asbestos Not Present
3A	Black mastic/tar	C5-at opening to piling below 1st layer of asphalt		Asbestos Not Present
3B	Black mastic/tar	C5-at opening to piling below asphalt on deck		Asbestos Not Present
4A	Black mastic/tar	J5-at opening to piling below asphalt on deck		Asbestos Not Present
5A	Black mastic/tar	J6-below asphalt on deck		Asbestos Not Present
6A	Black mastic/tar	H6-below asphalt on deck		Asbestos Not Present
7A	Black mastic/tar	D6-below asphalt on deck		Asbestos Not Present
8A	Black mastic/tar	D5-at opening to piling below asphalt on deck		Asbestos Not Present
8B	Black mastic/tar	D5-at opening to piling below 1st layer of asphalt		Asbestos Not Present
9A	Black asphalt	D13-below asphalt on deck		Asbestos Not Present
	Black mastic/tar	D13-below asphalt on deck		Asbestos Not Present
15A	**Black debris**	**1st piling on deck**	**Good**	**<1% Chrysotile**
16A	**Black debris**	**E6-on deck**	**Good**	**<1% Chrysotile**
17A	**Black debris**	**G7-on deck**	**Good**	**<1% Chrysotile**
18A	**Black debris**	**C3-on deck**	**Good**	**<1% Chrysotile**

Sample Number	Material Description	Sample Location	Condition if applicable	Asbestos Content
19A	Black debris	3rd piling	Good	<1% Chrysotile
20A	Black debris	4th piling	Good	<1% Chrysotile
21A	Black debris	Mid-span of trestle-2 to 3 pilings	Good	<1% Chrysotile
22A	Black debris	A9-on deck	Good	<1% Chrysotile
24A	Black debris	A10-on deck	Good	<1% Chrysotile
25A	Black debris	F5-on deck	Good	<1% Chrysotile
26A	Black debris	Next to 1st piling	Good	<1% Chrysotile
27A	Black debris	Next to ramp	Good	<1% Chrysotile
28A	Black debris	D12-on deck	Good	<1% Chrysotile
29A	Black debris	F12-on deck	Good	<1% Chrysotile
30A	Black debris	H12-on deck	Good	<1% Chrysotile
31A	Black debris	End of 2nd trestle	Good	<1% Chrysotile
32A	Black debris	H13-on deck	Good	<1% Chrysotile
33A	Black debris	K10-on deck	Good	<1% Chrysotile
34A	Black debris	H10-on deck	Good	<1% Chrysotile
35A	Black mastic/tar	1st piling on 2nd trestle under asphalt		Asbestos Not Present
36A	Black mastic/tar	2nd piling on 2nd trestle under asphalt		Asbestos Not Present
37A	Black mastic/tar	3rd piling on 2nd trestle under asphalt		Asbestos Not Present
38A	Black mastic/tar	End trestle under asphalt		Asbestos Not Present
39A	Black mastic/tar	H9-on deck under asphalt		Asbestos Not Present
40A	Black mastic/tar	J13-on deck under asphalt		Asbestos Not Present

APPENDIX B
Laboratory Analytical Results
Chain of Custody

2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	1A	Layered	Black Asphalt	Asbestos Not Present	NA	Clay Sand Tar
001a		Layered	Black Mastic	Asbestos Not Present	NA	Tar
002	1B	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose 20	Tar
003	1C	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose 80	Tar
004	1D	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
005	1E	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
006	1F	Layered	Gray Coating	Asbestos Not Present	NA	Vinyl

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
006a		Layered	Black Mastic	Asbestos Not Present	NA	Tar Sand
007	1G	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand
008	1H	Homogeneous	Black Mastic	Asbestos Present Chrysotile 10	Cellulose 40	Tar Sand
009	2A	Layered	Black Asphalt	Asbestos Not Present	NA	Clay Sand Tar
009a		Layered	Black Mastic	Asbestos Not Present	NA	Tar
010	2B	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
011	3A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
012	3B	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
013	4A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand
014	5A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
015	6A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
016	7A	Homogeneous	Black Mastic	Asbestos Not Present	Cellulose	60	Tar
017	8A	Homogeneous	Black Mastic	Asbestos Not Present	NA		Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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2033 Heritage Park Dr, Oklahoma City, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 286893
Account Number: B513
Date Received: 10/31/2017
Received By: Karen Braley
Date Analyzed: 10/31/2017
Analyzed By: Cassie Sanborn
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM
Project Location: 1525 North River Street Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018	8B	Homogeneous	Black Mastic	Asbestos Not Present	NA	Tar Sand
019	9A	Layered	Black Asphalt	Asbestos Not Present	NA	Tar Sand
019a		Layered	Black Mastic	Asbestos Not Present	NA	Tar

Cassie Sanborn, Analyst

10/31/2017
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Lab No.	236893
	Accept Reject

Contact Information			
Company:	Advantage Environmental	Phone:	
Contact:	Sidney Carter	Cell Phone:	(503) 522-1369
Account #:	B513	E-mail:	sid.carter@advantage-enviro.com
Sampled By:	Name: Sidney Carter	Date:	10/26-27/2017

Project Information	
Project Name:	EQM
Project Location:	1525 North River Street Portland, OR
Project ID:	
P.O. Number:	

Report Results (☑ one box)	
☐	QuanTEM Website
☐	Email sid.carter@advantage-enviro.com
☐	Other

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	10/30/17 3pm	FedX	K Bradley	10-31-17 10:10

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM	
☑	Bulk Analysis (EPA 600/R-93/116)
☐	400 Point Count
☐	1000 Point Count
☐	Gravimetric Preparation
☐	Particle ID

PLM	
☐	Vermiculite Attic Insulation (EPA 600/R-04/004)
☐	Other

PCM	
☐	NIOSH 7400

TEM	
☐	Air- AHERA
☐	Air- NIOSH 7402
☐	Air- ISO 10312
☐	Drinking Water- EPA 100.2
☐	Waste Water- EPA 600/4-83-043

TEM	
☐	Bulk- Presence / Absence EPA600/R-93/116
☐	Bulk- Quantitative [weight%]- Chatfield
☐	Dust- Presence / Absence
☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755
☐	Other

TURNAROUND TIME	
☐	Rush
☒	Same Day *
☑	24 - Hour
☐	3 - Day
☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	1A	☑	Black	Asphalt With mastic/Tar		A10 South side of pit top of deck leading edge
2	1B	☑	Black	Mastic/Tar		A10 South side of pit top of deck leading edge
3	1C	☑	Black	Mastic/Tar		A10 South side of pit on top of beam debris
4	1D	☑	Black	Mastic/Tar		A9 South side of pit on face of beam
5	1E	☑	Black	Mastic/Tar		A9 South side of pit on top of beam under deck
6	1F	☑	Gray	Gray coating		A9 at load out on top of bottom plate
7	1G	☑	Black	Mastic/Tar		A6 on top of deck at leading edge
8	1H	☑	Black	Mastic/Tar		A6 on top of beam
9	2A	☑	Black	Asphalt With mastic/Tar		A13 on deck leading edge
10	2B	☑	Black	Mastic/Tar		A13 on deck under asphalt

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are NOT available for Saturday Delivery

KB 10-31-17 S/W Sidney - he ord. Change THT to Same day + disregard extra 8A+8B + missing 10,11,12 - he ord Voi'd them as not sent.

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Lab No. 286893
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EQM | Project Location: 1525 North River Street Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	3A	☑	Black	Mastic/Tar		C5 at opening to piling under 1st layer of asphalt
12	3B	☑	Black	Mastic/Tar		C5 at opening to piling under asphalt on deck
13	4A	☑	Black	Mastic/Tar		J5 at opening to piling under asphalt on deck
14	5A	☑	Black	Mastic/Tar		J6 under asphalt on deck
15	6A	☑	Black	Mastic/Tar		H6 under asphalt on deck
16	7A	☑	Black	Mastic/Tar		D6 under asphalt on deck
17	8A	☑	Black	Mastic/Tar		D5 at opening to piling under asphalt on deck
18	8B	☑	Black	Mastic/Tar		D5 at opening to piling under 1st layer of asphalt
19	9A	☑	Black	Asphalt With Mastic/Tar		D13 under asphalt on deck
* 20	10A	☑	Black	Mastic/Tar		E13 under asphalt on deck
* 21	11A	☑	Black	Mastic/Tar		F13 under asphalt on deck
* 22	12A	☑	Black	Mastic/Tar		G13 under asphalt on deck
23		☐				
24		☐				
25		☐				
26		☐				
27		☐				
28		☐				
29		☐				
30		☐				

* # 20 - 22 = 10A, 11A & 12A - No sample sent

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
001	15A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
002	16A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	3	Tar Sand
003	17A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
004	18A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
005	19A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
006	20A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	8 2	Tar Sand
007	21A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513
Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
008	22A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	8	Tar Sand
009	VOID	**	** **	. **		Not Analyzed		
No Sample Received								
010	24A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose	5	Tar Sand
011	25A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
012	26A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 2	Tar Sand
013	27A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	8 2	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 287116
Account Number: B513
Date Received: 11/06/2017
Received By: Karen Braley
Date Analyzed: 11/06/2017
Analyzed By: Dee Ammerman
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EQM EPA
Project Location: 1525 North River St. Portland, OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous

Dee Ammerman, Analyst

11/6/2017
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Lab No.	287116
	(Accept) Reject

Report Results (☑ one box)	
☐	QuanTEM Website
☐	Email sid.carter@advantage-enviro.com
☐	Other

Contact Information		Project Information	
Company: Advantage Environmental	Phone:	Project Name: EQM EPA	
Contact: Sidney Carter	Cell Phone: (503) 522-1369	Project Location: 1525 North River St. Portland, OR	
Account #: B513	E-mail: sid.carter@advantage-enviro.com	Project ID:	
SAMPLED BY: Name: Sidney Carter	Date: 11/1/2017	P.O. Number:	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	11/3/17 3pm	FedX	K. Braley	11-6-17 9:45

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM	
☑	Bulk Analysis (EPA 600/R-93/116)
☐	400 Point Count
☐	1000 Point Count
☐	Gravimetric Preparation
☐	Particle ID

PLM	
☐	Vermiculite Attic Insulation (EPA 600/R-04/004)
☐	Other

PCM	
☐	NIOSH 7400

TEM	
☐	Air- AHERA
☐	Air- NIOSH 7402
☐	Air- ISO 10312
☐	Drinking Water- EPA 100.2
☐	Waste Water- EPA 600/4-83-043

TEM	
☐	Bulk- Presence / Absence EPA600/R-93/116
☐	Bulk- Quantitative [weight%]- Chatfield
☐	Dust- Presence / Absence
☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755
☐	Other

TURNAROUND TIME	
☐	Rush
☐	Same Day
☑	24 - Hour
☐	3 - Day
☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	15A	☑	Black	Debris		1st piling on deck
2	16A	☑	Black	Debris		E6 on deck
3	17A	☑	Black	Debris		G7 on deck
4	18A	☑	Black	Debris		C3 on deck
5	19A	☑	Black	Debris		3rd piling
6	20A	☑	Black	Debris		4th piling
7	21A	☑	Black	Debris		Mid span of trestle 2-3 pilings
8	22A	☑	Black	Debris		A9 on deck
9	23A	☑	Black	Debris		A10 on deck
10	24A	☑	Black	Debris		C7 on deck

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
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Missing #9 = 23A

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Lab No. 28716
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EQM EPA | Project Location: 1525 North River St. Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	25A	☑	Black	Debris		F5 on deck
12	26A	☑	Black	Debris		Next to first piling
13	27A	☑	Black	Debris		Next to ramp
14		☑				
15		☐				
16		☐				
17		☐				
18		☐				
19		☐				
20		☐				
21		☐				
22		☐				
23		☐				
24		☐				
25		☐				
26		☐				
27		☐				
28		☐				
29		☐				
30		☐				

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 288394
Account Number: B513

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Date Received: 12/07/2017
Received By: Karen Braley
Date Analyzed: 12/08/2017
Analyzed By: Carter Cox
Methodology: EPA/600/R-93/116

Project: EPA EQM
Project Location: 1525 North River St. Portland OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
001	28A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
002	29A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
003	30A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
004	31A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
005	32A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
006	33A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand
007	34A	Homogeneous	Black Debris	Asbestos Present Chrysotile	<1	Cellulose Glass Fiber	5 10	Tar Sand

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 288394
Account Number: B513
Date Received: 12/07/2017
Received By: Karen Braley
Date Analyzed: 12/08/2017
Analyzed By: Carter Cox
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA EQM
Project Location: 1525 North River St. Portland OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
008	35A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar
009	36A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar
010	37A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar
011	38A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar
012	39A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar
013	40A	Homogeneous	Black Tar	Asbestos Not Present	Cellulose 5	Tar

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 288394
Account Number: B513
Date Received: 12/07/2017
Received By: Karen Braley
Date Analyzed: 12/08/2017
Analyzed By: Carter Cox
Methodology: EPA/600/R-93/116

Client: Advantage Environmental, Inc.
P.O. Box 1026
Camas, WA 98607

Project: EPA EQM
Project Location: 1525 North River St. Portland OR
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous

Carter Cox

Carter W. Cox, Analyst

12/8/2017
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Lab No. 288394
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Contact Information			Project Information		Report Results (☑ one box)	
Company: Advantage Environmental		Phone:	Project Name: EPA EQM		☐	QuanTEM Website
Contact: Sidney Carter		Cell Phone: (503) 522-1369	Project Location: 1525 North River St. Portland, OR		☐	Email sid.carter@advantage-enviro.com
Account #: B513		E-mail: sid.carter@advantage-enviro.com	Project ID:		☐	Other
SAMPLED BY:	Name: Sidney Carter	Date: 12/06/2017	P.O. Number:			

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Sidney Carter	12/6/17 3pm	Fed X	K Bradley	12-7-17 10:00

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM		PLM		TEM		TEM		TURNAROUND TIME	
☑	Bulk Analysis (EPA 600/R-93/116)	☐	Vermiculite Attic Insulation (EPA 600/R-04/004)	☐	Air- AHERA	☐	Bulk- Presence / Absence EPA600/R-93/116	☐	Rush
☐	400 Point Count	☐	Other	☐	Air- NIOSH 7402	☐	Bulk- Quantitative [weight%]- Chatfield	☐	Same Day
☐	1000 Point Count	PCM		☐	Air- ISO 10312	☐	Dust- Presence / Absence	☑	24 - Hour
☐	Gravimetric Preparation	☐	NIOSH 7400	☐	Drinking Water- EPA 100.2	☐	Dust- Quantitative [fibers/sq.cm]- ASTM D5755	☐	3 - Day
☐	Particle ID			☐	Waste Water- EPA 600/4-83-043	☐	Other	☐	5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	28A	☑	Black	Debris		D12 on deck
2	29A	☑	Black	Debris		F12 on deck
3	30A	☑	Black	Debris		H12 on deck
4	31A	☑	Black	Debris		End of 2nd trestle
5	32A	☑	Black	Debris		H13 on deck
6	33A	☑	Black	Debris		K10 on deck
7	34A	☑	Black	Debris		H10 on deck
8	35A	☑	Black	Mastic/Tar		1st piling on 2nd trestle under asphalt
9	36A	☑	Black	Mastic/Tar		2nd piling on 2nd trestle under asphalt
10	37A	☑	Black	Mastic/Tar		3rd piling on 2nd trestle under asphalt

SATURDAY **FEDEX** SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
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For Lab Use Only
Lab No. 288394
Accept Reject

Project Information

Company: Advantage Environmental | Project Name: EPA EQM | Project Location: 1525 North River St. Portland, OR

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	38A	☑	Black	Mastic/Tar		End of trestle on deck under asphalt
12	39A	☑	Black	Mastic/Tar		H9 on deck under asphalt
13	40A	☑	Black	Mastic/Tar		J13 on deck under asphalt
14		☐				
15		☐				
16		☐				
17		☐				
18		☐				
19		☐				
20		☐				
21		☐				
22		☐				
23		☐				
24		☐				
25		☐				
26		☐				
27		☐				
28		☐				
29		☐				
30		☐				

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"
Please Note - UPS and USPS are **NOT** available for Saturday Delivery

APPENDIX C
AHERA Building Inspector
Certification

Certificate of Completion

This is to certify that

Sidney Carter

has satisfactorily completed
4 hours of training as a

AHERA Building Inspector

to comply with the training requirements of

TSCA Title II, 40 CFR 763 (AHERA)

1627809
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Jun 14, 2017 — Expires in 1 year.
Date(s) of Training

Exam Score:
If appropriate:

Instructor

ARGUS PACIFIC, INC / 1900 WEST NICKERSON ST, SUITE 315 / SEATTLE, WASHINGTON 98119 / 206.285.3373 / ARGUSPACIFIC.COM

APPENDIX F
Site Specific Work Plan

ADVANTAGE
Environmental INC.

EPA RIVER St. Water Front
WORK PLAN

Project:
River St Water Front
1525 North River Street
Portland, OR

Prepared By:
Advantage Environmental Inc.
9317 NE Hwy 99., Suite A
Vancouver, WA 98665

Table of Contents

A. Site specific work plan
B. Site Specific Asbestos Plan
C. Safety
D. Disposal
E. Air Monitoring
F. Final Cleaning
G. Work description
H. Close out documents

This work plan is issued for the hazardous material that may be impacted at the North River Street Project. The scope of work covered by this work plan includes non-hazardous work performed as part of the overall project scope and the removal, handling, and disposal of hazardous materials.

The Contractor shall complete the abatement work in full accordance with this work plan and meet all applicable requirements of state and federal regulations at all times for this project including Hazardous Abatement and Controls and Selective openings.

The Contractor is responsible for determining site conditions, quantities and location of all work to be performed, prior to starting work. The Contractor acknowledges investigation and acceptance of the conditions affecting the work. These conditions include, but are not limited to, physical conditions of the site that may affect access; handling and storage of tools and materials; access to water and electricity or other utilities that may otherwise affect the performance of required activities. Staging areas and parking at the site.

A. Site specific work plan

1. ASBESTOS HAZARD
    a. The hazards of asbestos are well documented and universally recognized. Asbestos materials in buildings are generally of concern when they are friable (material which can be crumbled, pulverized, or reduced to powder by hand pressure) in nature and can be disturbed, thus producing airborne fibers. Asbestos has long been known to cause asbestosis and a variety of irreversible cancers. In recognition of the serious health hazards associated with asbestos, various federal, state, and local agencies have imposed strict regulations. These regulations are designed to protect employees and building occupants from exposure to asbestos.

b. Suspect asbestos-containing materials are building materials that are suspected of containing regulated concentrations of asbestos, but which have not been confirmed to be non-asbestos by laboratory analysis. Suspect asbestos-containing materials include all thermal system insulation, surfacing materials, sheet vinyl flooring, floor tiles and floor tile mastic and roofing materials found in buildings constructed prior to 1981. OSHA and the State of Oregon consider a material to be asbestos-containing if at least one sample of the material contains greater than 1% asbestos by volume.

2. It is the policy of EPA/EQM to provide a safe and healthful work environment for all employees on this project. Such an environment requires that adequate precautions be taken to prevent employee exposure to airborne asbestos fibers. Effective control of presumed asbestos containing material (PACM) not only protects employees, but also reduces the risk of costs associated with asbestos fiber release episodes, e.g., disruption to operations, employee medical surveillance, and civil fines.

3. To safely perform work around PACM, Advantage Environmental recommends the following procedures for work within the site in non-regulated areas.

   a. All trestle work will be performed outside the regulated area. PAS/EQM will make initial impact to move all PACM in the area that trestle work is will be performed. Once the PACM has been moved and openings in the deck has been made, all impact to PACM will cease and then Advanced American Construction will be allowed into the area to start driving pilings and installing decking.
   b. The regulated area will follow the decking on both sides of the deck as it moves through the burn site.
   c. At no time, should Advantage American Employees step outside into the regulated area unless they are in full (PPE) personal protect equipment.
   d. Air monitoring will be performed on a daily basis on the trestle and employees to ensure that there is no exposure to employees. In the event that there are elevated fiber counts, all work will cease until the problem can be located and remedied.
   e. At all times, no visible emissions will be allowed in the regulated areas. In the event that visible emissions area seen all work will stop until work procedures can be addressed.
   f. No abatement activities will be allowed within 25 feet of a trestle where Advantage American Construction Employees are working.

B. Site Specific Asbestos Abatement

Description: Removal and disposal of asbestos shall be limited to the schedule provided by the EPA and EQM in adherence with DEQ.

- Work will be performed in accordance with Federal, State, and Local Regulations.
- All required notifications to regulatory agencies and other parties are to be submitted prior to start of project. Any variances requested from regulatory agencies must be reviewed and approved by the EPA and DEQ.
- Work area will be isolated from the general public and other parts of the site. All work areas are to be clearly marked with caution tape and appropriate signage.
- The Abatement Contractor shall ensure that full access to the site will be open for the EPA, EQM, DEQ and Advantage Environmental employees at all times.
- The EPA and EQM shall be responsible for keeping work areas secured at all times, particularly during off-hours.
- Abatement Contractor is responsible for securing its own equipment, supplies, and facilities, including trucks, ladders, and job boxes.
- Work hours and phasing to be determine by project schedule.
- Access into the regulated area, where abatement is to take place, will not be accessed by anyone other than those involved in site work and approved to be in that specific work area.
- Asbestos will be removed thoroughly wetted to eliminate air-borne fibers.
- Warning signs will be posted around the perimeter of the work area.
- PACM will be placed in lined 30 yard dumpsters. PACM waste material will be labeled as per various requirements including generator labels. All waste will be manifested prior to shipment.
- The Area will be cleared by visual inspections and laboratory testing as required from EPA's on-site representative.

Prior to commencement of work, asbestos abatement contractor will submit a notification for friable asbestos removal to Oregon DEQ and any other. All worker and contractor licenses will be onsite prior to work.

C. SAFETY

The following work practices will also be utilized in the work area as additional required safety measures:

It should be the object of the site contractor to promote a safe workplace, free of accidents, by the use a safety meeting among the working crew every day before the start of the work day. Before the beginning of every work day your team will perform a safety meeting to discuss the day's tasks and goals and the safety measures to be taken to accomplish the day's goals safely. Meeting is documented on the job daily log.

Asbestos abatement contractor will comply with Fire Prevention and Detection of Construction Environmental Health and Safety Standard, which specifically address fire protection during demolition activities.

Personal Protection Equipment (PPE) and Use
Once demarcation tape is erected no one will enter the work area without wearing as a minimum the following personal protective equipment: ½ face negative pressure respirator equipped with HEPA filters and fitted to each individual person, full body disposable suit equipped with a hood, safety glasses and hard hats. Laborers are further required to wear gloves and ear protection inside the work area if needed.

Decontamination Process for the regulated area.
Anyone who enters the regulated area shall follow the following decontamination process to exit work area: Before leaving the regulated area remove disposable suits and place in ACM bag for disposal without removing the respirator, remove safety glasses and hard hat and wet wipe. Clean, glasses, hardhat and respirator. Stow respirator into a protective bag for re-use.

Daily Inspections
The competent person and crew will inspect the regulated area for breaches in the fencing and missing demarcation tape prior to the removal of any PACM on a daily basis. Any deficiencies are to be resolved before proceeding with any PACM removal activities. At the end of the shift the water booms and water will be inspected for debris and any debris will be removed by the end of the work shift.

The abatement contractor is responsible for immediately reporting any breach in the regulated area to Project Manager and Owner's Representative Project Manager.

D. DISPOSAL

Waste Hauler:
Abatement contractor is to notify team of waste hauling company prior to start of project.

Disposal Facility:
Abatement contractor is to notify team of determined landfill prior to start of project.

Packaging:

- Material will be packed, sealed and labeled according to the regulations.
- Debris will be covered in six mill poly sheeting and labeled with demarcation tape on a daily basis if it is to be stored prior to loading into dumpsters.
- All ACM material will be transported by approved transport company to the landfill.
- All waste shipments will be manifested as per regulations.

Waste is packaged as previously described. Containers will be inspected by the supervisor for correctness and is labeled for disposal per regulations and specifications.

Your competent person will prepare a manifest in accordance with project protocols in preparation for the removal and pick up of the waste by approved transfer company. The waste transfer will be hauling the PACM/ACM to its final destination as written on the last section of the manifest. Disposal manifests will be signed by the landfill and returned to EQM within 30 days of disposal.

GENERATOR AND/OR HAULER REQUIREMENTS
The asbestos materials will be packaged in impermeable dust tight containers (i.e. six (6) mil plastic bags or double 6 mil poly film) All containers will be labeled in large legible letter:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

E. AIR MONITORING
Advantage Environmental will be performing all OSHA required Personnel Monitoring throughout the abatement phase of the project. Personal air sampling will be conducted daily during the abatement of asbestos or any time a person enters the regulated area.

Advantage Environmental will also be performing area sampling outside the regulated area by high volume pumps throughout the project.

In the event that elevated fiber counts occur, all work will stop and new work practices put in place.

F. FINAL CLEANING
Abatement contractor will remove all visible accumulations of asbestos material and debris.
All surfaces within the Work Area will be cleaned to a condition of no visible debris. The EPA or its representative will issue the final clearance of the site.

G. WORK DISCRIPTION

Potholing:

Holes will be cut into the deck and removed by an excavator to make access for pilings for the trestle. During this time the area will be regulated and only approved personnel will be allowed in the area.

ACM removal:

During removal, it is the asbestos abatement contractor's responsibility to observe all material being removed from the regulated area and that no visible emissions are seen at any time. All material is to be thoroughly wetted at all times when being moved or packaged.

In the event that fiber counts begin to be elevated and there is concerns of exposure, work will not commence until a new plan is in place.

H. SUBMITTALS

The following items shall be submitted at completion of project:

- DEQ Notification
- Copy of current Contractors' State Licensing Board (CCB) License;
- Proof of all required permits or variances;
- Copies of workers' asbestos training certificates, including the Competent Person;
- Copies of workers' annual medical exam and respirator approval;
- Copies of workers' twelve (12) month respirator fit testing records;
- Personal air monitoring (daily);
- Copies of updated notification to regulatory agencies (as needed).
- Certificate of Completion;
- Copies of completed uniform waste manifests, including hazardous and non-hazardous waste;
- Foreman's daily job reports;

APPENDIX G
DEQ Permit and Variance

ASN 1
DEQ Project Notification Form
For Abatement of Friable Asbestos-Containing Material

State of Oregon Department of Environmental Quality

For DEQ use only
Date Received _____
Amount Received _____
Check Number _____
Project Number _____

Attention: This notification must be complete, legible and received by DEQ at least 10 days before the start date of any friable asbestos abatement project and accompanied by the appropriate notification fee. Form instructions are online at: www.oregon.gov/deq

Project Category and Notification fee

[✓] **Emergency Abatement Project** (Emergency notifications require a 50% fee increase.)
Emergency Approved by (DEQ staff name)_____ **Date**_____
Reason for Emergency Fire
(e.g., explanation: fire or water damage, dangerous structure, etc.)

Check one:

A. [ ] $100 Projects with less than 40 linear feet or 80 square feet of asbestos-containing material, or for each residential abatement project.
B. [ ] $200 Projects from 40 to 259 linear feet or 80 to 159 square feet of asbestos-containing material.
C. [ ] $400 Projects from 260 to 1,299 linear feet or 160 to 799 square feet of asbestos-containing material.
D. [ ] $525 Projects from 1,300 to 2,599 linear feet or 800 to 1,599 square feet of asbestos-containing material.
E. [ ] $900 Projects from 2,600 to 4,999 linear feet or 1,600 to 3,499 square feet of asbestos-containing material.
F. [ ] $1,050 Projects from 5,000 to 9,999 linear feet or 3,500 to 5,999 square feet of asbestos-containing material.
G. [ ] $1,700 Projects from 10,000 to 25,999 linear feet or 6,000 to 15,999 square feet of asbestos-containing material.
H. [✓] $2,800 Projects from 26,000 to 259,999 linear feet or 16,000 to 159,999 square feet of asbestos-containing material.
I. [ ] $3,500 Projects 260,000 linear feet or more or 160,000 square feet or more of asbestos-containing material.

Complete the following:

1. If this is a revision to a previous notification, provide the revision number: no			
List lines that have been revised on this form:			
2. Project start date: 09/19/2017		3. Completion date: 03/30/2018	
4. Days of week abatement to be worked: Monday - Saturday			
5. Hours of abatement work: 7:00 a.m./p.m. - 5:30 a.m./p.m.			
6. Project site name: River Street Warehouse Fire			
7. Project site address: 1300 N. River Street			
Building, floor, room or unit number: Remainder of burned warehouse structure			
City: Portland	State: OR	County: Multnomah	Zip: 97227
8. Project site contact: Jerry Wade		Phone: 503-953-5263	
9. Abatement contractor name: Performance Abatement Services		DEQ license number: FSC 511	
Address: 13600 NE 10th Ave			Phone: 360-574-8400
City: Vancouver	State: WA		Zip: 98685
10. Quantity of asbestos material to be abated: 50,000		Linear feet:	Square feet: 50,000
11. Asbestos disposal site name: Hillsboro Landfill		Address: 3250 SE Minter Bridge Rd Hillsboro	

12. Type of facility: Residence (No. of units) ___, School ☐, Hospital ☐, Apartments ☐, Commercial ☑, Industrial ☐, Equipment ☐, Ship ☐, Other .		
13. List the asbestos-containing materials to be abated, the percent asbestos by each material, and where the asbestos-containing materials are located in the facility. Attach separate page if needed: Roofing paper 90%		
14. Oregon Certified Supervisor(s): David Nelson/ Gary Brown/ Travis Harrison		Phone: 503-519-4072/360-518-7251
Oregon Certification number: S14253 / S14438/ S14559		
15. Is the facility occupied or vacant? Vacant		
16. Present use of facility: Warehouse	Future use of facility: Demolish	Approximate construction date: 1950
17. Survey performed or sample(s) collected?	Survey: ☐ Yes ☐ No	Samples: ☑ Yes ☐ No, assumed
18. Survey or samples collected by	Name: Advantage Environmental	Phone: 503-709-0879
19. Is this a demolition? ☑ Yes ☐ No	Complete or Partial demolition? Complete	Is this a renovation? ☐ Yes ☑ No
20. Is the demolition State or local government ordered? ☑ Yes ☐ No	Name of government official who ordered the demolition: US EPA Region 10 FOSC	
Order date: Sept. 7, 2017	Government initiated demolition start date:	
21. Facility owner or operator name: Environmental Quality Management		Phone: 425-673-2900
Facility owner or operator address: 18939 120th Ave NE Suite 103		
City: Bothell	State: WA	Zip: 98011
22. Describe methods of asbestos abatement and disposal: wet method, mechanical removal method, waste to be loaded in lined roll off boxes and burrito wrapped		
23. Waste hauler name: Waste Management		Phone: 800-963-4050
Signature:	Date: 09-18-2017	Phone: 360-574-8400

I certify that the information contained in this notification are true and correct to the best of my knowledge and belief.

Reference: Oregon Administrative Rule 340-248-0260 for applicable notification requirements.

Please sign this form and deliver or mail with the fee payable to DEQ

Oregon Department of Environmental Quality
Financial Services - Revenue Section
700 NE Multnomah St., Suite 600
Portland, OR 97232-4100

Revisions to notifications may be scanned and emailed or faxed to the appropriate DEQ regional office

Northwest Region	Fax: 503-229-6957	Email: deqnwrasbestos@deq.state.or.us
Eastern Region	Fax: 541-388-8283	Email: Messina.Frank@deq.state.or.us
Western Region South, Coos Bay, Medford	Fax: 541-776-6262	Email: Croucher.Steve@deq.state.or.us
Western Region	Fax: 503-378-4196	Email: Boyd.Dottie@deq.state.or.us

Questions: Call DEQ at 1-800-452-4011 for your regional DEQ office contact or visit: www.oregon.gov/deq

Oregon
Kate Brown, Governor

Department of Environmental Quality
Northwest Region
700 Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5263
FAX (503) 229-6945
TTY 711

September 19, 2017

Sidney Carter – Advantage Environmental, Inc.
Ben Pullman – Performance Abatement Services.
Jerry Wade – Environmental Quality Management, Inc.
Randy Nattis – EPA
.
Via email: Sid.carter@advantage-enviro.com

RE: Alternative work practice variance
1700 N River Street
Portland, OR 97227
Expires: February 6th, 2018

Dear Mr. Carter:

On September 19, 2017, the DEQ Northwestern Region – Portland Office received your asbestos abatement work plan/variance request for the abatement of friable asbestos-containing waste material (ACWM) located throughout the remaining facility at the north river street warehouse fire site. Your work plan outlines intentions to perform a friable asbestos abatement project with a variance to work practice requirements associated with friable abatement outlined in Oregon Administrative Rule (OAR) 340-248-0270, specifically, the negative pressure enclosure and final clearance sampling requirements.

The DEQ grants approval to perform this friable asbestos abatement project providing the following provisions are met:

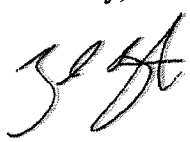
1. All ACWM is to be abated as outlined in your variance request/work plan. Any deviation from the submitted variance/work plan as outlined in this variance approval letter requires prior approval from the Department;
2. All ACWM is required to either be packaged and disposed of as ACWM or decontaminated if feasible and disposed of as general debris or recycled;
3. Installation of a containment boom system on the Willamette as a secondary engineering control; and
   - Installation of the containment boom is required to be installed on the Willamette river around the complete river perimeter of the site and secured to land upstream and downstream;
   - Containment boom system must be inspected at the beginning of each work shift to reaffirm the boom is securely in place;

- Debris caught in the boom must be removed and properly packaged at the end of each work shift until abatement is completed;
- All debris caught in the boom is required to be disposed of as friable ACWM or decontaminated if feasible and disposed of as general debris or recycled; and
- After abatement at the site is completed a final inspection/clean of the boom system must occur;
    - Onsite environmental consultant is required to determine that the containment boom is clean and free of all ACWM and signoff prior to the removal of the containment boom.

4. Asbestos abatement must be conducted within a regulated area consisting of asbestos barrier tape and signage;
5. Removal of the friable ACWM is allowed as long as adequate water or an alternative dust suppression method is used during the abatement process;
6. Use of mechanical equipment during the abatement is allowed by certified asbestos worker/supervisor only;
7. Only certified asbestos workers and supervisors are allowed to perform friable asbestos abatement;
8. PAS/Environmental Quality Management, Inc. (EQM) is required to have a consulting firm who is National Institute of Occupational Safety and Health (NIOSH) 582 certified and financially independent from the person(s) conducting the friable asbestos abatement project conduct ambient air area monitoring along the perimeter of the regulated area during all active abatement;
9. All applicable work practices listed in OAR 340-248-0270 must be employed;
10. All ACWM will be immediately placed in appropriate packaging during/after removal utilizing Advantage Environmental, Inc. (Advantage) proposed process outlined in your submitted variance/work plan, properly labeled and disposed of as required in OAR 340-248-0280;
11. The interim storage of ACWM that has been placed in proper packaging must be stored in a secure location to prevent tampering by unauthorized persons. This can include, but not limited to covered and locked drop box within temporary security fencing, etc.;
12. No visible emissions are allowed during any part of the abatement process;
13. At the conclusion of this project no open accumulation or storage of ACWM will be allowed at the project or staging site;
14. Maintain copies of the ambient air sampling results on site and make readily available as soon as is possible;
15. Keep a copy of this letter and Advantage variance/work plan at the work site and readily available for inspection; and
16. This approval letter applies only to the project listed above.

DEQ expects strict compliance and reserves the right to adjust the above requirements if required. Failure to follow this approval letter may result in possible asbestos regulation violations. If you have any questions or need additional technical assistance, please call me at (503) 229-5364.

Sincerely,



Zeb Bates
NWR Asbestos Inspector & Compliance Specialist

Cc: File

Eec: Audrey O'Brien – NWR Environmental Partnership Manager
Jeremy Fleming – NWR Solid Waste / Asbestos Program
Bruce Gilles – Cleanup and Emergency Response
Cheryl Grabham – DEQ Regional Solutions
Randy Nattis – EPA Federal On-Scene Coordinator
Jerry Wade – Environmental site Manager/EPA Contractor
Ben Pullman – PAS Project Manager
Sidney Carter – Consultant

ADVANTAGE Environmental INC.

Clean your world.

September 18, 2017

Zeb Bates
Oregon Department of Environmental Quality
Northwest Region-Portland Office
700 NE Multnomah St., Suite #600
Portland, OR 97232
(503) 229-5364 office
(503) 229-6957 fax
bates.zebuliah@deq.state.or.us

RE: Variance Request-for Removal of Friable Asbestos Containing Materials
River St Water Front Project - 1700 N River St. Portland, OR

Mr. Bates,

The reason for this Variance request is, it has been determined that the work area in question is unsafe for personnel to access and construct a negative pressure enclosure to remove and handle the asbestos containing materials on site. Workers will access the asbestos containing materials via swing stages, excavators and lifts. Wet methods will be utilized and asbestos containing materials will be placed into poly lined/covered waste containers.

Flotation booms will be on the west/river side of the regulated work area to capture any debris that may fall from the working platform. Access to the flotations booms will be via crane or excavator.

Daily high volume area air monitoring will be conducted outside of the regulated area and personnel air monitoring will be completed within the regulated work area. Air sample analysis to be completed by PCM Phase Contrast Microscopy.

Please feel free to contact me at (360) 356-7636 if you should have any questions.

Respectfully,
Advantage Environmental, Inc.

Sidney Carter
Senior Project Manager

Attachment: Site Contacts

Site Contacts:

River St Water Front Project - 1700 N River St. Portland, OR

Jerry Wade
Environmental Quality Management, Inc.
18939 120th Avenue NE, Suite 103
Bothell, WA 98011
Office: 425-673-2900
Mobile: 503-953-5263

Ben Pullman
Performance Abatement Services
13600 NE 10th Avenue
Vancouver, WA 98685
Ben.Pullman@pcg.com
Office: 360-574-8400
Mobile: 360-518-8400

Sidney Carter
Advantage Environmental, Inc.
9317 NE Highway 99, Suite A
Vancouver, WA 98665
sid.carter@advantage-enviro.com
Office: 360-356-7636
Mobile: 503-522-1369

APPENDIX H
Asbestos Awareness Certifications

Asbestos Awareness Training

October 2nd, 2017

Printed Name	Signature	Company
Kent Parker		AAC
Nicholas Arruda		AAC
Justin Scott		AAC
Jeff Doggy		AAC
Mark Jeffers		AAC
John Burdick		AAC
Tom Smith		EQM
MARK Conroy		EQM
Garry Reynolds		EQM
JERRY LAZE		EQM
JOE Flick		EQM

Certificate of Completion

This is to certify that

Mark Conway

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Garry Reynolds

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Jerry Wade

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Joe Ficek

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Tom Smith

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Kent Parker

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Justin Scott

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Nicholas Arroda

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Mark Jeffers

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

Jeff Daggy

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

Certificate of Completion

This is to certify that

John Burdick

Has satisfactorily completed
2 hours of

ASBESTOS AWARENESS TRAINING

As required by OSHA
In compliance with OSHA guidelines.

October 2, 2017

Certificate Issuer

Exp. Date: October 1, 2018

Advantage Environmental, Incorporated • 9317 NE Highway 99, Suite A • Vancouver, WA 98665 • (360) 356-7636

APPENDIX I
Advantage Environmental Air Data

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 9/20/2017
DATE RECEIVED 9/20/2017
DATE ANALYZED 9/20/2017
DATE REPORTED 9/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9201701	1	100	1/100
B2	9201702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92001	9201703	STEL	Jacob Johnson-Burn cell-Running water hose-Pump LV-5	1:25 PM	1:55 PM	2.06	2.06
92002	9201704	STEL	Jim Boyse-Burn cell-Running excavator-Pump LV-21	1:28 PM	1:58 PM	2.06	2.06
92003	9201705	P	Jacob Johnson-Burn cell-Running water hose-Pump LV-5	1:55 PM	2:30 PM	2.06	2.06
92004	9201706	P	Jim Boyse-Burn cell-Running excavator-Pump LV-21	1:55 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
92001	9201703	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.0082
92002	9201704	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.0099
92003	9201705	35	2.06	72.1	9.5	100	0.005	0.0900	11.465	0.0612	1.690	<0.1035	0.0082
92004	9201706	35	2.06	72.1	11	100	0.005	0.1050	13.376	0.0714	1.655	<0.1182	0.0099

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 2
PAGE 1 **OF** 1

DATE COLLECTED 9/21/2017
DATE RECEIVED 9/21/2017
DATE ANALYZED 9/21/2017
DATE REPORTED 9/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9211701	0	100	0/100
B2	9211702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92101	9201703	STEL	Jim Boyse-Burn cell-Running excavator-Pump LV-21	7:25 AM	7:59 AM	2.06	2.06
92102	9201704	STEL	Robert Barton-Burn cell-Hose operator & ground support-Pump LV-5	7:30 AM	8:00 AM	2.06	2.06
92103	9201705	Area	NE corner of regulated area-Pump HV-20	7:40 AM	12:25 PM	9.76	9.76
92104	9201706	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	8:01 AM	1:12 PM	2.06	2
92105	9201707	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	8:02 AM	1:14 PM	2.06	2.06
92106	9201708	Area	NE Corner of regulated area-Pump HV-20	12:30 PM	3:30 PM	9.76	9.76
92107	9201709	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	2:55 PM	4:00 PM	2.06	2.06
92108	9201710	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	2:50 PM	4:01 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
92101	9201703	34	2.06	70.04	5.5	100	0	0.055	7.006	0.0385	1.871	<0.0720	0.0099
92102	9201704	30	2.06	61.8	6	100	0	0.060	7.643	0.0476	1.839	<0.0876	0.0095
92103	9201705	285	9.76	2781.6	12	100	0	0.120	15.287	0.0021	1.620	<0.0034	N/A
92104	9201706	311	2.03	631.33	8.5	100	0	0.085	10.828	0.0066	1.720	<0.0114	0.0099
92105	9201707	312	2.06	642.72	6	100	0	0.060	7.643	0.0017	1.839	<0.0031	0.0095
92106	9201708	180	9.76	1756.8	8.5	100	0	0.085	10.828	0.0024	1.720	<0.0041	N/A
92107	9201709	65	2.06	133.9	6	100	0	0.060	7.643	0.0220	1.839	<0.0404	0.0099
92108	9201710	71	2.06	146.26	11	100	0	0.110	14.013	0.0369	1.655	<0.0610	0.0095

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 3
PAGE 1 **OF** 1

DATE COLLECTED 9/22/2017
DATE RECEIVED 9/22/2017
DATE ANALYZED 9/22/2017
DATE REPORTED 9/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9221701	0	100	0/100
B2	9221702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92201	9221703	STEL	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	7:35 AM	8:05 AM	1.93	1.93
92202	9221704	STEL	Jim Boyce-Burn cell-Excavator-moving/removing debris-Pump LV-41	7:40 AM	8:11 AM	2.06	2.06
92203	9221705	Area	Northside of regulated area-Pump HV-20	7:42 AM	11:17 AM	9.76	9.76
93304	9221706	Area	Southside of regulated area-Pump HV-201	7:45 AM	11:18 AM	9.76	9.76
92205	9221707	Personal	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	8:06 AM	11:13 AM	1.93	1.93
92206	9221708	Personal	Jim Boyce-Burn cell-Excavator-moving/removing debris-Pump LV-41	8:12 AM	11:12 AM	2.06	2.06
92207	9221709	Personal	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	2:25 PM	4:00 PM	1.93	1.93

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92201	9221703	30	1.93	57.9	5.5	100	0	0.055	7.006	0.0466	1.871	<0.0871	0.0102
92202	9221704	31	2.06	63.86	6	100	0	0.060	7.643	0.0461	1.839	<0.0847	0.0594
92203	9221705	215	9.76	2098.4	16	100	0	0.160	20.382	0.0037	1.550	<0.0058	N/A
93304	9221706	213	9.76	2078.88	9.5	100	0	0.095	12.102	0.0022	1.690	<0.0038	N/A
92205	9221707	187	1.93	360.91	7	100	0	0.070	8.917	0.0093	1.785	<0.0165	0.0102
92206	9221708	180	2.06	370.8	6	100	0	0.060	7.643	0.0079	1.839	<0.0146	0.0594
92207	9221709	95	1.93	183.35	7	100	0	0.070	8.917	0.0187	1.785	<0.0334	0.0102

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 4
PAGE 1 **OF** 1

DATE COLLECTED 9/25/2017
DATE RECEIVED 9/25/2017
DATE ANALYZED 9/25/2017
DATE REPORTED 9/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9251701	0	100	0/100
B2	9251702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92501	9251703	STEL	Gary Brown-Burn cell-Operating skid-steer-Pump LV-1	9:32 AM	10:04 AM	2.06	2.06
92502	9251704	STEL	Robert Burton-Burn cell-Running water hose-Pump LV-41	9:35 AM	10:05 AM	2.06	2.06
92503	9251705	Area	West end of regulated area-Pump HV-20	9:36 AM	1:59 PM	7	7
92504	9251706	Personal	Robert Burton-Burn cell-Running water hose-Pump LV-41	10:06 AM	1:30 PM	2.06	2.06
92505	9251707	Personal	Gary Brown-Burn cell-Operating skid-steer-Pump LV-1	10:07 AM	1:25 PM	2.06	2.06
92506	9251708	Personal	Robert Burton-Burn cell-Running water hose-Pump LV-41	1:53 PM	3:47 PM	2	2
92507	9251709	Personal	Gary Brown-Burn cell-Operating skid-steer-Pump LV-1	1:55 PM	3:46 PM	2	2
92508	9251710	Personal	West end of regulated area-Pump HV-20	2:00 PM	3:45 PM	7	7

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92501	9251703	32	2.06	65.92	5.5	100	0	0.055	7.006	0.0409	1.871	<0.0765	0.0120
92502	9251704	30	2.06	61.8	6	100	0	0.060	7.643	0.0476	1.839	<0.0876	0.0108
92503	9251705	263	7	1841	16	100	0	0.160	20.382	0.0043	1.550	<0.0066	N/A
92504	9251706	204	2.06	420.24	9.5	100	0	0.095	12.102	0.0111	1.690	<0.0187	0.0108
92505	9251707	198	2.06	407.88	7	100	0	0.070	8.917	0.0084	1.785	<0.0150	0.0120
92506	9251708	114	2	228	6	100	0	0.060	7.643	0.0129	1.839	<0.0237	0.0108
92507	9251709	111	2	222	7	100	0	0.070	8.917	0.0155	1.785	<0.0276	0.0120
92508	9251710	105	7	735	11	100	0	0.110	14.013	0.0073	1.655	<0.0121	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 5
PAGE 1 **OF** 1

DATE COLLECTED 9/26/2017
DATE RECEIVED 9/26/2017
DATE ANALYZED 9/26/2017
DATE REPORTED 9/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9261701	0	100	0/100
B2	9261702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92601	9261703	STEL	Robert Burton-Burn cell-Running water hose-Pump LV-1	7:55 AM	8:25 AM	2.06	2.06
92602	9261704	STEL	Jacob Johnson-Burn cell-Pump LV-3-1	7:57 AM	8:28 AM	2.06	2.06
92603	9261705	Personal	Robert Burton-Burn cell-Running water hose-Pump LV-1	8:31 AM	10:30 AM	2	2
92604	9261706	Personal	Jacob Johnson-Burn cell-Pump LV-3-1	8:35 AM	10:36 AM	2	2
92605	9261707	Area	SE Corner of regulated area-HV-20	8:40 AM	11:45 AM	6.5	6.5
92606	9261708	Personal	Robert Burton-Burn cell-Running water hose-Pump LV-1	10:34 AM	12:24 PM	2	2
92607	9261709	Personal	Jacob Johnson-Burn cell-Pump LV-3-1	10:38 AM	12:25 PM	2	2
92708	9261710	Personal	Robert Burton-Burn cell-Running water hose-Pump LV-1	1:30 PM	4:30 PM	2	2
92709	9261711	Personal	Jacob Johnson-Burn cell-Pump LV-3-1	1:33 PM	3:31 PM	2	2
92710	9261712	Area	SE Corner of regulated area-HV-20	1:40 PM	4:40 PM	6.5	6.5

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92601	9261703	30	2.06	61.8	7	100	0.0025	0.0675	8.599	0.0536	1.785	<0.0956	0.0196
92602	9261704	31	2.06	63.86	8	100	0.0025	0.0775	9.873	0.0595	1.741	<0.1036	0.0165
92603	9261705	119	2	238	6	100	0.0025	0.0575	7.325	0.0118	1.839	<0.0218	0.0196
92604	9261706	121	2	242	9.5	100	0.0025	0.0925	11.783	0.0187	1.690	<0.0317	0.0165
92605	9261707	185	6.5	1202.5	17	100	0.0025	0.1675	21.338	0.0068	1.530	<0.0105	N/A
92606	9261708	110	2	220	6	100	0.0025	0.0575	7.325	0.0128	1.839	<0.0236	0.0196
92607	9261709	107	2	214	7	100	0.0025	0.0675	8.599	0.0155	1.785	<0.0276	0.0165
92708	9261710	180	2	360	8	100	0.0025	0.0775	9.873	0.0106	1.741	<0.0184	0.0196
92709	9261711	118	2	236	11	100	0.0025	0.1075	13.694	0.0223	1.655	<0.0370	0.0165
92710	9261712	180	6.5	1170	20	100	0.0025	0.1975	25.159	0.0083	1.481	<0.0123	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 6
PAGE 1 **OF** 1

DATE COLLECTED 9/27/2017
DATE RECEIVED 9/27/2017
DATE ANALYZED 9/27/2017
DATE REPORTED 9/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9271701	0	100	0/100
B2	9271702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92701	9271703	Area	SE End of of regulated area-HV-21	8:15 AM	10:20 AM	12.6	12.6
92702	9271704	Area	NE Corner of pit-HV-21	10:55 AM	3:35 PM	7	7
92703	9271705	Personal	Kent Parker-Burn cell-Directing piling in pit-Pump LV-1	11:00 AM	11:32 AM	2.6	2.6
92704	9271706	Personal	Robert Barton-Burn cell-Running hose-Pump LV-21	11:03 AM	11:35 AM	2.6	2.6
92705	9271707	Personal	Jacob Johnson-Burn cell-Loading dumpster-Pump LV-4-1	11:05 AM	11:36 AM	2.6	2.6
92706	9271708	Area	NE Corner of regulated area-Pump HV-20	11:25 AM	3:45 PM	10.25	10.25
92707	9271709	Personal	Robert Barton-Burn cell-Running hose-Pump LV-21	11:37 AM	2:44 PM	2.6	2.6
92708	9271710	Personal	Jacob Johnson-Burn cell-Loading dumpster-Pump LV-4-1	11:38 AM	2:45 PM	2.6	2.6
92709	9271711	Personal	Kent Parker-Burn cell-Directing piling in pit-Pump LV-1	12:00 PM	2:40 PM	2.6	2.6

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92701	9271703	125	12.6	1575	9	100	0.0025	0.0875	11.146	0.0027	1.705	<0.0046	N/A
92702	9271704	280	7	1960	14	100	0.0025	0.1375	17.516	0.0034	1.590	<0.0055	N/A
92703	9271705	32	2.6	83.2	7	100	0.0025	0.0675	8.599	0.0398	1.785	<0.0710	0.0085
92704	9271706	32	2.6	83.2	9	100	0.0025	0.0875	11.146	0.0516	1.705	<0.0879	0.0063
92705	9271707	31	2.6	80.6	7.5	100	0.0025	0.0725	9.236	0.0441	1.775	<0.0783	0.0067
92706	9271708	260	10.25	2665	9.5	100	0.0025	0.0925	11.783	0.0017	1.690	<0.0029	N/A
92707	9271709	187	2.6	486.2	7.5	100	0.0025	0.0725	9.236	0.0073	1.775	<0.0130	0.0063
92708	9271710	187	2.6	486.2	10	100	0.0025	0.0975	12.420	0.0098	1.670	<0.0164	0.0067
92709	9271711	160	2.6	416	15	100	0.0025	0.1475	18.790	0.0174	1.575	<0.0274	0.0085

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 7
PAGE 1 **OF** 1

DATE COLLECTED 9/28/2017
DATE RECEIVED 9/28/2017
DATE ANALYZED 9/28/2017
DATE REPORTED 9/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9281701	1	100	1/100
B2	9281702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92801	9281703	Personal	Jacob Johnson-Burn cell-Water hose/dust control-Pump #LV-41	10:15 AM	10:45 AM	1.93	1.93
92802	9281704	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-3-1	10:25 AM	10:55 AM	2.6	2.6
92803	9281705	Area	Southwest side of work area-Pump #HV-20	10:30 AM	12:01 PM	8.85	8.85
92804	9281706	Personal	Jacob Johnson-Burn cell-Water hose/dust control-Pump #LV-41	10:50 AM	12:05 PM	2.6	2.6
92805	9281707	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-3-1	10:57 AM	12:00 PM	2.6	2.6
92806	9281708	Personal	Jacob Johnson-Burn cell-Water hose/dust control-Pump #LV-41	1:05 PM	3:05 PM	2.6	2.6
92807	9281709	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-3-1	1:10 PM	3:00 PM	1.93	1.93
92808	9281710	Area	Southwest side of work area-Pump #HV-20	1:20 PM	3:15 PM	8.85	8.85

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92801	9281703	30	1.93	57.9	8	100	0.005	0.0750	9.554	0.0635	1.741	<0.1106	0.0105
92802	9281704	30	2.6	78	7.5	100	0.005	0.0700	8.917	0.0440	1.775	<0.0781	0.0097
92803	9281705	91	8.85	805.35	11	100	0.005	0.1050	13.376	0.0064	1.655	<0.0106	N/A
92804	9281706	75	2.6	195	10.5	100	0.005	0.1000	12.739	0.0252	1.660	<0.0418	0.0105
92805	9281707	63	2.6	163.8	8	100	0.005	0.0750	9.554	0.0225	1.741	<0.0391	0.0097
92806	9281708	120	2.6	312	7	100	0.005	0.0650	8.280	0.0102	1.785	<0.0182	0.0105
92807	9281709	110	1.93	212.3	8	100	0.005	0.0750	9.554	0.0173	1.741	<0.0302	0.0097
92808	9281710	115	8.85	1017.75	7.5	100	0.005	0.0700	8.917	0.0034	1.775	<0.0060	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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NEGATIVE EXPOSURE ASSESSMENT
For
INSTALLATION OF PILING AND WELDING IN PIT
ADVANCED AMERICAN CONSTRUCTION

Environmental Quality Management

1300 N River St in Portland, OR

October 2, 2017

A. Description of current job

1. Work took place in the South pit of the Burn Cell and the North staging yard. The work being performed was moving and erecting pilings for the installation for a trestle. Equipment used was cranes, excavators and fork lifts, as well as vibrating and diesel hammers for the driving of the pilings.

2. Workers were in the pit installing pilings and welding a top beam in place during the course of the Negative exposure assessment.

3. Asbestos roofing debris and tar is present close to the work area upon the deck outside of their work area. All ACM (asbestos containing materials) were wetted during the course of the work and moved from the leading edge of the work site.

4. Engineering controls – Are being utilized by the asbestos abatement contractor on site, near the Pit. Engineering controls consist of keeping PACM (presumed asbestos containing materials) wet at all times, not allowing and visible emissions, and regulated areas.

5. Worker's training and experience - Workers have completed a 2-hour Asbestos Awareness Training course, plus training in their corresponding trade. This training included asbestos awareness training covering all topics specified by OHSA, in addition training and information was provided site specific to this project covering the asbestos-containing materials on which have been found on this project.

6. Removal of PACM and ACM from a regulated area was performed in other areas of the Cell within the regulated areas. Now removal or impacting of ACM was performed near AAC (Advanced American Construction) crews or outside the regulated area.

B. Initial Exposure Assessment (IEA) - INSTALLATION OF PILING AND WELDING IN PIT

1. Initial Exposure Assessment (IEA) was completed on September 28 & 29, 2017
   a. *Name of person performing IEA* Sidney Carter a *Senior Project Manage/Industrial Hygienist/certified NIOSH 582 equivalent* with Advantage Environmental, Inc.
   b. *Was a project design completed for this project?* Yes. Test procedures and air sampling procedures were prepared, and a project protocol of the test facility was provided.
   c. *Were engineering controls implemented as designed?* Yes.
   d. *Results of an 8-hr TWA:* No 8-hr TWA exposures were calculated. The sample results in Table 1a are for the actual duration of sampling, which ranged from 30 to 260 minutes (average = 55.2). 8-hr TWA exposures would be less than the values in Table 1, all of which are below the PEL of 0.1 fibers/cc.
   e. *Results of a 30-minute STEL:* All of the EL samples are below the excursion limit of 1.0 fibers/cc.
   f. *How were these samples analyzed?* Phase Contrast Microscopy using NIOSH Method 7400.
   g. *Are the results less than the PEL and the EL?* Yes.
   h. *Were the samples taken representative of all operations which will take place during the work?* Yes, provided that the workers receive training in using the procedure, that they use similar equipment and materials, and that work is limited to the installation of the trestle.

Table 1a. Summary of Personal Samples for: Working in Pit on Pilings/Welding
Collected September 28, 29 , 2017

	PEL samples	EL samples
No. of tests.....	4	6
Range, fibers/cc.....	0.0597 – 0.0873	0.0097 – 0.0227
Average, fibers/cc.....	0.0724	0.0171

*Employer is responsible for obtaining current (within 12 months) air sampling data

This project was completed on (check one) [X] **Piling installation** [X] **Welding**

Project/Job Information **Client Project/# 30309.0047**

1. Description of work: Piling installation & Welding Date(s) Work Performed: September 28, 29, 2017

This work will be performed at: 1300 N River St (Address) Portland (City) Oregon (State)

By employees of: Advantage Environmental, Inc.

C. Certification of Negative Exposure Assessment

Based on the information herein, worker exposures during the current job described above are not expected to exceed the Permissible Exposure Limits, based on comparison of the current job to the Initial Exposure Assessment and annual updates described in Section B.

Name: Sidney Carter Signature: _____ Date: 10/02/2017
PRINT name of competent person

Advanced American Construction
Personnel that may be represented:

Mark Jeffers
John Burdick
Todd High
Nick Arrada
Kent Parker
Justin Scott
Jeff Daggy

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # NEA1
PAGE 1 **OF** 1

DATE COLLECTED 9/28/2017
DATE RECEIVED 9/28/2017
DATE ANALYZED 9/28/2017
DATE REPORTED 9/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9281701	1	100	1/100
B2	9281702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
2801	9281703	STEL	Kent Parker-Burn cell-Working in pit on pilings/welding-Pump LV-21	7:40 AM	8:10 AM	2.06	2.06
2802	9281704	STEL	Jeff Daggy-Burn cell-Working in pit on pilings/welding-Pump LV-1	7:42 AM	8:12 AM	2.06	2.06
2803	9281705	Area	NE Corner of regulated area-Pump HV-200	7:55 AM	11:45 AM	9.76	9.76
2804	9281706	Personal	Kent Parker-Burn cell-Working in pit on pilings/welding-Pump LV-21	8:17 AM	12:37 PM	2.06	2.06
2805	9281707	Personal	Jeff Daggy-Burn cell-Working in pit on pilings/welding-Pump LV-1	8:18 AM	12:38 PM	2.06	1.93
2806	9281708	Personal	Jeff Daggy-Burn cell-Working in pit on pilings/welding-Pump LV-1	1:03 PM	2:43 PM	1.93	1.93
2807	9281709	Area	NE Corner of regulated area-Pump HV-200	1:05 PM	2:35 PM	9.76	9.76
2808	9281710	Personal	Kent Parker-Burn cell-Working in pit on pilings/welding-Pump LV-21	1:06 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
2801	9281703	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.0206
2802	9281704	30	2.06	61.8	11.5	100	0.005	0.1100	14.013	0.0873	1.635	<0.1427	0.0172
2803	9281705	230	9.76	2244.8	14.5	100	0.005	0.1400	17.834	0.0031	1.580	<0.0048	N/A
2804	9281706	260	2.06	535.6	24	100	0.005	0.2350	29.936	0.0215	1.435	<0.0309	0.0206
2805	9281707	260	1.995	518.7	12	100	0.005	0.1150	14.650	0.0109	1.620	<0.0176	0.0172
2806	9281708	100	1.93	193	11.5	100	0.005	0.1100	14.013	0.0280	1.635	<0.0457	0.0172
2807	9281709	90	9.76	878.4	13	100	0.005	0.1250	15.924	0.0070	1.610	<0.0112	N/A
2808	9281710	94	2.06	193.64	9	100	0.005	0.0850	10.828	0.0215	1.705	<0.0367	0.0206

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # NEA2
PAGE 1 **OF** 1

DATE COLLECTED 9/29/2017
DATE RECEIVED 9/29/2017
DATE ANALYZED 9/29/2017
DATE REPORTED 10/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9291701	0	100	0/100
B2	9281702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
2901	9291703	STEL	Kent Parker-Burn cell-Pipe layout-Pump #LV-21	7:45 AM	8:18 AM	1.93	1.93
2902	9291704	STEL	Jeff Daggy-Burn cell-Pipe layout-Pump #LV-1	7:46 AM	8:19 AM	1.93	1.93
2903	9291705	Personal	Kent Parker-Burn cell-Pipe layout-Pump #LV-21	8:18 AM	12:20 PM	1.93	1.93
2904	9291706	Personal	Jeff Daggy-Burn cell-Pipe layout-Pump #LV-1	8:19 AM	12:23 PM	1.93	1.93

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
2901	9291703	33	1.93	63.69	8	100	0.0025	0.0775	9.873	0.0597	1.741	<0.1039	0.0093
2902	9291704	33	1.93	63.69	9	100	0.0025	0.0875	11.146	0.0674	1.705	<0.1149	0.0095
2903	9291705	242	1.93	467.06	10	100	0.0025	0.0975	12.420	0.0102	1.670	<0.0171	0.0093
2904	9291706	244	1.93	470.92	9.5	100	0.0025	0.0925	11.783	0.0096	1.690	<0.0163	0.0095

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 9
PAGE 1 **OF** 1

DATE COLLECTED 9/30/2017
DATE RECEIVED 9/30/2017
DATE ANALYZED 9/30/2017
DATE REPORTED 9/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9301701	1	100	1/100
B2	9301702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
93001	9301703	Personal	Jacob Johnson-Burn cell-Dust Control-Pump #LV-5	7:40 AM	8:10 AM	2.6	2.6
93002	9301704	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-31	7:42 AM	8:12 AM	2.6	2.6
93003	9301705	Personal	Jacob Johnson-Burn cell-Dust Control-Pump #LV-5	8:13 AM	10:11 AM	2.6	2.6
93004	9301706	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-21	8:14 AM	10:13 AM	2.6	2.6
93005	9301707	Area	Northside of regulated area-Pump #HV-20	8:20 AM	10:05 AM	7.86	7.86
93006	9301708	Area	Northside of regulated area-Pump #HV-20	10:08 AM	2:08 PM	7.86	7.86
93007	9301709	Personal	Jacob Johnson-Burn cell-Dust Control-Pump #LV-5	10:11 AM	12:15 PM	2.6	2.6
93008	9301710	Personal	Mark Conway-Burn cell-Equipment Operator-Pump #LV-21	12:16 PM	2:42 PM	2.6	2.6

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
93001	9301703	30	2.6	78	6.5	100	0.005	0.0600	7.643	0.0377	1.810	<0.0683	0.0079
93002	9301704	30	2.6	78	7	100	0.005	0.0650	8.280	0.0409	1.785	<0.0730	0.0077
93003	9301705	118	2.6	306.8	8	100	0.005	0.0750	9.554	0.0120	1.741	<0.0209	0.0079
93004	9301706	119	2.6	309.4	7	100	0.005	0.0650	8.280	0.0103	1.785	<0.0184	0.0077
93005	9301707	105	7.86	825.3	6	100	0.005	0.0550	7.006	0.0033	1.839	<0.0060	N/A
93006	9301708	240	7.86	1886.4	7.5	100	0.005	0.0700	8.917	0.0018	1.775	<0.0032	N/A
93007	9301709	124	2.6	322.4	7	100	0.005	0.0650	8.280	0.0099	1.785	<0.0177	0.0079
93008	9301710	146	2.6	379.6	7	100	0.005	0.0650	8.280	0.0084	1.785	<0.0150	0.0077

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 10
PAGE 1 **OF** 1

DATE COLLECTED 10/2/2017
DATE RECEIVED 10/2/2017
DATE ANALYZED 10/2/2017
DATE REPORTED 10/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10021701	0	100	0/100
B2	10021702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100201	10021703	Personal	Kent Parker-Burn cell-Driving pilons-Pump LV-5	9:20 AM	9:50 AM	2	2
100202	10021704	Personal	Mark Conway-Burn cell-Equipment operator-Pump LV-31	9:20 AM	9:50 AM	2.06	2.06
100203	10021705	Personal	Mark Conway-Burn cell-Equipment operator-Pump LV-31	9:51 AM	2:30 PM	2	2
100204	10021706	Personal	Kent Parker-Burn cell-Driving pilons-Pump LV-5	9:54 AM	2:20 PM	2.6	2.6
100205	10021707	Area	Southwest side of regulated area-Pump HV-20	9:55 AM	12:40 PM	8.85	8.85
100206	10021708	Personal	Jacob Johnson-Burn cell-Dust control-Pump LV-21	10:35 AM	11:05 AM	2.6	2.6
100207	10021709	Area	North corner/center of pit-Pump HV-200	10:45 AM	2:25 PM	9.76	9.76
100208	10021710	Personal	Jacob Johnson-Burn cell-Dust control-Pump LV-21	11:40 AM	2:35 PM	2.6	2.6
100209	10021711	Personal	Mark Conway-Burn cell-Equipment operator-Pump LV-31	2:30 PM	3:45 PM	2	2

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100201	10021703	30	2	60	7.5	100	0.0025	0.0725	9.236	0.0593	1.775	<0.1052	0.0074
100202	10021704	30	2.06	61.8	8	100	0.0025	0.0775	9.873	0.0615	1.741	<0.1071	0.0123
100203	10021705	279	2	558	8.5	100	0.0025	0.0825	10.510	0.0073	1.720	<0.0125	0.0123
100204	10021706	266	2.6	691.6	9.5	100	0.0025	0.0925	11.783	0.0066	1.690	<0.0111	0.0074
100205	10021707	165	8.85	1460.25	7.5	100	0.0025	0.0725	9.236	0.0024	1.775	<0.0043	N/A
100206	10021708	30	2.6	78	7.5	100	0.0025	0.0725	9.236	0.0456	1.775	<0.0809	0.0065
100207	10021709	220	9.76	2147.2	8.5	100	0.0025	0.0825	10.510	0.0019	1.720	<0.0032	N/A
100208	10021710	175	2.6	455	9.5	100	0.0025	0.0925	11.783	0.0100	1.690	<0.0169	0.0065
100209	10021711	75	2	150	8.5	100	0.0025	0.0825	10.510	0.0270	1.720	<0.0464	0.0123

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 11
PAGE 1 **OF** 1

DATE COLLECTED 10/3/2017
DATE RECEIVED 10/3/2017
DATE ANALYZED 10/3/2017
DATE REPORTED 10/3/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10031701	0.5	100	0.5/100
B2	10031702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100301	10031703	Personal	Kent Parker-Burn cell-Working in pile-Pump LV-5	7:30 AM	8:00 AM	2.6	2.6
100302	10031704	Personal	Gary Brown-Burn cell-Dust control-Pump LV-21	7:45 AM	8:15 AM	2.6	2.6
100303	10031705	Personal	Kent Parker-Burn cell-Working in pile-Pump LV-5	8:15 AM	10:25 AM	2.6	2.6
100304	10031706	Personal	Gary Brown-Burn cell-Dust control-Pump LV-21	8:20 AM	10:22 AM	2.6	2.6
100305	10031707	Personal	Mark Conway-Burn cell-Equipment operator-Pump LV-1	8:25 AM	8:55 AM	2.6	2.6
100306	10031708	Area	Southwest side of working area-Pump HV-20	8:45 AM	12:00 PM	8.85	8.85
100307	10031709	Personal	Mark Conway-Burn cell-Equipment operator-Pump LV-1	9:00 AM	11:00 AM	2.6	2.6

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100301	10031703	30	2.6	78	6	100	0.0025	0.0575	7.325	0.0362	1.839	<0.0665	0.0051
100302	10031704	30	2.6	78	7.5	100	0.0025	0.0725	9.236	0.0456	1.775	<0.0809	0.0063
100303	10031705	130	2.6	338	8.5	100	0.0025	0.0825	10.510	0.0120	1.720	<0.0206	0.0051
100304	10031706	122	2.6	317.2	9	100	0.0025	0.0875	11.146	0.0135	1.705	<0.0231	0.0063
100305	10031707	30	2.6	78	7.5	100	0.0025	0.0725	9.236	0.0456	1.775	<0.0809	0.0061
100306	10031708	195	8.85	1725.75	10	100	0.0025	0.0975	12.420	0.0028	1.670	<0.0046	N/A
100307	10031709	120	2.6	312	8.5	100	0.0025	0.0825	10.510	0.0130	1.720	<0.0223	0.0061

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 12
PAGE 1 **OF** 1

DATE COLLECTED 10/4/2017
DATE RECEIVED 10/4/2017
DATE ANALYZED 10/4/2017
DATE REPORTED 10/4/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10041701	0.5	100	0.5/100
B2	10041702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100401	10041703	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-1	8:03 AM	8:33 AM	2.6	2.6
100402	10041704	Personal	Kent Parker-Burn cell-Installing platform-Pump #LV-5	8:05 AM	8:36 AM	2.6	2.6
100403	10041705	Area	Southwest side of regulated area-Pump #HV-20	8:15 AM	12:00 PM	7.86	7.86
100404	10041706	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-1	8:35 AM	12:00 PM	2.6	2.6
100405	10041707	Personal	Kent Parker-Burn cell-Installing platform-Pump #LV-5	8:36 AM	12:00 PM	2.6	2.6
100406	10041708	Personal	Mark Conway-Burn cell-Equipment operator-Pump #LV-1	12:50 PM	3:40 PM	2.6	2.6
100407	10041709	Area	Southwest side of regulated area-Pump #HV-20	1:00 PM	3:30 PM	7.86	7.86
100408	10041710	Personal	Kent Parker-Burn cell-Installing platform-Pump #LV-5	1:05 PM	3:45 PM	2.6	2.6

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100401	10041703	30	2.6	78	6	100	0.0025	0.0575	7.325	0.0362	1.839	<0.0665	0.0076
100402	10041704	31	2.6	80.6	5.5	100	0.0025	0.0525	6.688	0.0319	1.871	<0.0598	0.0084
100403	10041705	225	7.86	1768.5	9	100	0.0025	0.0875	11.146	0.0024	1.705	<0.0041	N/A
100404	10041706	205	2.6	533	6	100	0.0025	0.0575	7.325	0.0053	1.839	<0.0097	0.0076
100405	10041707	204	2.6	530.4	6.5	100	0.0025	0.0625	7.962	0.0058	1.810	<0.0105	0.0084
100406	10041708	170	2.6	442	8	100	0.0025	0.0775	9.873	0.0086	1.741	<0.0150	0.0076
100407	10041709	150	7.86	1179	9.5	100	0.0025	0.0925	11.783	0.0038	1.690	<0.0065	N/A
100408	10041710	160	2.6	416	10	100	0.0025	0.0975	12.420	0.0115	1.670	<0.0192	0.0084

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 13
PAGE 1 **OF** 1

DATE COLLECTED 10/5/2017
DATE RECEIVED 10/5/2017
DATE ANALYZED 10/5/2017
DATE REPORTED 10/5/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10051701	0	100	0/100
B2	10051702	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100501	10051703	Personal	Mark Jeffers-Burn cell-Crane operator-Pump #LV-21	7:30 AM	12:00 PM	2.6	2.6
100502	10051704	Area	Northwest side of regulated area-Pump #HV-20	8:00 AM	12:00 PM	9.76	9.76
100503	10051705	Personal	Jacob Johnson-Burn cell-Cutting wall from high-lift-Pump #LV-5	8:12 AM	12:01 PM	2.6	2.6
100504	10051706	Personal	Mark Jeffers-Burn cell-Crane operator-Pump #LV-21	12:36 PM	3:45 PM	2.6	2.6
100505	10051707	Personal	Jacob Johnson-Burn cell-Cutting wall from high-lift-Pump #LV-5	12:45 PM	2:45 PM	2.6	2.6
100506	10051708	Area	Northwest side of regulated area-Pump #HV-20	12:52 PM	2:00 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100501	10051703	270	2.6	702	8	100	0.005	0.0750	9.554	0.0052	1.741	<0.0091	0.0055
100502	10051704	240	9.76	2342.4	9.5	100	0.005	0.0900	11.465	0.0019	1.690	<0.0032	N/A
100503	10051705	229	2.6	595.4	9.5	100	0.005	0.0900	11.465	0.0074	1.690	<0.0125	0.0067
100504	10051706	189	2.6	491.4	7	100	0.005	0.0650	8.280	0.0065	1.785	<0.0116	0.0055
100505	10051707	120	2.6	312	8.5	100	0.005	0.0800	10.191	0.0126	1.720	<0.0216	0.0067
100506	10051708	68	9.76	663.68	11.5	100	0.005	0.1100	14.013	0.0081	1.635	<0.0133	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 14
PAGE 2 **OF** 2

DATE COLLECTED 10/5/2017
DATE RECEIVED 10/5/2017
DATE ANALYZED 10/5/2017
DATE REPORTED 10/5/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10061701	0	100	0/100
B2	10061702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100611	10061713	Personal	Kent Parker-Burn cell-Working on deck-Pump #LV-32	11:45 AM	2:35 PM	2.06	2.06
100612	10061714	Personal	South corner of pit-Pump HV-1	12:06 PM	3:40 PM	9.76	9.76
100613	10061715	Personal	Nick Arruda-Burn cell-Supervising crew-Pump LV-21	2:30 PM	3:25 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100611	10061713	170	2.06	350.2	5.5	100	0	0.0550	7.006	0.0077	1.871	<0.0144	0.0082
100612	10061714	214	9.76	2088.64	8	100	0	0.0800	10.191	0.0019	1.741	<0.0033	N/A
100613	10061715	55	2.06	113.3	5.5	100	0	0.0550	7.006	0.0238	1.871	<0.0445	0.0082

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 15
PAGE 1 **OF** 1

DATE COLLECTED 10/7/2017
DATE RECEIVED 10/7/2017
DATE ANALYZED 10/7/2017
DATE REPORTED 10/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10071701	0.5	100	0.5/100
B2	10071702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
100701	10071703	Area	Center top of trestle in back area-Pump #HV-20	7:45 AM	12:00 PM	9.76	9.76
100702	10071704	Personal	Jacob Johnson-Burn cell-Dust control-Pump #LV-30	7:57 AM	8:27 AM	2.06	2.06
100703	10071705	Area	Northeast side of deck-Pump #HV-21	7:58 AM	12:03 PM	9.76	9.76
100704	10071706	Personal	Mark Conway-Burn cell-Equipmet operator-Pump #LV-32	8:03 AM	8:34 AM	2.06	2.06
100705	10071707	Personal	Mark Conway-Burn cell-Equipmet operator-Pump #LV-32	8:35 AM	11:59 AM	2.06	2.06
100706	10071708	Personal	Jacob Johnson-Burn cell-Dust control-Pump #LV-30	8:29 AM	12:02 PM	2.06	2.06
100707	10071709	Personal	Mark Conway-Burn cell-Equipmet operator-Pump #LV-32	1:45 PM	3:00 PM	2.06	2.06
100708	10071710	Personal	Jacob Johnson-Burn cell-Dust control-Pump #LV-30	1:47 PM	3:00 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
100701	10071703	255	9.76	2488.8	13	100	0.0025	0.1275	16.242	0.0025	1.610	<0.0040	N/A
100702	10071704	30	2.06	61.8	6.5	100	0.0025	0.0625	7.962	0.0496	1.810	<0.0898	0.012
100703	10071705	245	9.76	2391.2	11	100	0.0025	0.1075	13.694	0.0022	1.655	<0.0036	N/A
100704	10071706	31	2.06	63.86	6	100	0.0025	0.0575	7.325	0.0442	1.839	<0.0812	0.011
100705	10071707	204	2.06	420.24	6.5	100	0.0025	0.0625	7.962	0.0073	1.810	<0.0132	0.011
100706	10071708	213	2.06	438.78	7	100	0.0025	0.0675	8.599	0.0075	1.785	<0.0135	0.012
100707	10071709	75	2.06	154.5	9.5	100	0.0025	0.0925	11.783	0.0294	1.690	<0.0496	0.011
100708	10071710	73	2.06	150.38	11	100	0.0025	0.1075	13.694	0.0351	1.655	<0.0580	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/10/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/07/2017 by Advantage Environmental, Inc. are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed by Advantage Environmental, Inc. for this day.

Air Data Results
Current air data for this day was below PELs and acceptable limits.

Technician report
Field technician noted minor dust release at contact point of equipment with the debris. Engineering controls were modified and no other issues were noted.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 16
PAGE 1 **OF** 1

DATE COLLECTED 10/10/2017
DATE RECEIVED 10/10/2017
DATE ANALYZED 10/10/2017
DATE REPORTED 10/10/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10101701	0.5	100	0.5/100
B2	10101702	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101001	10101703	STEL	Gary Brown-Burn cell-Loading dumpsters with excavator-Pump LV-1	9:06 AM	9:37 AM	1.93	1.93
101002	10101704	STEL	Eduardo Gonzalez-Burn cell-Wetting debris-Pump LV-21	9:16 AM	9:46 AM	1.93	1.93
101003	10101705	Area	Southeast corner of cell next to dumpster loading site-Pump HV-2	9:23 AM	12:02 PM	10.73	10.73
101004	10101706	Personal	Gary Brown-Burn cell-Loading dumpsters with excavator-Pump LV-1	9:38 AM	11:55 AM	1.93	1.93
101005	10101707	Personal	Eduardo Gonzalez-Burn cell-Wetting debris-Pump LV-21	9:47 AM	11:50 AM	1.93	1.93
101006	10101708	Personal	Eduardo Gonzalez-Burn cell-Wetting debris-Pump LV-21	11:52 AM	3:40 PM	1.93	1.93
101007	10101709	Area	Southeast corner of cell next to dumpster loading site-Pump HV-2	12:05 PM	3:46 PM	10.73	10.73
101008	10101710	Personal	Gary Brown-Burn cell-Loading dumpsters with excavator-Pump LV-1	12:57 PM	3:45 PM	1.93	1.93

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101001	10101703	31	1.93	59.83	6.5	100	0.0025	0.0625	7.962	0.0512	1.810	<0.0927	0.012
101002	10101704	30	1.93	57.9	7.5	100	0.0025	0.0725	9.236	0.0614	1.775	<0.1090	0.015
101003	10101705	159	10.73	1706.07	11	100	0.0025	0.1075	13.694	0.0031	1.655	<0.0051	N/A
101004	10101706	137	1.93	264.41	6.5	100	0.0025	0.0625	7.962	0.0116	1.810	<0.0210	0.012
101005	10101707	123	1.93	237.39	9	100	0.0025	0.0875	11.146	0.0181	1.705	<0.0308	0.015
101006	10101708	228	1.93	440.04	12	100	0.0025	0.1175	14.968	0.0131	1.620	<0.0212	0.015
101007	10101709	221	10.73	2371.33	11.5	100	0.0025	0.1125	14.331	0.0023	1.635	<0.0038	N/A
101008	10101710	168	1.93	324.24	9.5	100	0.0025	0.0925	11.783	0.0140	1.690	<0.0236	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/11/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/07/2017 by Advantage Environmental, Inc. are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed by Advantage Environmental, Inc. for this day.

Air Data Results
Current air data for this day was below PELs and acceptable limits.

Technician report
Field technician noted minor dust release at contact point of equipment with the debris. Engineering controls were modified and no other issues were noted.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management **ADVANTAGE PROJECT #** 17-225 **DATE COLLECTED** 10/11/2017
ATTENTION Jerry Wade **CLIENT PROJECT #** 30309.0047 **DATE RECEIVED** 10/11/2017
CONTRACTOR Performance Abatement Services / Advanced American Construction **REPORT #** 17 **DATE ANALYZED** 10/11/2017
PROJECT River Street Water Front Portland, OR **PAGE** 1 **OF** 1 **DATE REPORTED** 10/12/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10111706	0	100	0/100
B2	10111707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101101	10111708	STEL	Mark Conway-Moving debris/rock with longreach-Pump LV-32	7:43 AM	8:15 AM	2.06	2.06
101102	10111709	STEL	Nick Muranda-Building trestle-Pump LV-21	7:58 AM	8:30 AM	1.93	1.93
101103	10111710	Personal	Mark Conway-Moving debris/rock with longreach-Pump LV-32	8:16 AM	12:10 PM	2.06	2.06
101104	10111711	Area	West-end of trestle-Pump HV-21	8:26 AM	12:31 PM	9.76	9.76
101105	10111712	Personal	Nick Muranda-Building trestle-Pump LV-21	8:31 AM	12:01 PM	1.93	1.93
101106	10111713	Personal	Gary Brown-Loading dumpsters with excavator-Pump LV-1	8:34 AM	9:05 AM	1.93	1.93
101107	10111714	Personal	Mark Conway-Moving debris/rock with longreach-Pump LV-32	12:30 PM	3:15 PM	2.06	2.06
101108	10111715	Area	West-end of trestle-Pump HV-21	12:32 PM	3:30 PM	9.76	9.76
101109	10111716	Personal	Gary Brown-Loading dumpsters with excavator-Pump LV-1	12:35 PM	3:20 PM	1.93	1.93
101110	10111717	Personal	Nick Muranda-Building trestle-Pump LV-21	1:40 PM	3:31 PM	1.93	1.93

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101101	10111708	32	2.06	65.92	5.5	100	0.0025	0.0525	6.688	0.0391	1.871	<0.0731	0.012
101102	10111709	32	1.93	61.76	9	100	0.0025	0.0875	11.146	0.0695	1.705	<0.1185	0.018
101103	10111710	234	2.06	482.04	8.5	100	0.0025	0.0825	10.510	0.0084	1.720	<0.0144	0.012
101104	10111711	245	9.76	2391.2	14	100	0.0025	0.1375	17.516	0.0028	1.590	<0.0045	N/A
101105	10111712	210	1.93	405.3	11	100	0.0025	0.1075	13.694	0.0130	1.655	<0.0215	0.018
101106	10111713	31	1.93	59.83	8.5	100	0.0025	0.0825	10.510	0.0676	1.720	<0.1163	0.009
101107	10111714	165	2.06	339.9	11	100	0.0025	0.1075	13.694	0.0155	1.655	<0.0257	0.012
101108	10111715	178	9.76	1737.28	13.5	100	0.0025	0.1325	16.879	0.0037	1.600	<0.0060	N/A
101109	10111716	165	1.93	318.45	9.5	100	0.0025	0.0925	11.783	0.0142	1.690	<0.0241	0.009
101110	10111717	111	1.93	214.23	14	100	0.0025	0.1375	17.516	0.0315	1.590	<0.0501	0.018

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/12/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/07/2017 by Advantage Environmental, Inc. are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed by Advantage Environmental, Inc. for this day.

Air Data Results
Current air data for this day was below PELs and acceptable limits.

Technician report
Field technician noted minor dust release at contact point of equipment with the debris. Engineering controls were modified and no other issues were noted.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management **ADVANTAGE PROJECT #** 17-225 **DATE COLLECTED** 10/12/2017
ATTENTION Jerry Wade **CLIENT PROJECT #** 30309.0047 **DATE RECEIVED** 10/12/2017
CONTRACTOR Performance Abatement Services / Advanced American Construction **REPORT #** 18 **DATE ANALYZED** 10/12/2017
PROJECT River Street Water Front Portland, OR **PAGE** 1 **OF** 2 **DATE REPORTED** 10/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10121706	1	100	1/100
B2	10121707	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101201	10121708	STEL	Mark Conway-Excavator operator-Pump LV-1	8:00 AM	8:30 AM	2.06	2.06
101202	10121709	STEL	Nick Maranda-Laborer-Pump LV-21	8:05 AM	8:35 AM	2.06	2.06
101203	10121710	Personal	Gary Brown-Trestle worker-Pump LV-5	8:15 AM	8:45 AM	2.06	2.06
101204	10121711	Personal	Mark Conway-Excavator operator-Pump LV-1	8:31 AM	12:05 PM	9.76	9.76
101205	10121712	Personal	Nick Maranda-Laborer-Pump LV-21	8:36 AM	12:08 PM	2.06	2.06
101206	10121713	Personal	Gary Brown-Trestle worker-Pump LV-5	8:47 AM	12:00 PM	2.06	2.06
101207	10121714	Area	South-end of trestle-Pump HV-20	9:05 AM	12:10 PM	7.86	7.86
101208	10121715	Personal	Gary Brown-Trestle worker-Pump LV-5	12:01 PM	4:08 PM	2.06	2.06
101209	10121716	Personal	Mark Conway-Excavator operator-Pump LV-1	12:06 PM	4:05 PM	2.06	2.06
101210	10121717	Personal	Nick Maranda-Laborer-Pump LV-21	12:09 PM	1:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101201	10121708	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.011
101202	10121709	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.012
101203	10121710	30	2.06	61.8	8.5	100	0.005	0.0800	10.191	0.0635	1.720	<0.1092	0.014
101204	10121711	214	9.76	2088.64	11	100	0.005	0.1050	13.376	0.0025	1.655	<0.0041	0.011
101205	10121712	212	2.06	436.72	7.5	100	0.005	0.0700	8.917	0.0079	1.775	<0.0140	0.012
101206	10121713	193	2.06	397.58	11.5	100	0.005	0.1100	14.013	0.0136	1.635	<0.0222	0.014
101207	10121714	185	7.86	1454.1	11	100	0.005	0.1050	13.376	0.0035	1.655	<0.0059	N/A
101208	10121715	247	2.06	508.82	9	100	0.005	0.0850	10.828	0.0082	1.705	<0.0140	0.014
101209	10121716	239	2.06	492.34	11.5	100	0.005	0.1100	14.013	0.0110	1.635	<0.0179	0.011
101210	10121717	81	2.06	166.86	9.5	100	0.005	0.0900	11.465	0.0265	1.690	<0.0447	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 18
PAGE 2 **OF** 2

DATE COLLECTED 10/12/2017
DATE RECEIVED 10/12/2017
DATE ANALYZED 10/12/2017
DATE REPORTED 10/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10121706	1	100	1/100
B2	10121707	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101211	10121718	Area	South-end of trestle-Pump HV-20	12:12 PM	4:10 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101211	10121718	238	7.86	1870.68	13	100	0.005	0.1250	15.924	0.0033	1.610	<0.0053	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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Clean your world.

October 17, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/13/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/13/2017 by Advantage Environmental, Inc. are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed by Advantage Environmental, Inc. for this day.

Air Data Results
Current air data for this day was below PELs and acceptable limits.

Technician report
Field technician noted minor dust release at contact point of equipment with the debris. Engineering controls were modified and no other issues were noted.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 19
PAGE 1 **OF** 1

DATE COLLECTED 10/13/2017
DATE RECEIVED 10/13/2017
DATE ANALYZED 10/13/2017
DATE REPORTED 10/16/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10131706	1	100	1/100
B2	10131707	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101301	10131708	STEL	Jeff Doggey-Power buck-Pump LV-21	7:55 AM	8:25 AM	2.06	2.06
101302	10131709	STEL	Ever Bonilla-Laborer-Pump LV-1	8:05 AM	8:35 AM	2.06	2.06
101303	10131710	Area	Southwest of trestle-Pump HV-20	8:10 AM	12:07 PM	7.86	7.86
101304	10131711	Personal	Ever Bonilla-Laborer-Pump LV-1	8:36 AM	12:02 PM	2.06	2.06
101305	10131712	Personal	Jeff Doggey-Power buck-Pump LV-21	8:40 AM	12:00 PM	2.06	2.06
101306	10131713	Personal	Jeff Doggey-Power buck-Pump LV-21	12:03 PM	3:35 PM	2.06	2.06
101307	10131714	Personal	Ever Bonilla-Laborer-Pump LV-1	12:05 PM	3:45 PM	2.06	2.06
101308	10131715	Area	Southwest of trestle-Pump HV-20	12:09 PM	3:50 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101301	10131708	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.012
101302	10131709	30	2.06	61.8	6	100	0.005	0.0550	7.006	0.0436	1.839	<0.0803	0.011
101303	10131710	237	7.86	1862.82	11	100	0.005	0.1050	13.376	0.0028	1.655	<0.0046	N/A
101304	10131711	206	2.06	424.36	11	100	0.005	0.1050	13.376	0.0121	1.655	<0.0201	0.011
101305	10131712	200	2.06	412	11.5	100	0.005	0.1100	14.013	0.0131	1.635	<0.0214	0.012
101306	10131713	212	2.06	436.72	8	100	0.005	0.0750	9.554	0.0084	1.741	<0.0147	0.012
101307	10131714	220	2.06	453.2	7.5	100	0.005	0.0700	8.917	0.0076	1.775	<0.0134	0.011
101308	10131715	221	7.86	1737.06	10	100	0.005	0.0950	12.102	0.0027	1.670	<0.0045	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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October 17, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/16/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/16/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 20
PAGE 1 **OF** 2

DATE COLLECTED 10/16/2017
DATE RECEIVED 10/16/2017
DATE ANALYZED 10/16/2017
DATE REPORTED 10/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10161706	0	100	0/100
B2	10161707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101601	10161708	STEL	Mark Conway-Excavator operator-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
101602	10161709	STEL	Mark Jeffers-Crane operator-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
101603	10161710	Area	Southwest of trestle-Pump #HV-20	7:55 AM	11:55 AM	7.86	7.86
101604	10161711	STEL	Eduardo Gonzalez-Firehouse operator-Pump #LV-21	8:00 AM	8:30 AM	2.06	2.06
101605	10161712	Personal	Mark Conway-Excavator operator-Pump #LV-5	8:16 AM	12:00 PM	2.06	2.06
101606	10161713	Personal	Mark Jeffers-Crane operator-Pump #LV-1	8:17 AM	12:05 PM	2.06	2.06
101607	10161714	Personal	Eduardo Gonzalez-Firehouse operator-Pump #LV-21	8:35 AM	12:07 PM	2.06	2.06
101608	10161715	Personal	Mark Jeffers-Crane operator-Pump #LV-1	12:06 PM	3:15 PM	7.86	7.86
101609	10161716	Personal	Mark Conway-Excavator operator-Pump #LV-5	12:08 PM	4:40 PM	2.06	2.06
101610	10161717	Personal	Eduardo Gonzalez-Firehouse operator-Pump #LV-21	12:09 PM	4:42 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101601	10161708	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
101602	10161709	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.007
101603	10161710	240	7.86	1886.4	9.5	100	0.005	0.0900	11.465	0.0023	1.690	<0.0040	N/A
101604	10161711	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.014
101605	10161712	224	2.06	461.44	6.5	100	0.005	0.0600	7.643	0.0064	1.810	<0.0115	0.010
101606	10161713	228	2.06	469.68	7	100	0.005	0.0650	8.280	0.0068	1.785	<0.0121	0.007
101607	10161714	212	2.06	436.72	7.5	100	0.005	0.0700	8.917	0.0079	1.775	<0.0140	0.014
101608	10161715	189	7.86	1485.54	8.5	100	0.005	0.0800	10.191	0.0026	1.720	<0.0045	0.007
101609	10161716	272	2.06	560.32	9.5	100	0.005	0.0900	11.465	0.0079	1.690	<0.0133	0.010
0.014	10161717	273	2.06	562.38	14	100	0.005	0.1350	17.197	0.0118	1.590	<0.0187	0.014

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 20
PAGE 2 **OF** 2

DATE COLLECTED 10/16/2017
DATE RECEIVED 10/16/2017
DATE ANALYZED 10/16/2017
DATE REPORTED 10/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10161706	0	100	0/100
B2	10161707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101611	10131718	Area	Southwest of trestle-Pump #HV-20	12:13 PM	4:43 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101611	10131718	270	7.86	2122.2	13.5	100	0.005	0.1300	16.561	0.0030	1.600	<0.0048	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 18, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/17/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/17/2017 by AEI are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 21
PAGE 1 **OF** 1

DATE COLLECTED 10/17/2017
DATE RECEIVED 10/17/2017
DATE ANALYZED 10/17/2017
DATE REPORTED 10/18/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10171708	0	100	0/100
B2	10171709	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101701	10171710	STEL	Mark Conway-Running long reach/moving debris-Pump #LV-34	7:57 AM	8:31 AM	2.06	2.06
101702	10171711	Area	West-end of trestle-Pump HV-21	7:47 AM	11:59 AM	9.76	9.76
101703	10171712	STEL	Jacob Johnson-Spotting material on trestle/waterhose-Pump #LV-1	7:59 AM	8:30 AM	2.06	2.06
101704	10171713	STEL	Brent Hardinger-Running excavator/moving debris-Pump #LV-32	8:05 AM	8:39 AM	2.06	2.06
101705	10171714	Personal	Mark Conway-Running long reach/moving debris-Pump #LV-34	8:35 AM	11:50 AM	2.06	2.06
101706	10171715	Personal	Jacob Johnson-Spotting material on trestle/waterhose-Pump #LV-1	8:36 AM	12:15 PM	2.06	2.06
101707	10171716	Personal	Brent Hardinger-Running excavator/moving debris-Pump #LV-32	8:40 AM	12:00 PM	2.06	2.06
101708	10171717	Area	Northeast corner by pit-Pump HV-20	9:00 AM	11:58 AM	9.76	9.76
101709	10171718	Personal	Mark Conway-Running long reach/moving debris-Pump #LV-34	11:51 AM	3:55 PM	2.06	2.06
101710	10171719	Personal	Brent Hardinger-Running excavator/moving debris-Pump #LV-32	12:01 PM	3:50 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101701	10171710	34	2.06	70.04	6.5	100	0.005	0.0600	7.643	0.0420	1.810	<0.0760	0.010
101702	10171711	252	9.76	2459.52	13	100	0.005	0.1250	15.924	0.0025	1.610	<0.0040	N/A
101703	10171712	31	2.06	63.86	7	100	0.005	0.0650	8.280	0.0499	1.785	<0.0891	0.008
101704	10171713	34	2.06	70.04	6	100	0.005	0.0550	7.006	0.0385	1.839	<0.0708	0.015
101705	10171714	195	2.06	401.7	8	100	0.005	0.0750	9.554	0.0092	1.741	<0.0159	0.010
101706	10171715	219	2.06	451.14	11	100	0.005	0.1050	13.376	0.0114	1.655	<0.0189	0.008
101707	10171716	200	2.06	412	9	100	0.005	0.0850	10.828	0.0101	1.705	<0.0173	0.015
101708	10171717	178	9.76	1737.28	12.5	100	0.005	0.1200	15.287	0.0034	1.620	<0.0055	N/A
101709	10171718	244	2.06	502.64	8	100	0.005	0.0750	9.554	0.0073	1.741	<0.0127	0.010
101710	10171719	229	2.06	471.74	17	100	0.005	0.1650	21.019	0.0172	1.530	<0.0262	0.015

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/18/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/18/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 22
PAGE 1 **OF** 2

DATE COLLECTED 10/18/2017
DATE RECEIVED 10/18/2017
DATE ANALYZED 10/18/2017
DATE REPORTED 10/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10181709	1	100	1/100
B2	10181710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101801	10181711	STEL	Eduardo Gonzalez-Laborer-Pump #LV-1	8:00 AM	8:30 AM	2.06	2.06
101802	10181712	Area	South end of trestle-Pump HV-10	8:01 AM	12:00 PM	9.86	9.86
101803	10181713	STEL	Brent Hardinger-Excavator operator-Pump #LV-30	8:15 AM	8:48 AM	2.06	2.06
101804	10181714	STEL	Jacob Johnson-Water hose operator-Pump #LV-5	8:20 AM	8:54 AM	2.06	2.06
101805	10181715	Personal	Eduardo Gonzalez-Laborer-Pump #LV-1	8:31 AM	12:35 PM	2.06	2.06
101806	10181716	Personal	Brent Hardinger-Excavator operator-Pump #LV-30	8:49 AM	12:50 PM	2.06	2.06
101807	10181717	Area	West-end of trestle-Pump #HV-20	8:50 AM	12:10 PM	9.86	9.86
101808	10181718	Personal	Jacob Johnson-Water hose operator-Pump #LV-5	8:55 AM	12:25 PM	2.06	2.06
101809	10181719	Area	South end of trestle-Pump HV-10	12:05 PM	3:20 PM	9.86	9.86
101810	10181720	Area	West-end of trestle-Pump #HV-20	12:11 PM	3:25 PM	9.86	9.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101801	10181711	30	2.06	61.8	8.5	100	0.01	0.0750	9.554	0.0595	1.720	<0.1024	0.013
101802	10181712	239	9.86	2356.54	9.5	100	0.01	0.0850	10.828	0.0018	1.690	<0.0030	N/A
101803	10181713	33	2.06	67.98	8	100	0.01	0.0700	8.917	0.0505	1.741	<0.0879	0.010
101804	10181714	34	2.06	70.04	8.5	100	0.01	0.0750	9.554	0.0525	1.720	<0.0903	0.011
101805	10181715	244	2.06	502.64	9.5	100	0.01	0.0850	10.828	0.0083	1.690	<0.0140	0.013
101806	10181716	241	2.06	496.46	8	100	0.01	0.0700	8.917	0.0069	1.741	<0.0120	0.010
101807	10181717	200	9.86	1972	10.5	100	0.01	0.0950	12.102	0.0024	1.660	<0.0039	N/A
101808	10181718	210	2.06	432.6	8.5	100	0.01	0.0750	9.554	0.0085	1.720	<0.0146	0.011
101809	10181719	195	9.86	1922.7	11	100	0.01	0.1000	12.739	0.0026	1.655	<0.0042	N/A
101810	10181720	194	9.86	1912.84	10	100	0.01	0.0900	11.465	0.0023	1.670	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 22
PAGE 2 **OF** 2

DATE COLLECTED 10/18/2017
DATE RECEIVED 10/18/2017
DATE ANALYZED 10/18/2017
DATE REPORTED 10/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10181709	1	100	1/100
B2	10181710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: White / Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101811	10181721	Personal	Jacob Johnson-Water hose operator-Pump #LV-5	12:26 PM	3:22 PM	2.06	2.06
101812	10181722	Personal	Eduardo Gonzalez-Laborer-Pump #LV-1	12:36 PM	3:41 PM	2.06	2.06
101813	10181723	Personal	Brent Hardinger-Excavator operator-Pump #LV-30	12:51 PM	3:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101811	10181721	176	2.06	362.56	9	100	0.01	0.0800	10.191	0.0108	1.705	<0.0185	0.011
101812	10181722	185	2.06	381.1	10.5	100	0.01	0.0950	12.102	0.0122	1.660	<0.0203	0.013
101813	10181723	159	2.06	327.54	8	100	0.01	0.0700	8.917	0.0105	1.741	<0.0182	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/19/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/19/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 23
PAGE 1 **OF** 2

DATE COLLECTED 10/19/2017
DATE RECEIVED 10/19/2017
DATE ANALYZED 10/19/2017
DATE REPORTED 10/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10191706	0.5	100	0.5/100
B2	10191707	1	100	1/100

SAMPLES COLLECTED BY: White / Carter

SAMPLES ANALYZED BY: White / Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101901	10191708	STEL	Mark Jeffers-Crane Operator-Pump LV-1	7:38 AM	8:12 AM	2.06	2.06
101902	10191709	STEL	Justin Scott-Welding trestle-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
101903	10191710	STEL	Will Marinez-Flagging traffic-Pump LV-5	7:46 AM	8:16 AM	2.06	2.06
101904	10191711	Personal	Justin Scott-Welding trestle-Pump #LV-5	8:11 AM	12:00 PM	1.67	1.67
101905	10191712	Personal	Mark Jeffers-Crane Operator-Pump LV-1	8:13 AM	11:55 AM	2.06	2.06
101906	10191713	Personal	Will Marinez-Flagging traffic-Pump LV-5	8:20 AM	12:13 PM	2.06	2.06
101907	10191714	Area	South-end of trestle-Pump #HV-20	8:21 AM	12:07 PM	7.86	7.86
101908	10191715	Personal	Mark Jeffers-Crane Operator-Pump LV-1	12:01 PM	3:15 PM	2.06	2.06
101909	10191716	Personal	Justin Scott-Welding trestle-Pump #LV-5	12:02 PM	3:17 PM	2.06	2.06
101910	10191717	Personal	Will Marinez-Flagging traffic-Pump LV-5	12:15 PM	3:20 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101901	10191708	34	2.06	70.04	8.5	100	0.0075	0.0775	9.873	0.0543	1.720	<0.0933	0.014
101902	10191709	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.013
101903	10191710	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.014
101904	10191711	229	1.67	382.43	9	100	0.0075	0.0825	10.510	0.0106	1.705	<0.0180	0.013
101905	10191712	222	2.06	457.32	11	100	0.0075	0.1025	13.057	0.0110	1.655	<0.0182	0.014
101906	10191713	233	2.06	479.98	9	100	0.0075	0.0825	10.510	0.0084	1.705	<0.0144	0.014
101907	10191714	226	7.86	1776.36	17	100	0.0075	0.1625	20.701	0.0045	1.530	<0.0069	N/A
101908	10191715	194	2.06	399.64	11	100	0.0075	0.1025	13.057	0.0126	1.655	<0.0208	0.014
101909	10191716	195	2.06	401.7	11	100	0.0075	0.1025	13.057	0.0125	1.655	<0.0207	0.013
101910	10191717	185	2.06	381.1	14	100	0.0075	0.1325	16.879	0.0171	1.590	<0.0271	0.014

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 23
PAGE 2 **OF** 2

DATE COLLECTED 10/19/2017
DATE RECEIVED 10/19/2017
DATE ANALYZED 10/19/2017
DATE REPORTED 10/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10191706	0.5	100	0.5/100
B2	10191707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
101911	10191718	Area	South-end of trestle-Pump #HV-20	12:30 PM	3:16 PM	7.86	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
101911	10191718	166	4.96	823.36	14	100	0.0075	0.1325	16.879	0.0079	1.590	<0.0125	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 23, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/20/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/20/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 24
PAGE 1 **OF** 2

DATE COLLECTED 10/20/2017
DATE RECEIVED 10/20/2017
DATE ANALYZED 10/20/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10201706	1	100	1/100
B2	10201707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102001	10201708	STEL	Tommy Smith-Water delivery-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
102002	10201709	STEL	Ever Bonilla-Laborer-Pump #LV-21	7:42 AM	8:12 AM	2.06	2.06
102003	10201710	STEL	Gary Brown-Loading dumpsters with debris-Pump #LV-5	7:45 AM	8:15 AM	2.06	2
102004	10201711	Area	Front North side of work area-Pump #HV-20	8:00 AM	12:50 PM	7.86	7.86
102005	10201712	Personal	Tommy Smith-Water delivery-Pump #LV-1	8:13 AM	12:30 PM	2.06	2.06
102006	10201713	Personal	Ever Bonilla-Laborer-Pump #LV-21	8:16 AM	12:35 PM	2.06	2.06
102007	10201714	Personal	Gary Brown-Loading dumpsters with debris-Pump #LV-5	8:18 AM	12:32 PM	2.06	2.06
102008	10201715	Personal	Tommy Smith-Water delivery-Pump #LV-1	12:31 PM	3:31 PM	2.06	2.06
102009	10201716	Personal	Gary Brown-Loading dumpsters with debris-Pump #LV-5	12:33 PM	3:36 PM	2.06	2.06
102010	10201717	Personal	Ever Bonilla-Laborer-Pump #LV-21	12:38 PM	3:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102001	10201708	30	2.06	61.8	8.5	100	0.01	0.0750	9.554	0.0595	1.720	<0.1024	0.011
102002	10201709	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
102003	10201710	30	2.03	60.9	9	100	0.01	0.0800	10.191	0.0644	1.705	<0.1098	0.012
102004	10201711	290	7.86	2279.4	13	100	0.01	0.1200	15.287	0.0026	1.610	<0.0042	N/A
102005	10201712	257	2.06	529.42	8.5	100	0.01	0.0750	9.554	0.0069	1.720	<0.0120	0.011
102006	10201713	259	2.06	533.54	8	100	0.01	0.0700	8.917	0.0064	1.741	<0.0112	0.011
102007	10201714	254	2.06	523.24	8	100	0.01	0.0700	8.917	0.0066	1.741	<0.0114	0.012
102008	10201715	180	2.06	370.8	8	100	0.01	0.0700	8.917	0.0093	1.741	<0.0161	0.011
102009	10201716	183	2.06	376.98	10	100	0.01	0.0900	11.465	0.0117	1.670	<0.0196	0.012
102010	10201717	177	2.06	364.62	9	100	0.01	0.0800	10.191	0.0108	1.705	<0.0183	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 24
PAGE 2 **OF** 2

DATE COLLECTED 10/20/2017
DATE RECEIVED 10/20/2017
DATE ANALYZED 10/20/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10201706	1	100	1/100
B2	10201707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102011	10201708	Area	Front North side of work area-Pump #HV-20	12:59 PM	3:29 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102011	10201708	150	7.86	1179	8.5	100	0.01	0.0750	9.554	0.0031	1.720	<0.0054	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

October 23, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/21/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/21/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Personal sample #10210 worn by Jose Rodriguez was not returned with sampling pump LV-5 at the time of sample completion.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 25
PAGE 1 **OF** 2

DATE COLLECTED 10/21/2017
DATE RECEIVED 10/21/2017
DATE ANALYZED 10/21/2017
DATE REPORTED 10/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10211706	0	100	0/100
B2	10211707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102101	10211708	STEL	Jose Rodriguez-Working around debris-Pump #LV-5	7:31 AM	8:01 AM	2.06	2.06
102102	10211709	STEL	Travis Harrison-Working in debris-Pump #LV-1	7:32 AM	8:02 AM	2.06	2.06
102103	10211710	STEL	Mark Conway-Operating excavator-Pump #LV-21	7:36 AM	8:07 AM	2.06	2.06
102104	10211711	Area	Southwest end of trestle-Pump #HV-20	7:45 AM	12:00 PM	7.86	7.86
102105	10211712	Area	North-end of worksite-Pump #HV-21	7:50 AM	12:06 PM	7.86	7.86
102106	10211713	Personal	Travis Harrison-Working in debris-Pump #LV-1	8:03 AM	12:07 PM	2.06	2.06
102107	10211714	Personal	Jose Rodriguez-Working around debris-Pump #LV-5	8:05 AM	12:04 PM	2.06	2.06
102108	10211715	Personal	Mark Conway-Operating excavator-Pump #LV-21	8:10 AM	12:11 PM	2.06	2.06
102109	10211716	Area	Southwest end of trestle-Pump #HV-20	12:03 PM	1:45 PM	7.86	7.86
102110	10211717	Personal	Jose Rodriguez-Working around debris-Pump #LV-5	12:05 PM	NA	NA	NA

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102101	10211708	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.006
102102	10211709	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
102103	10211710	31	2.06	63.86	8	100	0.005	0.0750	9.554	0.0576	1.741	<0.1003	0.011
102104	10211711	255	7.86	2004.3	7.5	100	0.005	0.0700	8.917	0.0017	1.775	<0.0030	N/A
102105	10211712	256	7.86	2012.16	6.5	100	0.005	0.0600	7.643	0.0015	1.810	<0.0026	N/A
102106	10211713	244	2.06	502.64	7	100	0.005	0.0650	8.280	0.0063	1.785	<0.0113	0.009
102107	10211714	239	2.06	492.34	6	100	0.005	0.0550	7.006	0.0055	1.839	<0.0101	0.006
102108	10211715	241	2.06	496.46	8	100	0.005	0.0750	9.554	0.0074	1.741	<0.0129	0.011
102109	10211716	102	7.86	801.72	5.5	100	0.005	0.0500	6.369	< LOD	1.871	<1.8705	N/A
102110	10211717	NA`	NA	NA	Sample	Lost	N/A	N/A	N/A	N/A	N/A	N/A	0.006

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 25
PAGE 1 **OF** 2

DATE COLLECTED 10/21/2017
DATE RECEIVED 10/21/2017
DATE ANALYZED 10/21/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10211706	0	100	0/100
B2	10211707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102111	10211718	Personal	Travis Harrison-Working in debris-Pump #LV-1	12:08 PM	1:35 PM	2.06	2.06
102112	10211719	Area	Placed Sample on pump #HV-21 at North-end of worksite	12:13 PM	1:44 PM	7.86	7.86
102113	10211720	Personal	Mark Conway-Operating excavator-Pump #LV-1	12:14 PM	1:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102111	10211718	87	2.06	179.22	6.5	100	0.005	0.0600	7.643	0.0164	1.810	<0.0297	0.009
102112	10211719	91	7.86	715.26	8	100	0.005	0.0750	9.554	0.0051	1.741	<0.0090	N/A
102113	10211720	79	2.06	162.74	7	100	0.005	0.0650	8.280	0.0196	1.785	<0.0350	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

October 23, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/20/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/20/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/20/2017
DATE RECEIVED 10/21/2017
DATE ANALYZED 10/21/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100076	10211701	1	100	1/100
17100077	10211702	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100073	10211703	Area	AS15	7:42 AM	3:23 PM	10.056	10.304
17100074	10211704	Area	AS24	8:07 AM	3:41 PM	10.073	10.307
17100075	10211705	Area	AS26	7:53 AM	3:33 PM	9.996	10.272

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100073	10211703	461	10.18	4692.98	7	100	0.01	0.0600	7.643	0.0006	1.785	<0.0011	N/A
17100074	10211704	454	10.19	4626.26	6	100	0.01	0.0500	6.369	< LOD	1.839	<1.8390	N/A
17100075	10211705	460	10.134	4661.64	5.5	100	0.01	0.0450	5.732	< LOD	1.839	<1.8390	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 24, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/23/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/23/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 25
PAGE 1 **OF** 2

DATE COLLECTED 10/21/2017
DATE RECEIVED 10/21/2017
DATE ANALYZED 10/21/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10231706	0.5	100	0.5/100
B2	10231707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102301	10231708	STEL	Robert Barton-Laborer-Pump #LV-21	7:35 AM	8:05 AM	2.06	2.06
102302	10231709	STEL	Ever Bonilla-Foreman-Pump #LV-5	7:36 AM	8:06 AM	2.06	2.06
102303	10231710	STEL	Mark Jeffers-Crane Operator-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
102304	10231711	Area	North end of trestle-Pump #HV-20	7:46 AM	11:55 AM	7	7
102305	10231712	Personal	Robert Barton-Laborer-Pump #LV-21	8:07 AM	12:03 PM	2.06	2.06
102306	10231713	Personal	Ever Bonilla-Foreman-Pump #LV-5	8:08 AM	12:01 PM	2.06	2.06
102307	10231714	Personal	Mark Jeffers-Crane Operator-Pump #LV-1	8:16 AM	12:04 PM	2.06	2.06
102308	10231715	Personal	Ever Bonilla-Foreman-Pump #LV-5	12:02 PM	3:30 PM	2.06	2.06
102309	10231716	Personal	Robert Barton-Laborer-Pump #LV-21	12:05 PM	3:35 PM	2.06	2.06
102310	10231717	Personal	Mark Jeffers-Crane Operator-Pump #LV-1	12:08 PM	3:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102301	10231708	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
102302	10231709	30	2.06	61.8	6	100	0.005	0.0550	7.006	0.0436	1.839	<0.0803	0.009
102303	10231710	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.009
102304	10231711	249	7	1743	10	100	0.005	0.0950	12.102	0.0027	1.670	<0.0045	N/A
102305	10231712	236	2.06	486.16	7	100	0.005	0.0650	8.280	0.0066	1.785	<0.0117	0.010
102306	10231713	233	2.06	479.98	7.5	100	0.005	0.0700	8.917	0.0072	1.775	<0.0127	0.009
102307	10231714	228	2.06	469.68	6.5	100	0.005	0.0600	7.643	0.0063	1.810	<0.0113	0.009
102308	10231715	208	2.06	428.48	7	100	0.005	0.0650	8.280	0.0074	1.785	<0.0133	0.009
102309	10231716	210	2.06	432.6	7.5	100	0.005	0.0700	8.917	0.0079	1.775	<0.0141	0.010
102310	10231717	205	2.06	422.3	6	100	0.005	0.0550	7.006	0.0064	1.839	<0.0117	0.009

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 26
PAGE 2 **OF** 2

DATE COLLECTED 10/23/2017
DATE RECEIVED 10/23/2017
DATE ANALYZED 10/23/2017
DATE REPORTED 10/24/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10231706	0	100	0/100
B2	10231707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102301	10231708	Area	North end of trestle-Pump #HV-20	12:20 PM	3:26 PM	7	7

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102301	10231708	186	7	1302	11.5	100	0.005	0.1100	14.013	0.0041	1.635	<0.0068	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 25, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/24/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/24/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 27
PAGE 1 **OF** 2

DATE COLLECTED 10/24/2017
DATE RECEIVED 10/24/2017
DATE ANALYZED 10/24/2017
DATE REPORTED 10/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10241706	0.5	100	0.5/100
B2	10241707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102401	10241708	Area	South-end of trestle-Pump #HV-20	7:25 AM	11:50 AM	7.86	7.86
102402	10241709	STEL	Robert Michael Ganison-Flagger-Pump #LV-30	7:39 AM	8:09 AM	2.06	2.06
102403	10241710	STEL	Nick Miranda-Driving pilings-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
102404	10241711	STEL	Brent Hardinger-Excavator operator-Pump #LV-5	7:45 AM	8:15 AM	2.06	2.06
102405	10241712	Area	North-end of trestle-Pump #HV-21	8:00 AM	11:55 AM	8	8
102406	10241713	Personal	Robert Michael Ganison-Flagger-Pump #LV-30	8:11 AM	11:59 AM	2.06	2.06
102407	10241714	Personal	Nick Miranda-Driving pilings-Pump #LV-1	8:12 AM	12:11 PM	2.06	2.06
102408	10241715	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	8:17 AM	12:03 PM	2.06	2.06
102409	10241716	Area	South-end of trestle-Pump #HV-20	11:52 AM	3:36 PM	7.86	7.86
102410	10241717	Area	North-end of trestle-Pump #HV-21	11:56 AM	3:40 PM	8	8

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102401	10241708	265	7.86	2082.9	13.5	100	0.0075	0.1275	16.242	0.0030	1.600	<0.0048	N/A
102402	10241709	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.011
102403	10241710	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
102404	10241711	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.012
102405	10241712	235	8	1880	11.5	100	0.0075	0.1075	13.694	0.0028	1.635	<0.0046	N/A
102406	10241713	228	2.06	469.68	8.5	100	0.0075	0.0775	9.873	0.0081	1.720	<0.0139	0.011
102407	10241714	239	2.06	492.34	9.5	100	0.0075	0.0875	11.146	0.0087	1.690	<0.0147	0.011
102408	10241715	226	2.06	465.56	7.5	100	0.0075	0.0675	8.599	0.0071	1.775	<0.0126	0.012
102409	10241716	224	7.86	1760.64	12	100	0.0075	0.1125	14.331	0.0031	1.620	<0.0051	N/A
102410	10241717	224	8	1792	10.5	100	0.0075	0.0975	12.420	0.0027	1.660	<0.0044	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 27
PAGE 2 **OF** 2

DATE COLLECTED 10/24/2017
DATE RECEIVED 10/24/2017
DATE ANALYZED 10/24/2017
DATE REPORTED 10/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10241701	0.5	100	0.5/100
B2	10241702	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102411	10241718	Personal	Robert Michael Garison-Flagger-Pump #LV-30	12:05 PM	1:30 PM	2.06	2.06
102412	10241719	Personal	Nick Miranda-Driving pilings-Pump #LV-1	12:11 PM	3:45 PM	2.06	2.06
102413	10241720	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	12:13 PM	3:43 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102411	10241718	85	2.06	175.1	8	100	0.0075	0.0725	9.236	0.0203	1.741	<0.0353	0.011
102412	10241719	214	2.06	440.84	7.5	100	0.0075	0.0675	8.599	0.0075	1.775	<0.0133	0.011
102413	10241720	210	2.06	432.6	11	100	0.0075	0.1025	13.057	0.0116	1.655	<0.0192	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 26, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/25/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/25/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 28
PAGE 1 **OF** 2

DATE COLLECTED 10/25/2017
DATE RECEIVED 10/25/2017
DATE ANALYZED 10/25/2017
DATE REPORTED 10/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10251708	1	100	1/100
B2	10251709	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102501	10251710	Area	South-end of trestle-Pump #HV-20	7:35 AM	12:04 PM	7.86	7.86
102502	10251711	STEL	Kent Parker-Driving pilons into ground-Pump #LV-30	7:40 AM	8:10 AM	2.06	2.06
102503	10251712	STEL	Jacob Johnson-Dust control-Pump #LV-36	7:41 AM	8:11 AM	2.06	2.06
102504	10251713	STEL	Eduardo Gonzalez-Waterhose operator-Pump #LV1	8:00 AM	8:30 AM	2.06	2.06
102505	10251714	Personal	Kent Parker-Driving pilons into ground-Pump #LV-30	8:12 AM	11:55 AM	2.06	2.06
102506	10251715	Personal	Jacob Johnson-Dust control-Pump #LV-36	8:15 AM	11:58 AM	2.06	2.06
102507	10251716	Personal	Eduardo Gonzalez-Waterhose operator-Pump #LV1	8:31 AM	12:00 PM	2.06	2.06
102508	10251717	Area	North-side of trestle-Pump #HV-21	9:45 AM	12:01 PM	7.86	7.86
102509	10251718	Personal	Kent Parker-Driving pilons into ground-Pump #LV-30	11:57 AM	3:28 PM	2.06	2.06
102510	10251719	Personal	Jacob Johnson-Dust control-Pump #LV-36	11:59 AM	3:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102501	10251710	269	7.86	2114.34	13.5	100	0.01	0.1250	15.924	0.0029	1.600	<0.0046	N/A
102502	10251711	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.014
102503	10251712	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.012
102504	10251713	30	2.06	61.8	7	100	0.01	0.0600	7.643	0.0476	1.785	<0.0850	0.007
102505	10251714	223	2.06	459.38	11.5	100	0.01	0.1050	13.376	0.0112	1.635	<0.0183	0.014
102506	10251715	223	2.06	459.38	8.5	100	0.01	0.0750	9.554	0.0080	1.720	<0.0138	0.012
102507	10251716	209	2.06	430.54	9.5	100	0.01	0.0850	10.828	0.0097	1.690	<0.0164	N/A
102508	10251717	136	7.86	1068.96	7.5	100	0.01	0.0650	8.280	0.0030	1.775	<0.0053	0.007
102509	10251718	211	2.06	434.66	12	100	0.01	0.1100	14.013	0.0124	1.620	<0.0201	0.014
102510	10251719	211	2.06	434.66	10.5	100	0.01	0.0950	12.102	0.0107	1.660	<0.0178	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 28
PAGE 2 **OF** 2

DATE COLLECTED 10/25/2017
DATE RECEIVED 10/25/2017
DATE ANALYZED 10/25/2017
DATE REPORTED 10/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10251708	1	100	1/100
B2	10251709	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102511	10251720	Personal	Eduardo Gonzalez-Watrehose operator-Pump #LV-1	12:02 PM	3:31 PM	2.06	2.06
102512	10251721	Area	North-side of trestle-Pump #HV-21	12:03 PM	3:26 PM	7.86	7.86
102513	10251722	Area	Southside of trestle-Pump #HV-20	12:11 PM	3:25 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102511	10251720	209	2.06	430.54	8	100	0.01	0.0700	8.917	0.0080	1.741	<0.0139	0.007
102512	10251721	203	7.86	1595.58	7.5	100	0.01	0.0650	8.280	0.0020	1.775	<0.0035	N/A
102513	10251722	194	7.86	1524.84	11	100	0.01	0.1000	12.739	0.0032	1.655	<0.0053	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 27, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/26/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/26/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Sample 102606 worn by Eduardo Gonzales was over loaded.

Air Data Results
Current air data analyzed for this day was below the PELS and acceptable limits.

Technician report
Eduardo Gonzales was operating the water hose.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 29
PAGE 1 **OF** 2

DATE COLLECTED 10/26/2017
DATE RECEIVED 10/26/2017
DATE ANALYZED 10/26/2017
DATE REPORTED 10/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10261706	0.5	100	0.5/100
B2	10261707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102601	10261708	STEL	Mark Jeffers-Crane operator-Pump #LV-5	7:30 AM	8:00 AM	2.06	2.06
102602	10261709	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-1	7:34 AM	8:04 AM	2.06	2.06
102603	10261710	STEL	Jacob Johnson-Dust control-Pump #LV-21	7:39 AM	8:09 AM	2.06	2.06
102604	10261711	Area	Top of South-end of trestle-Pump #HV-20	7:45 AM	11:45 AM	7.86	7.8
102605	10261712	Personal	Mark Jeffers-Crane operator-Pump #LV-5	8:05 AM	11:58 AM	2.06	2.06
102606	10261713	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-1	8:10 AM	12:05 PM	2.06	2.06
102607	10261714	Personal	Jacob Johnson-Dust control-Pump #LV-21	8:16 AM	12:12 PM	2.06	2.06
102608	10261715	Area	Top of South-end of trestle-Pump #HV-20	11:47 AM	3:36 PM	7.86	7.86
102609	10261716	Personal	Mark Jeffers-Crane operator-Pump #LV-5	12:00 PM	3:28 PM	2.06	2.06
102610	10261717	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-1	12:07 PM	3:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102601	10261708	30	2.06	61.8	6.5	100	0.0075	0.0575	7.325	0.0456	1.810	<0.0826	0.016
102602	10261709	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.006
102603	10261710	30	2.06	61.8	6	100	0.0075	0.0525	6.688	0.0417	1.839	<0.0766	0.011
102604	10261711	240	7.83	1879.2	7	100	0.0075	0.0625	7.962	0.0016	1.785	<0.0029	N/A
102605	10261712	233	2.06	479.98	8.5	100	0.0075	0.0775	9.873	0.0079	1.720	<0.0136	0.016
102606	10261713	235	2.06	484.1	Sample	Over	Loaded	N/A	N/A	N/A	N/A	N/A	0.006
102607	10261714	236	2.06	486.16	9.5	100	0.0075	0.0875	11.146	0.0088	1.690	<0.0149	0.011
102608	10261715	229	7.86	1799.94	7.5	100	0.0075	0.0675	8.599	0.0018	1.775	<0.0033	N/A
102609	10261716	208	2.06	428.48	19.5	100	0.0075	0.1875	23.885	0.0215	1.490	<0.0320	0.016
102610	10261717	208	2.06	428.48	6.5	100	0.0075	0.0575	7.325	0.0066	1.810	<0.0119	0.006

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 29
PAGE 2 **OF** 2

DATE COLLECTED 10/26/2017
DATE RECEIVED 10/26/2017
DATE ANALYZED 10/26/2017
DATE REPORTED 10/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10261706	0.5	100	0.5/100
B2	10261707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102611	10251720	Personal	Jacob Johnson-Dust control-Pump #LV-21	12:15 PM	3:25 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
102611	10251720	190	2.06	391.4	9.5	100	0.0075	0.0875	11.146	0.0110	1.690	<0.0185	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE Environmental INC.

Clean your world.

December 27, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/21/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/21/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 70
PAGE 1 **OF** 2

DATE COLLECTED 12/21/2017
DATE RECEIVED 12/21/2017
DATE ANALYZED 12/21/2017
DATE REPORTED 12/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12211706	0	100	0/100
B2	12211707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122101	12211708	Area	End of Trestle 2-Pump #HV-33	7:21 AM	12:02 PM	9.76	9.76
122102	12211709	Area	Northside of deck-Pump #HV-08	7:25 AM	12:04 PM	9.76	9.76
122103	12211710	STEL	Ryan Okada-Boat activities & moving debris-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
122104	12211711	STEL	Little Steward-Lining & sealing dumpsters/trucks with poly-Pump #LV-5	7:35 AM	8:05 AM	2.06	2.06
122105	12211712	Area	Southeast Loading Area-Pump #HV-51	7:38 AM	12:00 PM	9.76	9.76
122106	12211713	STEL	Gary Reynolds-Equipment operator/moving dumpsters-Pump #LV-30	7:41 AM	8:11 AM	2.06	2.06
122107	12211714	Personal	Ryan Okada-Boat activities & moving debris-Pump #LV-1	8:01 AM	12:10 PM	2.06	2.06
122108	12211715	Personal	Little Steward-Lining & sealing dumpsters/trucks with poly-Pump #LV-5	8:06 AM	12:40 PM	2.06	2.06
122109	12211716	Personal	Gary Reynolds-Equipment operator/moving dumpsters-Pump #LV-30	8:12 AM	12:06 PM	2.06	2.06
122110	12211717	Area	Southeast Loading Area-Pump #HV-51	12:01 PM	2:33 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122101	12211708	281	9.76	2742.56	10	100	0.0025	0.0975	12.420	0.0017	1.670	<0.0029	N/A
122102	12211709	279	9.76	2723.04	7.5	100	0.0025	0.0725	9.236	0.0013	1.775	<0.0023	N/A
122103	12211710	30	2.06	61.8	6.5	100	0.0025	0.0625	7.962	0.0496	1.810	<0.0898	0.012
122104	12211711	30	2.06	61.8	15	100	0.0025	0.1475	18.790	0.1171	1.575	<0.1844	0.013
122105	12211712	262	9.76	2557.12	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A
122106	12211713	30	2.06	61.8	7	100	0.0025	0.0675	8.599	0.0536	1.785	<0.0956	0.010
122107	12211714	249	2.06	512.94	8	100	0.0025	0.0775	9.873	0.0074	1.741	<0.0129	0.012
122108	12211715	274	2.06	564.44	6	100	0.0025	0.0575	7.325	0.0050	1.839	<0.0092	0.013
122109	12211716	234	2.06	482.04	6.5	100	0.0025	0.0625	7.962	0.0064	1.810	<0.0115	0.010
122110	12211717	152	9.76	1483.52	7.5	100	0.0025	0.0725	9.236	0.0024	1.775	<0.0043	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 99
PAGE 1 **OF** 2

DATE COLLECTED 1/30/2018
DATE RECEIVED 1/30/2018
DATE ANALYZED 1/30/2018
DATE REPORTED 1/31/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1301806	0.5	100	0.5/100
B2	1301807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
13001	1301808	STEL	Brent Hardinger-Excavator Operator-Pump #LV-32	7:30 AM	8:00 AM	2.06	2.06
13002	1301809	STEL	Mark Jeffers-Crane Operator-Pump #LV-36	7:33 AM	8:03 AM	2.06	2.06
13003	1301810	STEL	Jacob Johnson-Working on cutting & removing decking-Pump #LV-5	7:36 AM	8:06 AM	2.06	2.06
13004	1301811	Area	End of Trestle 2-Pump #HV-52	7:38 AM	12:00 PM	9.76	9.76
13005	1301812	Area	End of Trestle 1-Pump #HV-33	7:42 AM	12:05 PM	9.76	9.76
13006	1301813	Area	Middle of Trestle 1-Pump #HV-22	7:46 AM	12:08 PM	9.76	9.76
13007	1301814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	8:01 AM	11:51 AM	2.06	2.06
13008	1301815	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	8:04 AM	11:54 AM	2.06	2.06
13009	1301816	Personal	Jacob Johnson-Working on cutting & removing decking-Pump #LV-5	8:07 AM	11:58 AM	2.06	2.06
13010	1301817	Area	End of Trestle 2-Pump #HV-52	12:01 PM	2:40 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
13001	1301808	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.012
13002	1301809	30	2.06	61.8	7	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
13003	1301810	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
13004	1301811	262	9.76	2557.12	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0021	N/A
13005	1301812	263	9.76	2566.88	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0022	N/A
13006	1301813	262	9.76	2557.12	9	100	0.005	0.0850	10.828	0.0016	1.705	<0.0028	N/A
13007	1301814	230	2.06	473.8	8	100	0.005	0.0750	9.554	0.0078	1.741	<0.0135	0.012
13008	1301815	230	2.06	473.8	6.5	100	0.005	0.0600	7.643	0.0062	1.810	<0.0112	0.010
13009	1301816	231	2.06	475.86	9	100	0.005	0.0850	10.828	0.0088	1.705	<0.0149	0.011
13010	1301817	159	9.76	1551.84	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 99
PAGE 2 **OF** 2

DATE COLLECTED 1/30/2018
DATE RECEIVED 1/30/2018
DATE ANALYZED 1/30/2018
DATE REPORTED 1/31/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1301806	0.5	100	0.5/100
B2	1301807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
13011	1301818	Area	End of Trestle 1-Pump #HV-33	12:06 PM	2:44 PM	9.76	9.76
13012	1301819	Area	Middle of Trestle 1-Pump #HV-22	12:09 PM	2:45 PM	9.76	9.76
13013	1301820	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	12:30 PM	2:29 PM	2.06	2.06
13014	1301821	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	12:33 PM	2:32 PM	2.06	2.06
13015	1301822	Personal	Jacob Johnson-Working on cutting & removing decking-Pump #LV-5	12:36 PM	2:36 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
13011	1301818	158	9.76	1542.08	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0035	N/A
13012	1301819	156	9.76	1522.56	7	100	0.005	0.0650	8.280	0.0021	1.785	<0.0037	N/A
13013	1301820	119	2.06	245.14	7.5	100	0.005	0.0700	8.917	0.0140	1.775	<0.0249	0.012
13014	1301821	119	2.06	245.14	9.5	100	0.005	0.0900	11.465	0.0180	1.690	<0.0304	0.010
13015	1301822	120	2.06	247.2	7.0	100	0.005	0.0650	8.280	0.0129	1.785	<0.0230	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/27/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/27/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 30
PAGE 1 **OF** 2

DATE COLLECTED 10/27/2017
DATE RECEIVED 10/27/2017
DATE ANALYZED 10/27/2017
DATE REPORTED 10/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10271706	0.5	100	0.5/100
B2	10271707	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102701	10271708	STEL	Justin Scott-Driving pilings-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
102702	10271709	STEL	Ever Bonilla-Loading debris by hand into dumpsters-Pump #LV-5	7:42 AM	8:12 AM	2.06	2.06
102703	10271710	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-21	7:50 AM	8:20 AM	2.06	2.06
102704	10271711	Area	South-end of trestle-Pump #HV-20	8:02 AM	12:10 PM	7.86	7.86
102705	10271712	Personal	Ever Bonilla-Loading debris by hand into dumpsters-Pump #LV-5	8:17 AM	12:00 PM	2.06	2.06
102706	10271713	Personal	Justin Scott-Driving pilings-Pump #LV-5	8:22 AM	11:45 AM	2.06	2.06
102707	10271714	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-21	8:35 AM	11:40 AM	2.06	2.06
102708	10271715	Personal	Justin Scott-Driving pilings-Pump #LV-5	11:50 AM	3:29 PM	2.06	2.06
102709	10271716	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-21	11:55 AM	3:31 PM	2.06	2.06
102710	10271717	Personal	Ever Bonilla-Loading debris by hand into dumpsters-Pump #LV-5	12:05 PM	3:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
102701	10271708	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.010
102702	10271709	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.010
102703	10271710	30	2.06	61.8	6.5	100	0.0075	0.0575	7.325	0.0456	1.810	<0.0826	0.008
102704	10271711	248	7.86	1949.28	7.5	100	0.0075	0.0675	8.599	0.0017	1.775	<0.0030	N/A
102705	10271712	223	2.06	459.38	7	100	0.0075	0.0625	7.962	0.0067	1.785	<0.0119	0.010
102706	10271713	203	2.06	418.18	6	100	0.0075	0.0525	6.688	0.0062	1.839	<0.0113	0.010
102707	10271714	185	2.06	381.1	6.5	100	0.0075	0.0575	7.325	0.0074	1.810	<0.0134	0.008
102708	10271715	219	2.06	451.14	7.5	100	0.0075	0.0675	8.599	0.0073	1.775	<0.0130	0.010
102709	10271716	216	2.06	444.96	6	100	0.0075	0.0525	6.688	0.0058	1.839	<0.0106	0.008
102710	10271717	215	2.06	442.9	7.5	100	0.0075	0.0675	8.599	0.0075	1.775	<0.0133	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 30
PAGE 2 **OF** 2

DATE COLLECTED 10/27/2017
DATE RECEIVED 10/27/2017
DATE ANALYZED 10/27/2017
DATE REPORTED 10/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10281709	0.5	100	0.5/100
B2	10281710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102711	10271718	Area	South-end of trestle-Pump #HV-20	12:12 PM	3:22 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
102711	10271718	190	7.86	1493.4	9.5	100	0.0075	0.0875	11.146	0.0029	1.690	<0.0049	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/28/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/28/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 31
PAGE 1 **OF** 1

DATE COLLECTED 10/28/2017
DATE RECEIVED 10/28/2017
DATE ANALYZED 10/28/2017
DATE REPORTED 10/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10281709	0.5	100	0.5/100
B2	10281710	1	100	1/100

SAMPLES COLLECTED BY: Pete Coleman

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
102801	10281711	Area	West-end of trestle-Pump #HV-200	7:34 AM	11:04 AM	9.76	9.76
102802	10281712	STEL	Gary Brown-Loading debris by hand into bags & dumpster-Pump #I	7:42 AM	8:12 AM	2.06	2.06
102803	10281713	STEL	Brent Hardinger-Excavator operator-Pump #LV-5	7:43 AM	8:13 AM	2.06	2.06
102804	10281714	STEL	Mark Conway-Excavator operator-Pump #LV-21	7:45 AM	8:15 AM	7.86	7.86
102805	10281715	Area	South-end of regulated area-Pump #HV-201	8:10 AM	11:05 AM	9.76	9.76
102806	10281716	Personal	Gary Brown-Loading debris by hand into bags & dumpster-Pump #I	8:14 AM	10:21 AM	2.06	2.06
102807	10281717	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	8:16 AM	11:02 AM	2.06	2.06
102808	10281718	Personal	Mark Conway-Excavator operator-Pump #LV-21	8:17 AM	11:03 AM	2.06	2.06

P

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
102801	10281711	210	9.76	2049.6	8	100	0.0075	0.0725	9.236	0.0017	1.741	<0.0030	N/A
102802	10281712	30	2.06	61.8	9	100	0.0075	0.0825	10.510	0.0655	1.705	<0.1116	0.0096
102803	10281713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.0074
102804	10281714	30	7.86	235.8	8	100	0.0075	0.0725	9.236	0.0151	1.741	<0.0262	0.0050
102805	10281715	175	9.76	1708	16	100	0.0075	0.1525	19.427	0.0044	1.550	<0.0068	N/A
102806	10281716	127	2.06	261.62	12	100	0.0075	0.1125	14.331	0.0211	1.620	<0.0342	0.0096
102807	10281717	166	2.06	341.96	9	100	0.0075	0.0825	10.510	0.0118	1.705	<0.0202	0.0074
102808	10281718	166	2.06	341.96	9	100	0.0075	0.0825	10.510	0.0118	1.705	<0.0202	0.0050

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

October 31, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/30/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/30/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 32
PAGE 1 **OF** 2

DATE COLLECTED 10/30/2017
DATE RECEIVED 10/30/2017
DATE ANALYZED 10/30/2017
DATE REPORTED 10/31/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10301709	0.5	100	0.5/100
B2	10301710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
103001	10301711	Area	West-end of trestle-Pump #HV-20	7:30 AM	11:40 AM	9.76	9.76
103002	10301712	Area	North-end of worksite-Pump #HV-21	7:35 AM	11:42 AM	9.76	9.76
103003	10301713	STEL	Eduardo Gonzalez-Fire hose operator-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
103004	10301714	STEL	Jacob Santesson-Laborer-Pump #LV-1	7:42 AM	8:12 AM	2.06	2.06
103005	10301715	STEL	Jeff Daggey-Driving pilons into ground-Pump #LV-21	7:45 AM	8:15 AM	9.76	9.76
103006	10301716	Personal	Jacob Santesson-Laborer-Pump #LV-1	8:14 AM	11:55 AM	2.06	2.06
103007	10301717	Personal	Eduardo Gonzalez-Fire hose operator-Pump #LV-5	8:16 AM	11:58 AM	2.06	2.06
103008	10301718	Personal	Jeff Daggey-Driving pilons into ground-Pump #LV-21	8:18 AM	11:50 AM	2.06	2.06
103009	10301719	Area	West-end of trestle-Pump #HV-20	11:41 AM	3:31 PM	9.76	9.76
103010	10301720	Area	North-end of worksite-Pump #HV-21	11:43 AM	3:30 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
103001	10301711	250	9.76	2440	8	100	0.0075	0.0725	9.236	0.0015	1.741	<0.0025	N/A
103002	10301712	247	9.76	2410.72	9	100	0.0075	0.0825	10.510	0.0017	1.705	<0.0029	N/A
103003	10301713	30	2.06	61.8	6.5	100	0.0075	0.0575	7.325	0.0456	1.810	<0.0826	0.0090
103004	10301714	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.0110
103005	10301715	30	9.76	292.8	16	100	0.0075	0.1525	19.427	0.0255	1.550	<0.0396	0.0093
103006	10301716	221	2.06	455.26	8.5	100	0.0075	0.0775	9.873	0.0083	1.720	<0.0144	0.0110
103007	10301717	222	2.06	457.32	6	100	0.0075	0.0525	6.688	0.0056	1.839	<0.0104	0.0090
103008	10301718	212	2.06	436.72	9	100	0.0075	0.0825	10.510	0.0093	1.705	<0.0158	0.0093
103009	10301719	230	9.76	2244.8	6	100	0.0075	0.0525	6.688	0.0011	1.839	<0.0021	N/A
103010	10301720	227	9.76	2215.52	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0027	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 32
PAGE 2 **OF** 2

DATE COLLECTED 10/30/2017
DATE RECEIVED 10/30/2017
DATE ANALYZED 10/30/2017
DATE REPORTED 10/31/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10301709	0.5	100	0.5/100
B2	10301710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
103011	10301721	Personal	Jeff Daggey-Driving pilons into ground-Pump #LV-21	11:51 AM	3:22 PM	2.06	2.06
103012	10301722	Personal	Jacob Santesson-Laborer-Pump #LV-1	12:00 PM	3:26 PM	2.06	2.06
103013	10301723	Personal	Eduardo Gonzalez-Fire hose operator-Pump #LV-5	12:05 PM	3:23 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
103011	10301721	211	2.06	434.66	8	100	0.0075	0.0725	9.236	0.0082	1.741	<0.0142	0.0093
103012	10301722	206	2.06	424.36	9	100	0.0075	0.0825	10.510	0.0095	1.705	<0.0163	0.0110
103013	10301723	198	2.06	407.88	8	100	0.0075	0.0725	9.236	0.0087	1.741	<0.0152	0.0090

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 1, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/31/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 10/31/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 33
PAGE 1 **OF** 2

DATE COLLECTED 10/31/2017
DATE RECEIVED 10/31/2017
DATE ANALYZED 10/31/2017
DATE REPORTED 11/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10301709	0.5	100	0.5/100
B2	10301710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sid Carter

SAMPLES ANALYZED BY: Sid Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
103101	10317114	Area	West-end of trestle-Pump #HV-20	7:30 AM	12:30 PM	9.76	9.76
103102	10311715	Area	At pit-Pump #HV-21	7:35 AM	12:50 PM	9.76	9.76
103103	10311716	STEL	Ever Bonilla-Laborer-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
103104	10311717	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-21	7:42 AM	8:13 AM	2.06	2.06
103105	10311718	STEL	Nick Maranda-Driving pilons-Pump #LV-5	7:45 AM	8:15 AM	2.06	2.06
103106	10311719	Personal	Ever Bonilla-Laborer-Pump #LV-1	8:12 AM	12:28 PM	2.06	2.06
103107	10311720	Personal	Nick Maranda-Driving pilons-Pump #LV-5	8:20 AM	12:15 PM	2.06	2.06
103108	10311721	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-21	8:22 AM	12:36 PM	2.06	2.06
103109	10311722	Area	West-end of trestle-Pump #HV-20	12:31 PM	3:10 PM	9.76	9.76
103110	10311723	Personal	Nick Maranda-Driving pilons-Pump #LV-5	12:32 PM	3:20 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
103101	10317114	300	9.76	2928	8	100	0.005	0.0750	9.554	0.0013	1.741	<0.0022	N/A
103102	10311715	315	9.76	3074.4	9	100	0.005	0.0850	10.828	0.0014	1.705	<0.0023	N/A
103103	10311716	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.007
103104	10311717	31	2.06	63.86	7.5	100	0.005	0.0700	8.917	0.0538	1.775	<0.0954	0.012
103105	10311718	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.011
103106	10311719	256	2.06	527.36	9	100	0.005	0.0850	10.828	0.0079	1.705	<0.0135	0.007
103107	10311720	235	2.06	484.1	7.5	100	0.005	0.0700	8.917	0.0071	1.775	<0.0126	0.011
103108	10311721	254	2.06	523.24	8	100	0.005	0.0750	9.554	0.0070	1.741	<0.0122	0.012
103109	10311722	159	9.76	1551.84	6	100	0.005	0.0550	7.006	0.0017	1.839	<0.0032	N/A
103110	10311723	168	2.06	346.08	10	100	0.005	0.0950	12.102	0.0135	1.670	<0.0225	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 33
PAGE 2 **OF** 2

DATE COLLECTED 10/31/2017
DATE RECEIVED 10/31/2017
DATE ANALYZED 10/31/2017
DATE REPORTED 11/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	10301709	0.5	100	0.5/100
B2	10301710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sid Carter

SAMPLES ANALYZED BY: Sid Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
103111	10301721	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-21	12:37 PM	3:49 PM	2.06	2.06
103112	10301722	Area	At pit-Pump #HV-21	12:51 PM	3:15 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
103111	10301721	192	2.06	395.52	9.5	100	0.005	0.0900	11.465	0.0112	1.690	<0.0189	0.012
103112	10301722	144	9.76	1405.44	9	100	0.005	0.0850	10.828	0.0030	1.705	<0.0051	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 2, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/01/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/01/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 34
PAGE 1 **OF** 2

DATE COLLECTED 11/1/2017
DATE RECEIVED 11/1/2017
DATE ANALYZED 11/1/2017
DATE REPORTED 11/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11011708	0.5	100	0.5/100
B2	11011709	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110101	11011710	STEL	Mark Conway-Excavator operator-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
110102	11011711	STEL	Gary Reynolds-Skid Steer operator-Pump #LV-21	7:42 AM	8:12 AM	2.06	2.06
110103	11011712	Area	West-end of first trestle-Pump #HV-20	7:45 AM	11:35 AM	7.86	7.86
110104	11011713	Area	Next to opening beside 2nd trestle-Pump #HV-21	7:48 AM	11:30 AM	7.86	7.86
110105	11011714	STEL	Mark Jeffers-Pile buck-Pump #LV-1	7:50 AM	8:20 AM	2.06	2.06
110106	11011715	Personal	Gary Reynolds-Skid Steer operator-Pump #LV-21	8:15 AM	11:25 AM	2.06	2.06
110107	11011716	Personal	Mark Conway-Excavator operator-Pump #LV-5	8:18 AM	11:59 AM	2.06	2.06
110108	11011717	Personal	Mark Jeffers-Pile buck-Pump #LV-1	8:22 AM	11:26 AM	2.06	2.06
110109	11011718	Personal	Mark Jeffers-Pile buck-Pump #LV-1	11:31 AM	3:20 PM	2.06	2.06
110110	11011719	Area	Next to opening beside 2nd trestle-Pump #HV-21	11:40 AM	3:35 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110101	11011710	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.010
110102	11011711	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
110103	11011712	230	7.86	1807.8	7	100	0.0075	0.0625	7.962	0.0017	1.785	<0.0030	N/A
110104	11011713	222	7.86	1744.92	7.5	100	0.0075	0.0675	8.599	0.0019	1.775	<0.0034	N/A
110105	11011714	30	2.06	61.8	6.5	100	0.0075	0.0575	7.325	0.0456	1.810	<0.0826	0.010
110106	11011715	190	2.06	391.4	7	100	0.0075	0.0625	7.962	0.0078	1.785	<0.0140	0.010
110107	11011716	221	2.06	455.26	7.5	100	0.0075	0.0675	8.599	0.0073	1.775	<0.0129	0.010
110108	11011717	184	2.06	379.04	8	100	0.0075	0.0725	9.236	0.0094	1.741	<0.0163	0.010
110109	11011718	229	2.06	471.74	7	100	0.0075	0.0625	7.962	0.0065	1.785	<0.0116	0.010
110110	11011719	235	7.86	1847.1	10	100	0.0075	0.0925	11.783	0.0025	1.670	<0.0041	NA

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 34
PAGE 2 **OF** 2

DATE COLLECTED 11/1/2017
DATE RECEIVED 11/1/2017
DATE ANALYZED 11/1/2017
DATE REPORTED 11/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11011708	0.5	100	0.5/100
B2	11011709	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110111	11011720	Area	West-end of first trestle-Pump #HV-20	11:42 AM	3:28 PM	7.86	7.86
110112	11011721	Personal	Gary Reynolds-Skid Steer operator-Pump #LV-21	11:50 AM	1:15 PM	2.06	2.06
110113	11011723	Personal	Mark Conway-Excavator operator-Pump #LV-5	12:55 PM	1:20 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110111	11011720	226	7.86	1776.36	9.5	100	0.0075	0.0875	11.146	0.0024	1.690	<0.0041	N/A
110112	11011721	85	2.06	175.1	7.5	100	0.0075	0.0675	8.599	0.0189	1.775	<0.0336	0.010
110113	11011723	25	2.06	51.5	8	100	0.0075	0.0725	9.236	0.0690	1.741	<0.1202	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 3, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/02/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/02/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 35
PAGE 1 **OF** 2

DATE COLLECTED 11/2/2017
DATE RECEIVED 11/2/2017
DATE ANALYZED 11/2/2017
DATE REPORTED 11/3/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11021708	0.5	100	0.5/100
B2	11021709	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110201	11021710	STEL	Jacob Johnson-Cherry picker above pit-Pump #LV-21	7:35 AM	8:05 AM	2.06	2.06
110202	11021711	STEL	Tommy Smith-Forklift operator-Pump #LV-5	7:36 AM	8:06 AM	2.06	2.06
110203	11021712	STEL	Mark Conway-Excavator operator-Pump #LV-36	7:38 AM	8:08 AM	2.06	2.06
110204	11021713	Area	South-end of deck-Pump #HV-21	7:40 AM	11:35 AM	7.86	7.86
110205	11021714	Area	West-end of first trestle-Pump #HV-20	7:45 AM	11:24 AM	7.86	7.86
110206	11021715	Personal	Tommy Smith-Forklift operator-Pump #LV-5	8:07 AM	11:55 AM	2.06	2.06
110207	11021716	Personal	Mark Conway-Excavator operator-Pump #LV-36	8:15 AM	11:46 AM	2.06	2.06
110208	11021717	Personal	Jacob Johnson-Cherry picker above pit-Pump #LV-21	8:19 AM	12:01 PM	2.06	2.06
110209	11021718	Area	West-end of first trestle-Pump #HV-20	11:25 AM	3:28 PM	7.86	7.86
110210	11021719	Area	South-end of deck-Pump #HV-21	11:40 AM	3:26 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110201	11021710	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
110202	11021711	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
110203	11021712	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
110204	11021713	235	7.86	1847.1	7.5	100	0.005	0.0700	8.917	0.0019	1.775	<0.0033	N/A
110205	11021714	219	7.86	1721.34	6.5	100	0.005	0.0600	7.643	0.0017	1.810	<0.0031	N/A
110206	11021715	228	2.06	469.68	7	100	0.005	0.0650	8.280	0.0068	1.785	<0.0121	0.010
110207	11021716	211	2.06	434.66	6.5	100	0.005	0.0600	7.643	0.0068	1.810	<0.0123	0.009
110208	11021717	222	2.06	457.32	7.5	100	0.005	0.0700	8.917	0.0075	1.775	<0.0133	0.009
110209	11021718	243	7.86	1909.98	7	100	0.005	0.0650	8.280	0.0017	1.785	<0.0030	N/A
110210	11021719	226	7.86	1776.36	10	100	0.005	0.0950	12.102	0.0026	1.670	<0.0044	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 35
PAGE 2 **OF** 2

DATE COLLECTED 11/2/2017
DATE RECEIVED 11/2/2017
DATE ANALYZED 11/2/2017
DATE REPORTED 11/3/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11011708	0.5	100	0.5/100
B2	11011709	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110211	11021720	Personal	Mark Conway-Excavator operator-Pump #LV-36	11:58 AM	1:30 PM	2.06	2.06
110212	11011722	Personal	Tommy Smith-Forklift operator-Pump #LV-5	12:00 PM	3:25 PM	2.06	2.06
110213	11011723	Personal	Jacob Johnson-Cherry picker above pit-Pump #LV21	12:05 PM	3:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110211	11021720	92	2.06	189.52	6.5	100	0.005	0.0600	7.643	0.0155	1.810	<0.0281	0.009
110212	11011722	205	2.06	422.3	7.5	100	0.005	0.0700	8.917	0.0081	1.775	<0.0144	0.010
110213	11011723	210	2.06	432.6	6.5	100	0.005	0.0600	7.643	0.0068	1.810	<0.0123	0.009

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 6, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/03/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/03/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 36
PAGE 1 **OF** 2

DATE COLLECTED 11/3/2017
DATE RECEIVED 11/3/2017
DATE ANALYZED 11/3/2017
DATE REPORTED 11/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11031709	1	100	1/100
B2	11031710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110301	11031711	STEL	Brent Hardinger-Excavator Operator-Pump #LV-36	7:40 AM	8:10 AM	2.06	2.06
110302	11031712	STEL	Gary Brown-Laborer-Pump #LV-21	7:41 AM	8:11 AM	2.06	2.06
110303	11031713	STEL	Ever Bonilla-Laborer-Pump #Lv-5	7:45 AM	8:15 AM	2.06	2.06
110304	11031714	Area	West-end of first trestle-Pump #HV-20	7:50 AM	12:15 AM	7.86	7.86
110305	11031715	Area	North-end of Work Area-Pump #HV-21	7:53 AM	12:08 PM	7.86	7.86
110306	11031716	Personal	Brent Hardinger-Excavator Operator-Pump #LV-36	8:12 AM	11:50 AM	2.06	2.06
110307	11031717	Personal	Gary Brown-Laborer-Pump #LV-21	8:16 AM	12:00 PM	2.06	2.06
110308	11031718	Personal	Ever Bonilla-Laborer-Pump #Lv-5	8:18 AM	11:58 AM	2.06	2.06
110309	11031719	Personal	Brent Hardinger-Excavator Operator-Pump #LV-36	11:55 AM	3:25 PM	7.86	7.86
110310	11031720	Personal	Gary Brown-Laborer-Pump #LV-21	12:01 PM	3:20 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110301	11031711	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.008
110302	11031712	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.008
110303	11031713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
110304	11031714	985	7.86	7742.1	7.5	100	0.0075	0.0675	8.599	0.0004	1.775	<0.0008	N/A
110305	11031715	255	7.86	2004.3	6.5	100	0.0075	0.0575	7.325	0.0014	1.810	<0.0025	N/A
110306	11031716	218	2.06	449.08	8.5	100	0.0075	0.0775	9.873	0.0085	1.720	<0.0146	0.008
110307	11031717	224	2.06	461.44	9	100	0.0075	0.0825	10.510	0.0088	1.705	<0.0150	0.008
110308	11031718	220	2.06	453.2	8	100	0.0075	0.0725	9.236	0.0078	1.741	<0.0137	0.011
110309	11031719	210	7.86	1650.6	7	100	0.0075	0.0625	7.962	0.0019	1.785	<0.0033	0.008
110310	11031720	199	7.86	1564.14	7.5	100	0.0075	0.0675	8.599	0.0021	1.775	<0.0038	0.008

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 36
PAGE 2 **OF** 2

DATE COLLECTED 11/3/2017
DATE RECEIVED 11/3/2017
DATE ANALYZED 11/3/2017
DATE REPORTED 11/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11031709	1	100	1/100
B2	11031710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110311	11031721	Personal	Ever Bonilla-Laborer-Pump #LV-5	12:02 PM	3:28 PM	2.06	2.06
110312	11031722	Area	North-end of Work Area-Pump #HV-21	12:10 PM	3:34 PM	2.06	2.06
110313	11031723	Area	West-end of first trestle-Pump #HV-20	12:16 PM	3:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110311	11031721	206	2.06	424.36	8	100	0.0075	0.0725	9.236	0.0084	1.741	<0.0146	0.011
110312	11031722	204	2.06	420.24	7.5	100	0.0075	0.0675	8.599	0.0079	1.775	<0.0140	N/A
110313	11031723	199	2.06	409.94	6.5	100	0.0075	0.0575	7.325	0.0069	1.810	<0.0125	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 7, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/06/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/06/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 37
PAGE 1 **OF** 2

DATE COLLECTED 11/6/2017
DATE RECEIVED 11/6/2017
DATE ANALYZED 11/6/2017
DATE REPORTED 11/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11061709	0.5	100	0.5/100
B2	11061710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110601	11061711	Area	South-side of deck-Pump #HV-21	7:25 AM	12:15 PM	7.86	7.86
110602	11061712	Area	Center of first trestle-Pump #HV-20	7:30 AM	12:18 PM	7.86	7.86
110603	11061713	STEL	Brent Hardinger-Crane operator-Pump #LV-36	7:35 AM	8:05 AM	2.06	2.06
110604	11061714	STEL	Chris Noce-Laborer-Pump #LV-21	7:36 AM	8:06 AM	2.06	2.06
110605	11061715	STEL	Victor Hernandez-Laborer-Pump #LV-30	7:40 AM	8:10 AM	2.06	2.06
110607	11061716	Persona	Brent Hardinger-Crane operator-Pump #LV-36	8:07 AM	11:50 AM	2.06	2.06
110608	11061717	Personal	Chris Noce-Laborer-Pump #LV-21	8:12 AM	11:45 AM	2.06	2.06
110609	11061718	Personal	Victor Hernandez-Laboer-Pump #LV-30	8:14 AM	12:01 PM	2.06	2.06
110610	11061719	Personal	Chris Noce-Laborer-Pump #LV-21	11:48 AM	3:25 PM	2.06	2.06
110611	11061720	Personal	Brent Hardinger-Crane operator-Pump #LV-36	11:52 AM	3:20 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110601	11061711	290	7.86	2279.4	9	100	0.005	0.0850	10.828	0.0018	1.705	<0.0031	N/A
110602	11061712	288	7.86	2263.68	8.5	100	0.005	0.0800	10.191	0.0017	1.720	<0.0030	N/A
110603	11061713	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.011
110604	11061714	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
110605	11061715	30	2.06	61.8	8.5	100	0.005	0.0800	10.191	0.0635	1.720	<0.1092	0.011
110607	11061716	223	2.06	459.38	8.5	100	0.005	0.0800	10.191	0.0085	1.720	<0.0147	0.011
110608	11061717	213	2.06	438.78	8.5	100	0.005	0.0800	10.191	0.0089	1.720	<0.0154	0.011
110609	11061718	227	2.06	467.62	7.5	100	0.005	0.0700	8.917	0.0073	1.775	<0.0130	0.011
110610	11061719	217	2.06	447.02	8	100	0.005	0.0750	9.554	0.0082	1.741	<0.0143	0.011
110611	11061720	208	2.06	428.48	7.5	100	0.005	0.0700	8.917	0.0080	1.775	<0.0142	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 37
PAGE 2 **OF** 2

DATE COLLECTED 11/6/2017
DATE RECEIVED 11/6/2017
DATE ANALYZED 11/6/2017
DATE REPORTED 11/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11061709	0.5	100	0.5/100
B2	11061710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110611	11061721	Personal	Victor Hernandez-Laborer-Pump #LV-30	12:10 PM	3:23 PM	2.06	2.06
110612	11061722	Area	South-side of deck-Pump HV-21	12:16 PM	3:30 PM	7.86	7.86
110613	11061723	Area	Center of first trestle	12:19 PM	3:31 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110611	11061721	193	2.06	397.58	8	100	0.005	0.0750	9.554	0.0093	1.741	<0.0161	0.011
110612	11061722	194	7.86	1524.84	10	100	0.005	0.0950	12.102	0.0031	1.670	<0.0051	N/A
110613	11061723	192	7.86	1509.12	7.5	100	0.005	0.0700	8.917	0.0023	1.775	<0.0040	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 8, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/07/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/07/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 38
PAGE 1 **OF** 2

DATE COLLECTED 11/7/2017
DATE RECEIVED 11/7/2017
DATE ANALYZED 11/7/2017
DATE REPORTED 11/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11071709	1	100	1/100
B2	11071710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110701	11071711	Area	Northside of worksite in front of deck-Pump #HV-21	7:30 AM	12:05 PM	7.86	7.86
110702	11071712	Area	First trestle-Pump #HV-20	7:30 AM	12:18 PM	7.86	7.86
110703	11071713	STEL	Brian Cosgrove-Crane operator-Pump #LV-36	7:35 AM	8:05 AM	2.06	2.06
110704	11071714	STEL	Ever Bonilla-Laborer-Pump #LV-5	7:37 AM	8:07 AM	2.06	2.06
110705	11071715	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-4	7:40 AM	8:10 AM	2.06	2.06
110706	11071716	Personal	Ever Bonilla-Laborer-Pump #LV-5	8:15 AM	11:55 AM	2.06	2.06
110707	11071717	Personal	Brian Cosgrove-Crane operator-Pump #LV-36	8:16 AM	11:45 AM	2.06	2.06
110708	11071718	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-4	8:17 AM	11:40 AM	2.06	2.06
110709	11071719	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-4	11:42 AM	1:40 PM	2.06	2.06
110710	11071720	Personal	Brian Cosgrove-Crane operator-Pump #LV-36	11:46 AM	3:25 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110701	11071711	275	7.86	2161.5	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0027	N/A
110702	11071712	288	7.86	2263.68	8	100	0.0075	0.0725	9.236	0.0016	1.741	<0.0027	N/A
110703	11071713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
110704	11071714	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
110705	11071715	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.010
110706	11071716	220	2.06	453.2	9	100	0.0075	0.0825	10.510	0.0089	1.705	<0.0152	0.011
110707	11071717	209	2.06	430.54	7	100	0.0075	0.0625	7.962	0.0071	1.785	<0.0127	0.010
110708	11071718	203	2.06	418.18	7.5	100	0.0075	0.0675	8.599	0.0079	1.775	<0.0141	0.010
110709	11071719	118	2.06	243.08	7.5	100	0.0075	0.0675	8.599	0.0136	1.775	<0.0242	0.010
110710	11071720	219	2.06	451.14	8.5	100	0.0075	0.0775	9.873	0.0084	1.720	<0.0145	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services / Advanced American Construction
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 38
PAGE 2 **OF** 2

DATE COLLECTED 11/7/2017
DATE RECEIVED 11/7/2017
DATE ANALYZED 11/7/2017
DATE REPORTED 11/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11071709	1	100	1/100
B2	11071710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11071721	110711	Personal	Ever Bonilla-Laborer-Pump #LV-5	11:57 AM	1:34 PM	2.06	2.06
11071721	110712	Area	Northside of worksite in front of deck-Pump #HV-21	12:08 PM	3:30 PM	7.86	7.86
11071723	110713	Area	On first trestle-Pump #HV-20	12:10 PM	3:32 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11071721	110711	97	2.06	199.82	8	100	0.0075	0.0725	9.236	0.0178	1.741	<0.0310	0.011
11071721	110712	202	7.86	1587.72	7	100	0.0075	0.0625	7.962	0.0019	1.785	<0.0034	N/A
11071723	110713	202	7.86	1587.72	7.5	100	0.0075	0.0675	8.599	0.0021	1.775	<0.0037	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/08/2017 Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/08/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release and or anomalies in the field.

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 39
PAGE 1 **OF** 2

DATE COLLECTED 11/8/2017
DATE RECEIVED 11/8/2017
DATE ANALYZED 11/8/2017
DATE REPORTED 11/9/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11081709	1	100	1/100
B2	11081710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110801	11081711	Area	Front of deck-Pump #HV-21	7:25 AM	12:00 PM	7.86	7.86
110802	11081712	Area	West-end of First Trestle-Pump #HV-20	7:28 AM	12:03 PM	7.86	7.86
110803	11081713	STEL	Jacob Johnson-Laborer-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
110804	11081714	STEL	Matt Weisker-Piledriver/Welding-Pump #LV-5	7:35 AM	8:05 AM	2.06	2.06
110805	11081715	STEL	Shelby Clark-Security Flagger-Pump #LV-30	7:45 AM	8:15 AM	2.06	2.06
110806	11081716	Personal	Jacob Johnson-Laborer-Pump #LV-1	8:06 AM	11:46 AM	2.06	2.06
110807	11081717	Personal	Matt Weisker-Piledriver/Welding-Pump #LV-5	8:07 AM	11:58 AM	2.06	2.06
110808	11081718	Personal	Shelby Clark-Security Flagger-Pump #LV-30	8:16 AM	11:55 AM	2.06	2.06
110809	11081719	Personal	Jacob Johnson-Laborer-Pump #LV-1	11:47 AM	3:24 PM	2.06	2.06
110810	11081720	Personal	Shelby Clark-Security Flagger-Pump #LV-30	11:56 AM	3:25 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110801	11081711	275	7.86	2161.5	10	100	0.01	0.0900	11.465	0.0020	1.670	<0.0034	N/A
110802	11081712	275	7.86	2161.5	10.5	100	0.01	0.095	12.102	0.0022	1.660	<0.0036	N/A
110803	11081713	30	2.06	61.8	7.5	100	0.01	0.065	8.280	0.0516	1.775	<0.0916	0.011
110804	11081714	30	2.06	61.8	8	100	0.01	0.07	8.917	0.0556	1.741	<0.0967	0.011
110805	11081715	30	2.06	61.8	9.5	100	0.01	0.085	10.828	0.0675	1.690	<0.1140	0.012
110806	11081716	220	2.06	453.2	9	100	0.01	0.080	10.191	0.0087	1.705	<0.0148	0.011
110807	11081717	231	2.06	475.86	8.5	100	0.01	0.075	9.554	0.0077	1.720	<0.0133	0.011
110808	11081718	219	2.06	451.14	8.5	100	0.01	0.075	9.554	0.0082	1.720	<0.0140	0.012
110809	11081719	217	2.06	447.02	8	100	0.01	0.07	8.917	0.0077	1.741	<0.0134	0.011
110810	11081720	209	2.06	430.54	9	100	0.01	0.08	10.191	0.0091	1.705	<0.0155	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portlad, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 39
PAGE 2 **OF** 2

DATE COLLECTED 11/8/2017
DATE RECEIVED 11/8/2017
DATE ANALYZED 11/8/2017
DATE REPORTED 11/9/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11081709	1	100	1/100
B2	11081710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110811	11081711	Personal	Matt Weisker-Pile driver/Welding-Pump #LV-5	11:59 AM	3:28 PM	2.06	2.06
110812	11081712	Area	Front of Deck-Pump #HV-21	12:01 PM	3:22 PM	7.86	7.86
110813	11081713	Area	West-end of First Trestle-Pump #HV-20	12:05 PM	3:23 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110811	11081711	209	2.06	430.54	8	100	0.01	0.0700	8.917	0.0080	1.741	<0.0139	0.011
110812	11081712	201	7.86	1579.86	10.5	100	0.01	0.095	12.102	0.0029	1.660	<0.0049	N/A
110813	11081713	198	7.86	1556.28	9	100	0.01	0.080	10.191	0.0025	1.705	<0.0043	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC

Clean your world.

November 10, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/09/2017 Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/09/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release and or anomalies in the field.

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 40
PAGE 1 **OF** 2

DATE COLLECTED 11/9/2017
DATE RECEIVED 11/9/2017
DATE ANALYZED 11/9/2017
DATE REPORTED 11/10/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11091709	0.5	100	0.5/100
B2	11091710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110901	11091711	Area	Southeast side of work are ain front of deck-Pump #HV-21	7:30 AM	11:30 AM	7.86	7.86
110902	11091712	Area	West-end of first trestle-Pump #HV-20	7:31 AM	11:34 AM	7.86	7.86
110903	11091713	STEL	Nick Maranda-Pile driver-Pump #LV-1	7:35 AM	8:05 AM	2.06	2.06
110904	11091714	STEL	Brian Cosgrover-Crane Operator-Pump #LV-5	7:36 AM	8:06 AM	2.06	2.06
110905	11091715	Personal	Brian Cosgrover-Crane Operator-Pump #LV-5	8:07 AM	11:51 AM	2.06	2.06
110906	11091716	STEL	Nick Maranda-Pile driver-Pump #LV-1	8:10 AM	11:50 AM	2.06	2.06
110907	11091717	Personal	Jacob Johnson-Laborer-Pump #LV-21	8:15 AM	8:45 AM	2.06	2.06
110908	11091718	Pesonal	Jacob Johnson-Laborer-Pump #LV-21	8:48 AM	12:00 PM	2.06	2.06
110909	11091719	Area	Southeast side of work are ain front of deck-Pump #HV-21	11:32 AM	3:25 PM	7.86	7.86
110910	11091720	Area	West-end of first trestle-Pump #HV-20	11:35 AM	3:24 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110901	11091711	240	7.86	1886.4	8	100	0.0075	0.0725	9.236	0.0019	1.741	<0.0033	N/A
110902	11091712	243	7.86	1909.98	9	100	0.0075	0.0825	10.510	0.0021	1.705	<0.0036	N/A
110903	11091713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
110904	11091714	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
110905	11091715	224	2.06	461.44	8	100	0.0075	0.0725	9.236	0.0077	1.741	<0.0134	0.011
110906	11091716	220	2.06	453.2	8	100	0.0075	0.0725	9.236	0.0078	1.741	<0.0137	0.010
110907	11091717	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.011
110908	11091718	192	2.06	395.52	8.5	100	0.0075	0.0775	9.873	0.0096	1.720	<0.0165	0.011
110909	11091719	233	7.86	1831.38	8.5	100	0.0075	0.0775	9.873	0.0021	1.720	<0.0036	N/A
110910	11091720	229	7.86	1799.94	9	100	0.0075	0.0825	10.510	0.0022	1.705	<0.0038	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portlad, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.004
REPORT # 40
PAGE 2 **OF** 2

DATE COLLECTED 11/9/2017
DATE RECEIVED 11/9/2017
DATE ANALYZED 11/9/2017
DATE REPORTED 11/10/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11091709	0.5	100	0.5/100
B2	11091710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
110911	11091721	Personal	Brian Cosgrove-Crane Operator-Pump #LV-5	11:52 AM	3:29 PM	2.06	2.06
110912	11091722	Personal	Nick Maranda-Pile driver-Pump #LV-1	11:53 AM	3:28 PM	2.06	2.06
110913	11091723	Personal	Jacob Johnson-Laborer-Pump #LV-21	12:01 PM	3:32 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
110911	11091721	217	2.06	447.02	8	100	0.0075	0.0725	9.236	0.0080	1.741	<0.0138	0.011
110912	11091722	215	2.06	442.9	7.5	100	0.0075	0.068	8.599	0.0075	1.775	<0.0133	0.010
110913	11091723	211	2.06	434.66	8	100	0.0075	0.073	9.236	0.0082	1.741	<0.0142	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 13, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/10/2017 Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/10/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release and or anomalies in the field.

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 41
PAGE 1 **OF** 2

DATE COLLECTED 11/10/2017
DATE RECEIVED 11/10/2017
DATE ANALYZED 11/10/2017
DATE REPORTED 11/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11101709	0.5	100	0.5/100
B2	11101710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111001	11101711	Area	Northside of Deck-Pump #HV-21	7:30 AM	11:19 AM	7.86	7.86
111002	11101712	Area	West-end of first trestle-Pump #HV-20	7:35 AM	11:15 AM	7.86	7.86
111003	11101713	STEL	Matt Weisker-Pile driver-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
111004	11101714	STEL	Nick Maranda-Pile driver-Pump #LV-21	7:43 AM	8:13 AM	2.06	2.06
111005	11101715	STEL	Kent Parker-Pile driver-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
111006	11101716	Personal	Matt Weisker-Pile driver-Pump #LV-5	8:12 AM	11:50 AM	2.06	2.06
111007	11101717	Personal	Nick Maranda-Pile driver-Pump #LV-21	8:18 AM	12:00 PM	2.06	2.06
111008	11101718	Personal	Kent Parker-Pile driver-Pump #LV-1	8:20 AM	11:45 AM	2.06	2.06
111009	11101719	Area	West-end of first trestle-Pump #HV-20	11:16 AM	1:54 PM	7.86	7.86
111010	11101720	Area	Northside of Deck-Pump #HV-21	11:20 AM	1:55 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111001	11101711	229	7.86	1799.94	10	100	0.0075	0.0925	11.783	0.0025	1.670	<0.0042	N/A
111002	11101712	220	7.86	1729.2	9	100	0.0075	0.083	10.510	0.0023	1.705	<0.0040	N/A
111003	11101713	30	2.06	61.8	8	100	0.0075	0.073	9.236	0.0575	1.741	<0.1001	0.011
111004	11101714	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
111005	11101715	30	2.06	61.8	8.5	100	0.0075	0.078	9.873	0.0615	1.720	<0.1058	0.012
111006	11101716	218	2.06	449.08	9	100	0.0075	0.083	10.510	0.0090	1.705	<0.0154	0.011
111007	11101717	222	2.06	457.32	8.5	100	0.0075	0.0775	9.873	0.0083	1.720	<0.0143	0.011
111008	11101718	205	2.06	422.3	8.5	100	0.0075	0.0775	9.873	0.0090	1.720	<0.0155	0.012
111009	11101719	158	7.86	1241.88	8.5	100	0.0075	0.0775	9.873	0.0031	1.720	<0.0053	N/A
111010	11101720	155	7.86	1218.3	8.5	100	0.0075	0.0775	9.873	0.0031	1.720	<0.0054	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.004
REPORT # 41
PAGE 2 **OF** 2

DATE COLLECTED 11/10/2017
DATE RECEIVED 11/10/2017
DATE ANALYZED 11/10/2017
DATE REPORTED 11/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11101709	0.5	100	0.5/100
B2	11101710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111011	11101721	Personal	Kent Parker-Pile driver-Pump #LV-1	11:46 AM	2:02 PM	2.06	2.06
111012	11101722	Personal	Matt Weisker-Pile driver-Pump #LV-5	11:52 AM	1:58 PM	2.06	2.06
111013	11101723	Personal	Nick Maranda-Pile driver-Pump #LV-21	12:02 PM	2:00 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111011	11101721	136	2.06	280.16	9	100	0.0075	0.0825	10.510	0.0144	1.705	<0.0246	0.012
111012	11101722	126	2.06	259.56	8	100	0.0075	0.073	9.236	0.0137	1.741	<0.0238	0.011
111013	11101723	118	2.06	243.08	8	100	0.0075	0.073	9.236	0.0146	1.741	<0.0255	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 14, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/13/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/13/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 42
PAGE 1 **OF** 2

DATE COLLECTED 11/13/2017
DATE RECEIVED 11/13/2017
DATE ANALYZED 11/13/2017
DATE REPORTED 11/14/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11131701	1	100	1/100
B2	11131702	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111301	11131703	Area	North-end of deck-Pump #HV-21	7:05 AM	11:40 AM	7.86	7.86
111302	11131704	Area	2nd Trestle-Pump #HV-20	7:07 AM	11:42 AM	7.86	7.86
111303	11131705	STEL	Mark Jeffers-Crane Operator-Pump #LV-36	7:45 AM	8:15 AM	2.06	2.06
111304	11131706	STEL	Eduardo Gonzalez-Fire Hose Operator-Pump #LV-5	7:50 AM	8:20 AM	2.06	2.06
111305	11131707	STEL	Justin Scott-Pile Driver-Pump #LV-38	7:52 AM	8:22 AM	2.06	2.06
111306	11131708	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	8:17 AM	12:05 PM	2.06	2.06
111307	11131709	Personal	Eduardo Gonzalez-Fire Hose Operator-Pump #LV-5	8:21 AM	11:55 AM	2.06	2.06
111308	11131710	Personal	Justin Scott-Pile Driver-Pump #LV-38	8:23 AM	12:00 PM	2.06	2.06
111309	11131711	Area	North-end of deck-Pump #HV-21	11:41 AM	3:20 PM	7.86	7.86
111310	11131712	Area	2nd Trestle-Pump #HV-20	11:45 AM	3:21 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111301	11131703	275	7.86	2161.5	9.5	100	0.01	0.085	10.828	0.0019	1.690	<0.0033	N/A
111302	11131704	275	7.86	2161.5	9	100	0.01	0.080	10.191	0.0018	1.705	<0.0031	N/A
111303	11131705	30	2.06	61.8	8.5	100	0.01	0.075	9.554	0.0595	1.720	<0.1024	0.012
111304	11131706	30	2.06	61.8	8.5	100	0.01	0.075	9.554	0.0595	1.720	<0.1024	0.012
111305	11131707	30	2.06	61.8	8.5	100	0.01	0.075	9.554	0.0595	1.720	<0.1024	0.011
111306	11131708	228	2.06	469.68	9.5	100	0.01	0.085	10.828	0.0089	1.690	<0.0150	0.012
111307	11131709	214	2.06	440.84	9	100	0.01	0.080	10.191	0.0089	1.705	<0.0152	0.012
111308	11131710	217	2.06	447.02	8	100	0.01	0.070	8.917	0.0077	1.741	<0.0134	0.011
111309	11131711	219	7.86	1721.34	8.5	100	0.01	0.075	9.554	0.0021	1.720	<0.0037	N/A
111310	11131712	216	7.86	1697.76	8.5	100	0.01	0.075	9.554	0.0022	1.720	<0.0037	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.004
REPORT # 42
PAGE 2 **OF** 2

DATE COLLECTED 11/13/2017
DATE RECEIVED 11/13/2017
DATE ANALYZED 11/13/2017
DATE REPORTED 11/14/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11131701	1	100	1/100
B2	11131702	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111311	11131713	Personal	Eduardo Gonzalez-Fire Hose Operator-Pump #LV-5	11:57 AM	3:25 PM	2.06	2.06
111312	11131714	Personal	Justin Scott-Pile Driver-Pump #LV-38	12:02 PM	3:28 PM	2.06	2.06
111313	11131715	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	12:06 PM	3:24 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111311	11131713	208	2.06	428.48	9.5	100	0.01	0.085	10.828	0.0097	1.690	<0.0164	0.012
111312	11131714	206	2.06	424.36	8	100	0.01	0.070	8.917	0.0081	1.741	<0.0141	0.011
111313	11131715	198	2.06	407.88	10	100	0.01	0.090	11.465	0.0108	1.670	<0.0181	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 15, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/14/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/14/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 43
PAGE 1 **OF** 2

DATE COLLECTED 11/14/2017
DATE RECEIVED 11/14/2017
DATE ANALYZED 11/14/2017
DATE REPORTED 11/15/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11141707	0.5	100	0.5/100
B2	11141708	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111401	11141709	STEL	Gary Brown-Laborer-Pump #LV-5	7:00 AM	7:30 AM	2.06	2.06
111402	11141710	STEL	Kent Parker-Pile driver-Pump #LV-1	7:01 AM	7:32 AM	2.06	2.06
111403	11141711	STEL	Ever Bonilla-Laborer-Pump #LV-38	7:05 AM	7:35 AM	2.06	2.06
111404	11141712	Personal	Gary Brown-Laborer-Pump #LV-5	7:31 AM	11:45 AM	2.06	2.06
111405	11141713	Personal	Kent Parker-Pile driver-Pump #LV-1	7:33 AM	11:40 AM	2.06	2.06
111406	11141714	Personal	Ever Bonilla-Laborer-Pump #LV-38	7:36 AM	11:50 AM	2.06	2.06
111407	11141715	Area	West-end of first trestle-Pump #HV-20	7:40 AM	11:54 AM	7.86	7.86
111408	11141716	Area	Southeast corner of worksite-Pump #HV-21	7:45 AM	12:00 PM	7.86	7.86
111409	11141717	Personal	Kent Parker-Pile driver-Pump #LV-1	11:41 AM	3:25 PM	2.06	2.06
111410	11141718	Personal	Gary Brown-Laborer-Pump #LV-5	11:46 AM	3:21 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111401	11141709	30	2.06	61.8	7.5	100	0.005	0.070	8.917	0.0556	1.775	<0.0986	0.011
111402	11141710	31	2.06	63.86	7	100	0.005	0.065	8.280	0.0499	1.785	<0.0891	0.010
111403	11141711	30	2.06	61.8	7.5	100	0.005	0.070	8.917	0.0556	1.775	<0.0986	0.011
111404	11141712	254	2.06	523.24	7.5	100	0.005	0.070	8.917	0.0066	1.775	<0.0116	0.011
111405	11141713	247	2.06	508.82	8	100	0.005	0.075	9.554	0.0072	1.741	<0.0126	0.010
111406	11141714	254	2.06	523.24	8	100	0.005	0.075	9.554	0.0070	1.741	<0.0122	0.011
111407	11141715	254	7.86	1996.44	8.5	100	0.005	0.080	10.191	0.0020	1.720	<0.0034	N/A
111408	11141716	255	7.86	2004.3	8.5	100	0.005	0.080	10.191	0.0020	1.720	<0.0034	N/A
111409	11141717	224	2.06	461.44	7	100	0.005	0.065	8.280	0.0069	1.785	<0.0123	0.010
111410	11141718	215	2.06	442.9	8	100	0.005	0.075	9.554	0.0083	1.741	<0.0145	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 43
PAGE 2 **OF** 2

DATE COLLECTED 11/14/2017
DATE RECEIVED 11/14/2017
DATE ANALYZED 11/14/2017
DATE REPORTED 11/15/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11141707	0.5	100	0.5/100
B2	11141708	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111411	11141719	Personal	Ever Bonilla-Laborer-Pump #LV-38	11:52 AM	3:22 PM	2.06	2.06
111412	11141720	Area	West-end of first trestle-Pump #HV-20	11:57 AM	3:31 PM	7.86	7.86
111413	11141721	Area	Southeast corner of worksite-Pump #HV-21	12:01 PM	3:30 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111411	11141719	210	2.06	432.6	8	100	0.005	0.075	9.554	0.0085	1.741	<0.0148	0.011
111412	11141720	214	7.86	1682.04	8.5	100	0.005	0.080	10.191	0.0023	1.720	<0.0040	N/A
111413	11141721	209	7.86	1642.74	8.5	100	0.005	0.080	10.191	0.0024	1.720	<0.0041	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 16, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/15/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/15/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 44
PAGE 1 **OF** 2

DATE COLLECTED 11/15/2017
DATE RECEIVED 11/15/2017
DATE ANALYZED 11/15/2017
DATE REPORTED 11/16/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11151709	0	100	0/100
B2	11151710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111501	11151711	Area	Southeast side of work area-Pump #HV-21	7:00 AM	11:55 AM	7.86	7.86
111502	11151712	Area	West-end of 2nd trestle-Pump #HV-20	7:05 AM	11:59 AM	7.86	7.86
111503	11151713	STEL	Eduardo Gonzalez-Fire hose Operator-Pump #LV-30	7:01 AM	7:31 AM	2.06	2.06
111504	11151714	STEL	Brent Hardinger-Excavator Operator-Pump #LV-1	7:02 AM	7:32 AM	2.06	2.06
111505	11151715	STEL	Jacob Johnson-Laborer-Pump #LV-5	7:15 AM	7:45 AM	2.06	2.06
111506	11151716	Personal	Eduardo Gonzalez-Fire hose Operator-Pump #LV-30	7:33 AM	11:30 AM	2.06	2.06
111507	11151717	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	7:36 AM	11:35 AM	2.06	2.06
111508	11151718	Personal	Jacob Johnson-Laborer-Pump #LV-5	7:47 AM	11:45 AM	2.06	2.06
111509	11151719	Personal	Eduardo Gonzalez-Fire hose Operator-Pump #LV-30	11:32 AM	3:25 PM	2.06	2.06
111510	11151720	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	11:36 AM	3:27 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111501	11151711	295	7.86	2318.7	7.5	100	0.005	0.070	8.917	0.0015	1.775	<0.0026	N/A
111502	11151712	294	7.86	2310.84	8	100	0.005	0.075	9.554	0.0016	1.741	<0.0028	N/A
111503	11151713	30	2.06	61.8	7.5	100	0.005	0.070	8.917	0.0556	1.775	<0.0986	0.010
111504	11151714	30	2.06	61.8	7	100	0.005	0.065	8.280	0.0516	1.785	<0.0921	0.010
111505	11151715	30	2.06	61.8	7	100	0.005	0.065	8.280	0.0516	1.785	<0.0921	0.010
111506	11151716	237	2.06	488.22	7	100	0.005	0.065	8.280	0.0065	1.785	<0.0117	0.010
111507	11151717	239	2.06	492.34	7	100	0.005	0.065	8.280	0.0065	1.785	<0.0116	0.010
111508	11151718	238	2.06	490.28	7.5	100	0.005	0.070	8.917	0.0070	1.775	<0.0124	0.010
111509	11151719	233	2.06	479.98	7.5	100	0.005	0.070	8.917	0.0072	1.775	<0.0127	0.010
111510	11151720	231	2.06	475.86	7.5	100	0.005	0.070	8.917	0.0072	1.775	<0.0128	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 44
PAGE 2 **OF** 2

DATE COLLECTED 11/15/2017
DATE RECEIVED 11/15/2017
DATE ANALYZED 11/15/2017
DATE REPORTED 11/16/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11151709	0	100	0/100
B2	11151710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111511	11151721	Personal	Jacob Johnson-Laborer-Pump #LV-5	11:48 AM	3:35 PM	2.06	2.06
111512	11151722	Area	Southeast side of work area-Pup #HV-21	11:57 AM	3:20 PM	7.86	7.86
111513	11151723	Area	West-end of 2nd trestle-Pump #HV-20	12:01 PM	3:22 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111511	11151721	227	2.06	467.62	8	100	0.005	0.075	9.554	0.0079	1.741	<0.0137	0.010
111512	11151722	203	7.86	1595.58	8.5	100	0.005	0.080	10.191	0.0025	1.720	<0.0042	N/A
111513	11151723	201	7.86	1579.86	8	100	0.005	0.075	9.554	0.0023	1.741	<0.0041	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 17, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/16/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/16/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 45
PAGE 1 **OF** 2

DATE COLLECTED 11/16/2017
DATE RECEIVED 11/16/2017
DATE ANALYZED 11/16/2017
DATE REPORTED 11/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11161709	0.5	100	0.5/100
B2	11161710	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111601	11161711	STEL	Ever Bonilla-Lining & sealing dumpsters with poly-Pump #LV-5	7:05 AM	7:35 AM	2.06	2.06
111602	11161712	STEL	Mark Jeffers-Operating Crane-Pump #LV-30	7:07 AM	7:37 AM	2.06	2.06
111603	11161713	STEL	Brent Hardinger-Operating Excavator-Pump #LV-1	7:18 AM	7:48 AM	2.06	2.06
111604	11161714	Personal	Ever Bonilla-Lining & sealing dumpsters with poly-Pump #LV-5	7:36 AM	12:44 PM	2.06	2.06
111605	11161715	Personal	Mark Jeffers-Operating Crane-Pump #LV-30	7:38 AM	12:19 PM	2.06	2.06
111606	11161716	Personal	Brent Hardinger-Operating Excavator-Pump #LV-1	7:50 AM	12:46 PM	2.06	2.06
111607	11161717	Area	West-end of 2nd trestle-Pump #HV-33	9:15 AM	12:02 PM	7.86	7.86
111608	11161718	Area	Loading Area-Pump #HV-8	10:15 AM	12:22 PM	7.86	7.86
111609	11161719	Area	West-end of 2nd trestle-Pump #HV-33	12:03 PM	2:34 PM	7.86	7.86
111610	11161720	Personal	Mark Jeffers-Operating Crane-Pump #LV-30	12:20 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111601	11161711	30	2.06	61.8	8	100	0.0025	0.0775	9.873	0.0615	1.741	<0.1071	0.013
111602	11161712	30	2.06	61.8	13	100	0.0025	0.1275	16.242	0.1012	1.610	<0.1629	0.014
111603	11161713	30	2.06	61.8	16	100	0.0025	0.1575	20.064	0.1250	1.550	<0.1937	0.014
111604	11161714	308	2.06	634.48	7	100	0.0025	0.0675	8.599	0.0052	1.785	<0.0093	0.013
111605	11161715	281	2.06	578.86	8	100	0.0025	0.0775	9.873	0.0066	1.741	<0.0114	0.014
111606	11161716	296	2.06	609.76	6	100	0.0025	0.0575	7.325	0.0046	1.839	<0.0085	0.014
111607	11161717	167	7.86	1312.62	7	100	0.0025	0.0675	8.599	0.0025	1.785	<0.0045	N/A
111608	11161718	127	7.86	998.22	6	100	0.0025	0.0575	7.325	0.0028	1.839	<0.0052	N/A
111609	11161719	151	7.86	1186.86	8	100	0.0025	0.0775	9.873	0.0032	1.741	<0.0056	N/A
111610	11161720	137	2.06	282.22	7	100	0.0025	0.0675	8.599	0.0117	1.785	<0.0209	0.014

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 45
PAGE 2 **OF** 2

DATE COLLECTED 11/16/2017
DATE RECEIVED 11/16/2017
DATE ANALYZED 11/16/2017
DATE REPORTED 11/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11161709	0.5	100	0.5/100
B2	11161710	0	100	0/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111611	11161711	Area	Loading Area-Pump #HV-8	12:23 PM	2:32 PM	7.86	7.86
111612	11161712	Personal	Ever Bonilla-Lining & sealing dumpsters with poly-Pump #LV-5	12:45 PM	2:38 PM	2.06	2.06
111613	11161713	Personal	Brent Hardinger-Operating Excavator-Pump #LV-1	12:47 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111611	11161711	129	7.86	1013.94	6	100	0.0025	0.0575	7.325	0.0028	1.839	<0.0051	N/A
111612	11161712	113	2.06	232.78	11	100	0.0025	0.1075	13.694	0.0226	1.655	<0.0375	0.013
111613	11161713	103	2.06	212.18	6	100	0.0025	0.0575	7.325	0.0133	1.839	<0.0244	0.014

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/17/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/17/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 46
PAGE 1 **OF** 2

DATE COLLECTED 11/17/2017
DATE RECEIVED 11/17/2017
DATE ANALYZED 11/17/2017
DATE REPORTED 11/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11171709	1	100	1/100
B2	11171710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111701	11171711	Area	Southeast side of trestle 2-Pump #HV-21	6:40 AM	12:08 PM	7.86	7.86
111702	11171712	Area	West-end of trestle 1-Pump #HV-20	6:42 AM	12:11 PM	7.86	7.86
111703	11171713	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:00 AM	7:30 AM	2.06	2.06
111704	11171714	STEL	Ever Bonilla-Laborer-Pump #LV-1	7:10 AM	7:40 AM	2.06	2.06
111705	11171715	STEL	Jacob Johnson-Laborer-Pump #LV-5	7:12 AM	7:42 AM	2.06	2.06
111706	11171716	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	7:31 AM	11:45 AM	2.06	2.06
111707	11171717	Personal	Ever Bonilla-Laborer-Pump #LV-1	7:41 AM	11:55 AM	2.06	2.06
111708	11171718	Personal	Jacob Johnson-Laborer-Pump #LV-5	7:43 AM	12:03 PM	2.06	2.06
111709	11171719	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	11:46 AM	3:00 PM	2.06	2.06
111710	11171720	Personal	Ever Bonilla-Laborer-Pump #LV-1	11:56 AM	3:01 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111701	11171711	328	7.86	2578.08	8.5	100	0.0075	0.0775	9.873	0.0015	1.720	<0.0025	N/A
111702	11171712	329	7.86	2585.94	8	100	0.0075	0.0725	9.236	0.0014	1.741	<0.0024	N/A
111703	11171713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
111704	11171714	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.011
111705	11171715	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
111706	11171716	254	2.06	523.24	9	100	0.0075	0.0825	10.510	0.0077	1.705	<0.0132	0.011
111707	11171717	254	2.06	523.24	9	100	0.0075	0.0825	10.510	0.0077	1.705	<0.0132	0.011
111708	11171718	260	2.06	535.6	9.5	100	0.0075	0.0875	11.146	0.0080	1.690	<0.0135	0.011
111709	11171719	194	2.06	399.64	8.5	100	0.0075	0.0775	9.873	0.0095	1.720	<0.0164	0.011
111710	11171720	185	2.06	381.1	8	100	0.0075	0.0725	9.236	0.0093	1.741	<0.0162	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 46
PAGE 2 **OF** 2

DATE COLLECTED 11/17/2017
DATE RECEIVED 11/17/2017
DATE ANALYZED 11/17/2017
DATE REPORTED 11/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11171709	1	100	1/100
B2	11171710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
111711	11171721	Personal	Jacob Johnson-Laborer-Pump #LV-5	12:03 PM	3:02 PM	2.06	2.06
111712	11171722	Area	Southest side of trestle 2-Pump #HV-21	12:09 PM	3:05 PM	7.86	7.86
111713	11171723	Area	West-end of trestle 1-Pump #HV-20	12:12 PM	2:30 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
111711	11171721	179	2.06	368.74	7.5	100	0.0075	0.0675	8.599	0.0090	1.775	<0.0159	0.011
111712	11171722	176	7.86	1383.36	9	100	0.0075	0.0825	10.510	0.0029	1.705	<0.0050	N/A
111713	11171723	138	7.86	1084.68	8.5	100	0.0075	0.0775	9.873	0.0035	1.720	<0.0060	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 21, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/20/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/20/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 47
PAGE 1 **OF** 2

DATE COLLECTED 11/20/2017
DATE RECEIVED 11/20/2017
DATE ANALYZED 11/20/2017
DATE REPORTED 11/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11201709	0.5	100	0.5/100
B2	11201710	1	100	1/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112001	11201711	Area	Southeast corner of ramp to trestle 2-Pump #HV-21	6:45 AM	12:00 PM	7.86	7.86
112002	11201712	Area	Top of trestle 2-Pump #HV-20	6:47 AM	12:02 PM	7.86	7.86
112003	11201713	STEL	Gary Brown-Laborer-Pump #LV-38	7:20 AM	7:50 AM	2.06	2.06
112004	11201714	STEL	Ever Bonilla-Laborer-Pump #LV-1	7:22 AM	7:52 AM	2.06	2.06
112005	11201715	STEL	Tommy Smith-Laborer-Pump #LV-30	7:25 AM	7:55 AM	2.06	2.06
112006	11201716	Personal	Gary Brown-Laborer-Pump #LV-38	7:51 AM	11:55 AM	2.06	2.06
112007	11201717	Personal	Ever Bonilla-Laborer-Pump #LV-1	7:53 AM	11:50 AM	2.06	2.06
112008	11201718	Personal	Tommy Smith-Laborer-Pump #LV-30	7:56 AM	11:40 AM	2.06	2.06
112009	11201719	Personal	Tommy Smith-Laborer-Pump #LV-30	11:41 AM	2:40 PM	2.06	2.06
112010	11201720	Personal	Ever Bonilla-Laborer-Pump #LV-1	11:51 AM	3:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112001	11201711	315	7.86	2475.9	8.5	100	0.0075	0.0775	9.873	0.0015	1.720	<0.0026	N/A
112002	11201712	315	7.86	2475.9	8	100	0.0075	0.0725	9.236	0.0014	1.741	<0.0025	N/A
112003	11201713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.011
112004	11201714	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
112005	11201715	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.010
112006	11201716	244	2.06	502.64	8	100	0.0075	0.0725	9.236	0.0071	1.741	<0.0123	0.011
112007	11201717	237	2.06	488.22	8	100	0.0075	0.0725	9.236	0.0073	1.741	<0.0127	0.010
112008	11201718	224	2.06	461.44	7.5	100	0.0075	0.0675	8.599	0.0072	1.775	<0.0127	0.010
112009	11201719	179	2.06	368.74	7.5	100	0.0075	0.0675	8.599	0.0090	1.775	<0.0159	0.010
112010	11201720	219	2.06	451.14	7.5	100	0.0075	0.0675	8.599	0.0073	1.775	<0.0130	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 47
PAGE 2 **OF** 2

DATE COLLECTED 11/20/2017
DATE RECEIVED 11/20/2017
DATE ANALYZED 11/20/2017
DATE REPORTED 11/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11171709	1	100	1/100
B2	11171710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112011	11201721	Personal	Gary Brown-Laborer-Pump #LV-38	11:56 AM	3:25 PM	2.06	2.06
112012	11201722	Area	Southeast corner of ramp to trestle 2-Pump #HV-21	12:01 PM	3:21 PM	7.86	7.86
112013	11201723	Area	On top of trestle 2-Pump #HV-20	12:03 PM	3:20 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112011	11201721	209	2.06	430.54	8.5	100	0.0075	0.0775	9.873	0.0088	1.720	<0.0152	0.011
112012	11201722	200	7.86	1572	8.5	100	0.0075	0.0775	9.873	0.0024	1.720	<0.0042	N/A
112013	11201723	197	7.86	1548.42	7	100	0.0075	0.0625	7.962	0.0020	1.785	<0.0035	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 22, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/21/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/21/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 48
PAGE 1 **OF** 2

DATE COLLECTED 11/21/2017
DATE RECEIVED 11/21/2017
DATE ANALYZED 11/21/2017
DATE REPORTED 11/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11211709	0.5	100	0.5/100
B2	11211710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112101	11211711	Area	Southeast corner of ramp to trestle 2-Pump #HV-21	6:46 AM	11:45 AM	7.86	7.86
112102	11211712	Area	On top of trestle 2-Pump #HV-20	6:48 AM	11:48 AM	7.86	7.86
112103	11211713	STEL	Gary Reynolds-Excavator operator-Pump #LV-5	7:15 AM	7:45 AM	2.06	2.06
112104	11211714	STEL	Jacob Johnson-Laborer-Pump #LV-1	7:17 AM	7:47 AM	2.06	2.06
112105	11211715	STEL	Mark Conway-Excavator operator-Pump #LV-21	7:20 AM	7:50 AM	2.06	2.06
112106	11211716	Personal	Gary Reynolds-Excavator operator-Pump #LV-5	7:46 AM	12:10 PM	2.06	2.06
112107	11211717	Personal	Jacob Johnson-Laborer-Pump #LV-1	7:48 AM	12:00 PM	2.06	2.06
112108	11211718	Personal	Mark Conway-Excavator operator-Pump #LV-21	7:51 AM	12:06 PM	2.06	2.06
112109	11211719	Area	Southeast corner of ramp to trestle 2-Pump #HV-21	11:46 AM	3:15 PM	7.86	7.86
112110	11211720	Area	On top of trestle 2-Pump #HV-20	11:49 AM	3:17 PM	7.86	7.86

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112101	11211711	299	7.86	2350.14	8	100	0.005	0.0750	9.554	0.0016	1.741	<0.0027	N/A
112102	11211712	300	7.86	2358	7.5	100	0.005	0.0700	8.917	0.0015	1.775	<0.0026	N/A
112103	11211713	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.010
112104	11211714	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.010
112105	11211715	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.011
112106	11211716	264	2.06	543.84	7	100	0.005	0.0650	8.280	0.0059	1.785	<0.0105	0.010
112107	11211717	252	2.06	519.12	7.5	100	0.005	0.0700	8.917	0.0066	1.775	<0.0117	0.010
112108	11211718	255	2.06	525.3	8	100	0.005	0.0750	9.554	0.0070	1.741	<0.0122	0.011
112109	11211719	209	7.86	1642.74	7.5	100	0.005	0.0700	8.917	0.0021	1.775	<0.0037	N/A
112110	11211720	208	7.86	1634.88	7.5	100	0.005	0.0700	8.917	0.0021	1.775	<0.0037	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 48
PAGE 2 **OF** 2

DATE COLLECTED 11/21/2017
DATE RECEIVED 11/21/2017
DATE ANALYZED 11/21/2017
DATE REPORTED 11/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11211709	0.5	100	0.5/100
B2	11211710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Vinson White

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112111	11211721	Personal	Jacob Johnson-Laborer-Pump #LV-1	12:01 PM	3:25 PM	2.06	2.06
112112	11211722	Personal	Mark Conway-Excavator operator-Pump #LV-21	12:06 PM	3:28 PM	2.06	2.06
112113	11211723	Personal	Gary Reynolds-Excavator operator-Pump #LV-5	12:11 PM	3:22 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112111	11211721	204	2.06	420.24	7	100	0.005	0.0650	8.280	0.0076	1.785	<0.0135	0.010
112112	11211722	202	2.06	416.12	8	100	0.005	0.0750	9.554	0.0088	1.741	<0.0154	0.011
112113	11211723	191	2.06	393.46	7.5	100	0.005	0.0700	8.917	0.0087	1.775	<0.0155	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 27, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/22/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/22/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 49
PAGE 1 **OF** 1

DATE COLLECTED 11/22/2017
DATE RECEIVED 11/22/2017
DATE ANALYZED 11/22/2017
DATE REPORTED 11/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11221709	0.5	100	0.5/100
B2	11221710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112201	11221711	Area	Southeast side of trestle 1-Pump #HV-21	7:10 AM	10:25 AM	7.86	7.86
112202	11221712	Area	West end of trestle 1-Pump #HV-20	7:12 AM	10:27 AM	7.86	7.86
112203	11221713	STEL	Brent Hardinger-Loading debris by hand-Pump #LV-36	8:15 AM	8:45 AM	2.06	2.06
112204	11221714	STEL	Jacob Johnson-Loading debris by hand-Pump #LV-5	8:17 AM	8:47 AM	2.06	2.06
112205	11221715	STEL	Mark Jeffers-Excavator operator-Pump #LV-1	8:20 AM	8:50 AM	2.06	2.06
112206	11221716	Personal	Brent Hardinger-Loading debris by hand-Pump #LV-36	8:46 AM	10:30 AM	2.06	2.06
112207	11221717	Personal	Jacob Johnson-Loading debris by hand-Pump #LV-5	8:48 AM	10:32 AM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112201	11221711	195	7.86	1532.7	8	100	0.005	0.0750	9.554	0.0024	1.741	<0.0042	N/A
112202	11221712	195	7.86	1532.7	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0040	N/A
112203	11221713	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.007
112204	11221714	30	2.06	61.8	8.5	100	0.005	0.0800	10.191	0.0635	1.720	<0.1092	0.007
112205	11221715	30	2.06	61.8	8.5	100	0.005	0.0800	10.191	0.0635	1.720	<0.1092	0.004
112206	11221716	104	2.06	214.24	8	100	0.005	0.0750	9.554	0.0172	1.741	<0.0299	0.007
112207	11221717	104	2.06	214.24	6.5	100	0.005	0.0600	7.643	0.0137	1.810	<0.0249	0.007

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 28, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/27/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/27/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 50
PAGE 1 **OF** 2

DATE COLLECTED 11/27/2017
DATE RECEIVED 11/27/2017
DATE ANALYZED 11/27/2017
DATE REPORTED 11/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11271706	0.5	100	0.5/100
B2	11271707	0	100	0/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112701	11271708	Area	End of Trestle 2-Pump #HV-33	7:02 AM	12:04 PM	9.76	9.76
112702	11271709	Area	Loading area between trestles-Pump #HV-8	7:08 AM	12:08 PM	9.76	9.76
112703	11271710	STEL	Mark Jeffers-Crane operator-Pump #LV-30	7:13 AM	7:43 AM	2.06	2.06
112704	11271711	STEL	Mark Conway-Loading debris in excavator-Pump #LV-5	7:16 AM	7:46 AM	2.06	2.06
112705	11271712	STEL	Jacob Johnson-Lining dumpsters & assisting in load out-Pump #LV-1	7:19 AM	7:49 AM	2.06	2.06
112706	11271713	Personal	Mark Jeffers-Crane operator-Pump #LV-30	7:44 AM	12:06 PM	2.06	2.06
112707	11271714	Personal	Mark Conway-Loading debris in excavator-Pump #LV-5	7:47 AM	12:16 PM	2.06	2.06
112708	11271715	Personal	Jacob Johnson-Lining dumpsters & assisting in load out-Pump #LV-1	7:50 AM	12:12 PM	2.06	2.06
112709	11271716	Area	End of Trestle 2-Pump #HV-33	12:05 PM	2:30 PM	9.76	9.76
112710	11271717	Personal	Mark Jeffers-Crane operator-Pump #LV-30	12:07 PM	2:36 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112701	11271708	302	9.76	2947.52	8	100	0.0025	0.0775	9.873	0.0013	1.741	<0.0022	N/A
112702	11271709	300	9.76	2928	9.5	100	0.0025	0.0925	11.783	0.0015	1.690	<0.0026	N/A
112703	11271710	30	2.06	61.8	12	100	0.0025	0.1175	14.968	0.0932	1.620	<0.1511	0.016
112704	11271711	30	2.06	61.8	17	100	0.0025	0.1675	21.338	0.1329	1.530	<0.2034	0.016
112705	11271712	30	2.06	61.8	7	100	0.0025	0.0675	8.599	0.0536	1.785	<0.0956	0.014
112706	11271713	262	2.06	539.72	13	100	0.0025	0.1275	16.242	0.0116	1.610	<0.0187	0.016
112707	11271714	269	2.06	554.14	9	100	0.0025	0.0875	11.146	0.0077	1.705	<0.0132	0.016
112708	11271715	262	2.06	539.72	16	100	0.0025	0.1575	20.064	0.0143	1.550	<0.0222	0.014
112709	11271716	145	9.76	1415.2	9	100	0.0025	0.0875	11.146	0.0030	1.705	<0.0052	N/A
112710	11271717	149	2.06	306.94	7	100	0.0025	0.0675	8.599	0.0108	1.785	<0.0193	0.016

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 50
PAGE 2 **OF** 2

DATE COLLECTED 11/27/2017
DATE RECEIVED 11/27/2017
DATE ANALYZED 11/27/2017
DATE REPORTED 11/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11271706	0.5	100	0.5/100
B2	11271707	0	100	0/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112711	11271718	Area	Loaidng area between trestles-Pump #HV-8	12:09 PM	2:24 PM	7.86	7.86
112712	11271719	Personal	Jacob Johnson-Lining dumpsters & assisting in load out-Pump #LV-1	12:13 PM	2:40 PM	2.06	2.06
112713	11271720	Personal	Mark Conway-Loading debris in excavator-Pump #LV-5	12:17 PM	2:50 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112711	11271718	135	7.86	1061.1	7	100	0.0025	0.0675	8.599	0.0031	1.785	<0.0056	N/A
112712	11271719	147	2.06	302.82	7	100	0.0025	0.0675	8.599	0.0109	1.785	<0.0195	0.014
112713	11271720	153	2.06	315.18	8	100	0.0025	0.0775	9.873	0.0121	1.741	<0.0210	0.016

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 29, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/28/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/28/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 51
PAGE 1 **OF** 2

DATE COLLECTED 11/28/2017
DATE RECEIVED 11/28/2017
DATE ANALYZED 11/28/2017
DATE REPORTED 11/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11281709	1	100	1/100
B2	11281710	1	100	1/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112801	11281711	Area	End of Trestle 2-Pump #HV-33	6:50 AM	12:03 PM	9.76	9.76
112802	11281712	Area	Center of loading area between trestles-Pump #HV-8	6:55 AM	12:06 PM	9.76	9.76
112803	11281713	STEL	Nick Maranda-Crane operator-Pump #LV-1	7:05 AM	7:35 AM	2.06	2.06
112804	11281714	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-30	7:08 AM	7:38 AM	2.06	2.06
112805	11281715	STEL	Gary Brown-Excavator operator-Pump #LV-5	7:10 AM	7:40 AM	2.06	2.06
112806	11281716	Personal	Nick Maranda-Crane operator-Pump #LV-1	7:36 AM	12:00 PM	2.06	2.06
112807	11281717	Pesonal	Eduardo Gonzalez-Firehose operator-Pump #LV-30	7:39 AM	11:57 AM	2.06	2.06
112808	11281718	Personal	Gary Brown-Excavator operator-Pump #LV-5	7:41 AM	10:50 AM	2.06	2.06
112809	11281719	Personal	Gary Brown-Excavator operator-Pump #LV-5	11:59 AM	2:26 PM	2.06	2.06
112810	11281720	Area	End of Trestle 2-Pump #HV-33	12:04 PM	2:33 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112801	11281711	313	9.76	3054.88	10	100	0.01	0.0900	11.465	0.0014	1.670	<0.0024	N/A
112802	11281712	311	9.76	3035.36	16	100	0.01	0.1500	19.108	0.0024	1.550	<0.0038	N/A
112803	11281713	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.007
112804	11281714	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.012
112805	11281715	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.012
112806	11281716	264	2.06	543.84	8	100	0.01	0.0700	8.917	0.0063	1.741	<0.0110	0.007
112807	11281717	258	2.06	531.48	12	100	0.01	0.1100	14.013	0.0102	1.620	<0.0164	0.012
112808	11281718	189	2.06	389.34	9	100	0.01	0.0800	10.191	0.0101	1.705	<0.0172	0.012
112809	11281719	147	2.06	302.82	8	100	0.01	0.0700	8.917	0.0113	1.741	<0.0197	0.012
112810	11281720	149	9.76	1454.24	9	100	0.01	0.0800	10.191	0.0027	1.705	<0.0046	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 51
PAGE 2 **OF** 2

DATE COLLECTED 11/28/2017
DATE RECEIVED 11/28/2017
DATE ANALYZED 11/28/2017
DATE REPORTED 11/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11281709	1	100	1/100
B2	11281710	1	100	1/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112811	11281721	Area	Center of loading area between trestles-Pump #HV-8	12:07 PM	2:30 PM	9.76	9.76
112812	11281722	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-30	12:50 PM	2:24 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112811	11281721	143	9.76	1395.68	7.5	100	0.01	0.0650	8.280	0.0023	1.775	<0.0041	N/A
112812	11281722	94	2.06	193.64	7.5	100	0.01	0.0650	8.280	0.0165	1.775	<0.0292	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

November 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/29/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/29/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 52
PAGE 1 **OF** 2

DATE COLLECTED 11/29/2017
DATE RECEIVED 11/29/2017
DATE ANALYZED 11/29/2017
DATE REPORTED 11/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11291709	0	100	0/100
B2	11291710	1	100	1/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112901	11291711	Area	End of Trestle 2-Pump #HV-8	6:55 AM	12:00 PM	9.76	9.76
112902	11291712	Area	Loading area between trestles-Pump #HV-33	7:00 AM	12:02 PM	9.76	9.76
112903	11291713	STEL	Jeff Doggey-Laborer working on decking of trestle 2-Pump #LV-5	7:04 AM	7:34 AM	2.06	2.06
112904	11291714	STEL	Gary Reynolds-Laborer loading debris by hand-Pump #LV-1	7:10 AM	7:40 AM	2.06	2.06
112905	11291715	STEL	Dave Nelson-Foreman-Pump #LV-30	7:15 AM	7:45 AM	2.06	2.06
112906	11291716	Personal	Jeff Doggey-Laborer working on decking of trestle 2-Pump #LV-5	7:35 AM	11:00 AM	2.06	2.06
112907	11291717	Personal	Gary Reynolds-Laborer loading debris by hand-Pump #LV-1	7:41 AM	12:06 PM	2.06	2.06
112908	11291718	Personal	Dave Nelson-Foreman-Pump #LV-30	7:46 AM	11:57 AM	2.06	2.06
112909	11291719	Area	End of Trestle 2-Pump #HV-8	12:01 PM	2:30 PM	9.76	9.76
112910	11291720	Area	Loading area between trestles-Pump #HV-33	12:03 PM	2:35 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112901	11291711	305	9.76	2976.8	9	100	0.005	0.0850	10.828	0.0014	1.705	<0.0024	N/A
112902	11291712	302	9.76	2947.52	8	100	0.005	0.0750	9.554	0.0012	1.741	<0.0022	N/A
112903	11291713	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
112904	11291714	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.017
112905	11291715	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
112906	11291716	205	2.06	422.3	14	100	0.005	0.1350	17.197	0.0157	1.590	<0.0249	0.010
112907	11291717	265	2.06	545.9	18	100	0.005	0.1750	22.293	0.0157	1.515	<0.0238	0.017
112908	11291718	251	2.06	517.06	10	100	0.005	0.0950	12.102	0.0090	1.670	<0.0150	0.011
112909	11291719	149	9.76	1454.24	7	100	0.005	0.0650	8.280	0.0022	1.785	<0.0039	N/A
112910	11291720	152	9.76	1483.52	7	100	0.005	0.0650	8.280	0.0021	1.785	<0.0038	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 52
PAGE 2 **OF** 2

DATE COLLECTED 11/29/2017
DATE RECEIVED 11/29/2017
DATE ANALYZED 11/29/2017
DATE REPORTED 11/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11291709	0	100	0/100
B2	11291710	1	100	1/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
112911	11291721	Personal	Dave Nelson-Foreman-Pump #LV-30	12:31 PM	2:32 PM	2.06	2.06
112912	11291722	Personal	Gary Reynolds-Laborer loading debris by hand-Pump #LV-1	12:32 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
112911	11291721	121	2.06	249.26	6.5	100	0.005	0.0600	7.643	0.0118	1.810	<0.0214	0.011
112912	11291722	125	2.06	257.5	8	100	0.005	0.0750	9.554	0.0143	1.741	<0.0249	0.017

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 1, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/30/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 11/30/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 53
PAGE 1 **OF** 2

DATE COLLECTED 11/30/2017
DATE RECEIVED 11/30/2017
DATE ANALYZED 11/30/2017
DATE REPORTED 12/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11301709	0.5	100	0.5/100
B2	11301710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
113001	11301711	Area	End of Trestle 2 - Pump #HV-33	6:53 AM	11:52 AM	9.76	9.76
113002	11301712	Area	Loading Area between Trestles-Pump #HV-8	7:00 AM	12:00 PM	9.76	9.76
113003	11301713	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:05 AM	7:35 AM	2.06	2.06
113004	11301714	STEL	Ever Bonilla-Firehose operator-Pump #LV-5	7:10 AM	7:40 AM	2.06	2.06
113005	11301715	STEL	Brent hardinger-Trarversing worksite/equipment operator-Pump #LV-1	7:12 AM	7:42 AM	2.06	2.06
113006	11301716	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	7:36 AM	11:57 AM	2.06	2.06
113007	11301717	Personal	Ever Bonilla-Firehose operator-Pump #LV-5	7:41 AM	12:20 PM	2.06	2.06
113008	11301718	Personal	Brent hardinger-Trarversing worksite/equipment operator-Pump #LV-1	7:43 AM	11:55 AM	2.06	2.06
113009	11301719	Area	End of Trestle 2 - Pump #HV-33	11:53 AM	2:36 PM	9.76	9.76
113010	11301720	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	11:58 AM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
113001	11301711	299	9.76	2918.24	12	100	0.005	0.1150	14.650	0.0019	1.620	<0.0031	N/A
113002	11301712	300	9.76	2928	7	100	0.005	0.0650	8.280	0.0011	1.785	<0.0019	N/A
113003	11301713	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
113004	11301714	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.007
113005	11301715	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.012
113006	11301716	261	2.06	537.66	9	100	0.005	0.0850	10.828	0.0078	1.705	<0.0132	0.011
113007	11301717	279	2.06	574.74	7	100	0.005	0.0650	8.280	0.0055	1.785	<0.0099	0.007
113008	11301718	252	2.06	519.12	11	100	0.005	0.1050	13.376	0.0099	1.655	<0.0164	0.012
113009	11301719	163	9.76	1590.88	8	100	0.005	0.0750	9.554	0.0023	1.741	<0.0040	N/A
113010	11301720	162	2.06	333.72	6.5	100	0.005	0.0600	7.643	0.0088	1.810	<0.0160	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 53
PAGE 2 **OF** 2

DATE COLLECTED 11/30/2017
DATE RECEIVED 11/30/2017
DATE ANALYZED 11/30/2017
DATE REPORTED 12/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	11301709	0.5	100	0.5/100
B2	11301710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter / Johnson

SAMPLES ANALYZED BY: Carter / Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
113011	11301721	Area	Loading Area between Trestles-Pump #HV-8	12:01 PM	2:30 PM	9.76	9.76
113012	11301722	Personal	Brent hardinger-Trarversing worksite/equipment operator-Pump #LV-1	12:30 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
113011	11301721	149	9.76	1454.24	6.5	100	0.005	0.0600	7.643	0.0020	1.810	<0.0037	N/A
113012	11301722	135	2.06	278.1	9	100	0.005	0.0850	10.828	0.0150	1.705	<0.0256	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 4, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/01/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/01/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 54
PAGE 1 **OF** 1

DATE COLLECTED 12/1/2017
DATE RECEIVED 12/1/2017
DATE ANALYZED 12/1/2017
DATE REPORTED 12/4/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12011701	1	100	1/100
B2	12011702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter/Johnson/Coleman

SAMPLES ANALYZED BY: Johnson/Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120101	12011703	Area	Loading area between Trestle 1 & Trestle 2-Pump #HV-706	7:05 AM	12:08 PM	9.21	9.21
120102	12011704	Area	End of Trestle 2-Pump #HV-705	7:10 AM	12:13 PM	9.21	9.21
120103	12011705	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-30	8:21 AM	8:51 AM	2.06	2.06
120104	12011706	STEL	Mark Conway-Excavator operator-Pump #LV-1	8:24 AM	8:54 AM	2.06	2.06
120105	12011707	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-30	8:52 AM	10:00 AM	2.06	2.06
120106	12011708	Personal	Mark Conway-Excavator operator-Pump #LV-1	8:55 AM	12:10 PM	2.06	2.06
120107	12011709	Area	Loading area between Trestle 1 & Trestle 2-Pump #HV-706	12:09 PM	2:17 PM	9.21	9.21
120108	12011710	Personal	Mark Conway-Excavator operator-Pump #LV-1	12:11 PM	2:16 PM	2.06	2.06
120109	12011711	Area	End of Trestle 2-Pump #HV-705	12:14 PM	2:18 PM	9.21	9.21

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120101	12011703	303	9.21	2790.63	8.5	100	0.0075	0.0775	9.873	0.0014	1.720	<0.0023	N/A
120102	12011704	303	9.21	2790.63	12.5	100	0.0075	0.1175	14.968	0.0021	1.620	<0.0033	N/A
120103	12011705	30	2.06	61.8	13	100	0.0075	0.1225	15.605	0.0972	1.610	<0.1565	0.010
120104	12011706	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.014
120105	12011707	68	2.06	140.08	8	100	0.0075	0.0725	9.236	0.0254	1.741	<0.0442	0.010
120106	12011708	195	2.06	401.7	7.5	100	0.0075	0.0675	8.599	0.0082	1.775	<0.0146	0.014
120107	12011709	128	9.21	1178.88	7.5	100	0.0075	0.0675	8.599	0.0028	1.775	<0.0050	N/A
120108	12011710	125	2.06	257.5	13	100	0.0075	0.1225	15.605	0.0233	1.610	<0.0376	0.014
120109	12011711	124	9.21	1142.04	7	100	0.0075	0.0625	7.962	0.0027	1.785	<0.0048	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 27, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/26/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/26/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 72
PAGE 1 **OF** 2

DATE COLLECTED 12/26/2017
DATE RECEIVED 12/26/2017
DATE ANALYZED 12/26/2017
DATE REPORTED 12/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12271706	0.5	100	0.5/100
B2	12271707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122701	12271708	STEL	Ever Bonilla-Lining dumpsters with poly-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
122702	12271709	STEL	Mark Conway-Equipment operator-Pump #LV-5	7:32 AM	8:02 AM	2.06	2.06
122703	12271710	Area	NW Corner of Regulated Area-Pump #HV-52	7:35 AM	12:00 PM	9.76	9.76
122704	12271711	Area	SE Corner beside ramp to Trestle 2-Pump #HV-8	7:37 AM	12:03 PM	9.76	9.76
122705	12271712	Area	End of Trestle 2-Pump #HV-33	7:39 AM	12:05 PM	9.76	9.76
122706	12271713	Personal	Ever Bonilla-Lining dumpsters with poly-Pump #LV-1	8:01 AM	11:58 AM	2.06	2.06
122707	12271714	Personal	Mark Conway-Equipment operator-Pump #LV-5	8:03 AM	12:07 PM	2.06	2.06
122708	12271715	Area	NW Corner of Regulated Area-Pump #HV-52	12:01 PM	2:47 PM	9.76	9.76
122709	12271716	Area	SE Corner beside ramp to Trestle 2-Pump #HV-8	12:04 PM	12:00 PM	9.76	9.76
122710	12271717	Area	End of Trestle 2-Pump #HV-33	12:06 PM	2:44 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122701	12271708	30	2.06	61.8	17	100	0.005	0.1650	21.019	0.1309	1.530	<0.2003	0.015
122702	12271709	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
122703	12271710	265	9.76	2586.4	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0021	N/A
122704	12271711	266	9.76	2596.16	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0022	N/A
122705	12271712	266	9.76	2596.16	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0021	N/A
122706	12271713	237	2.06	488.22	7	100	0.005	0.0600	7.643	0.0060	1.810	<0.0109	0.015
122707	12271714	244	2.06	502.64	8	100	0.005	0.0750	9.554	0.0073	1.741	<0.0127	0.010
122708	12271715	166	9.76	1620.16	6.5	100	0.005	0.0600	7.643	0.0018	1.810	<0.0033	N/A
122709	12271716	1436	9.76	14015.36	9.0	100	0.005	0.0850	10.828	0.0003	1.705	<0.0005	N/A
122710	12271717	158	9.76	1542.08	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0035	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 72
PAGE 2 **OF** 2

DATE COLLECTED 12/26/2017
DATE RECEIVED 12/26/2017
DATE ANALYZED 12/26/2017
DATE REPORTED 12/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12271706	0.5	100	0.5/100
B2	12271707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122711	12271718	Personal	Mark Conway-Equipment operator-Pump #LV-5	12:35 PM	2:35 PM	2.06	2.06
122712	12271719	Personal	Ever Bonilla-Lining dumpsters with poly-Pump #LV-1	12:40 PM	2:41 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122711	12271718	120	2.06	247.2	6.5	100	0.005	0.0600	7.643	0.0119	1.810	<0.0215	0.010
122712	12271719	121	2.06	249.26	8	100	0.005	0.0750	9.554	0.0148	1.741	<0.0257	0.015

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 28, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/27/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/27/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 73
PAGE 1 **OF** 2

DATE COLLECTED 12/27/2017
DATE RECEIVED 12/27/2017
DATE ANALYZED 12/27/2017
DATE REPORTED 12/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12271706	1	100	1/100
B2	12271707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122701	12271708	Area	End of Trestle 2-Pump #HV-33	7:25 AM	12:04 PM	9.76	9.76
122702	12271709	Area	Northside of Regulated Area-Pump #HV-8	7:30 AM	12:06 PM	9.76	9.76
122703	12271710	Area	Mid-span of Trestle 1-Pump #HV-51	7:35 AM	12:08 PM	9.76	9.76
122704	12271711	STEL	Jacob Johnson-Lining and securing dumpsters with poly-Pump #LV-1	7:47 AM	8:17 AM	2.06	2.06
122705	12271712	STEL	Brent Hardinger-Excavator operator-Pump #LV-5	7:50 AM	8:20 AM	2.06	2.06
122706	12271713	Personal	Jacob Johnson-Lining and securing dumpsters with poly-Pump #LV-1	8:18 AM	11:58 AM	2.06	2.06
122707	12271714	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	8:21 AM	12:10 PM	2.06	2.06
122708	12271715	Area	End of Trestle 2-Pump #HV-33	12:05 PM	2:47 PM	9.76	9.76
122709	12271716	Area	Northside of Regulated Area-Pump #HV-8	12:07 PM	2:50 PM	9.76	9.76
122710	12271717	Area	Mid-span of Trestle 1-Pump #HV-51	12:09 PM	2:53 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122701	12271708	279	9.76	2723.04	7.5	100	0.0075	0.0675	8.599	0.0012	1.775	<0.0022	N/A
122702	12271709	276	9.76	2693.76	7	100	0.0075	0.0625	7.962	0.0011	1.785	<0.0020	N/A
122703	12271710	273	9.76	2664.48	9	100	0.0075	0.0825	10.510	0.0015	1.705	<0.0026	N/A
122704	12271711	30	2.06	61.8	14	100	0.0075	0.1325	16.879	0.1052	1.590	<0.1672	0.015
122705	12271712	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.012
122706	12271713	220	2.06	453.2	7	100	0.0075	0.0625	7.962	0.0068	1.785	<0.0121	0.015
122707	12271714	229	2.06	471.74	9.5	100	0.0075	0.0875	11.146	0.0091	1.690	<0.0154	0.012
122708	12271715	162	9.76	1581.12	8.0	100	0.0075	0.0725	9.236	0.0022	1.741	<0.0039	N/A
122709	12271716	163	9.76	1590.88	10.0	100	0.0075	0.0925	11.783	0.0029	1.670	<0.0048	N/A
122710	12271717	164	9.76	1600.64	9.5	100	0.0075	0.0875	11.146	0.0027	1.690	<0.0045	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 73
PAGE 2 **OF** 2

DATE COLLECTED 12/27/2017
DATE RECEIVED 12/27/2017
DATE ANALYZED 12/27/2017
DATE REPORTED 12/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12271706	1	100	1/100
B2	12271707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122711	12271718	Personal	Jacob Johnson-Lining and securing dumpsters with poly-Pump #LV-1	12:40 PM	2:41 PM	2.06	2.06
122712	12271719	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	12:45 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122711	12271718	121	2.06	249.26	11	100	0.0075	0.1025	13.057	0.0202	1.655	<0.0334	0.015
122712	12271719	120	2.06	247.2	9	100	0.0075	0.0825	10.510	0.0164	1.705	<0.0279	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 29, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/28/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/28/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 74
PAGE 1 **OF** 2

DATE COLLECTED 12/28/2017
DATE RECEIVED 12/28/2017
DATE ANALYZED 12/28/2017
DATE REPORTED 12/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12281706	0.5	100	0.5/100
B2	12281707	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122801	12281708	Area	End of Trestle 2-Pump #HV-8	7:57 AM	12:10 PM	9.76	9.76
122802	12281709	Area	Mid-span of Trestle 1-Pump #HV-33	8:05 AM	12:07 PM	9.76	9.76
122803	12281710	Area	NW corner of Regulated Area-Pump #HV51	8:07 AM	12:12 PM	9.76	9.76
122804	12281711	STEL	Mark Conway-Equipment operator-Pump #LV-1	8:10 AM	8:40 AM	2.06	2.06
122805	12281712	STEL	Gary Reynolds-Cutting deck-Pump #LV-5	8:13 AM	8:43 AM	2.06	2.06
122806	12281713	Personal	Mark Conway-Equipment operator-Pump #LV-1	8:41 AM	12:00 PM	2.06	2.06
122807	12281714	Personal	Gary Reynolds-Cutting deck-Pump #LV-5	8:44 AM	12:05 PM	2.06	2.06
122808	12281715	Area	Mid-span of Trestle 1-Pump #HV-33	12:08 PM	2:35 PM	9.76	9.76
122809	12281716	Area	End of Trestle 2-Pump #HV-8	12:11 PM	2:13 PM	9.76	9.76
122810	12281717	Area	NW corner of Regulated Area-Pump #HV51	12:13 PM	2:40 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122801	12281708	253	9.76	2469.28	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0022	N/A
122802	12281709	242	9.76	2361.92	7.5	100	0.0075	0.0675	8.599	0.0014	1.775	<0.0025	N/A
122803	12281710	245	9.76	2391.2	7	100	0.0075	0.0625	7.962	0.0013	1.785	<0.0023	N/A
122804	12281711	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.013
122805	12281712	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.011
122806	12281713	199	2.06	409.94	7	100	0.0075	0.0625	7.962	0.0075	1.785	<0.0133	0.013
122807	12281714	201	2.06	414.06	7	100	0.0075	0.0625	7.962	0.0074	1.785	<0.0132	0.011
122808	12281715	147	9.76	1434.72	7	100	0.0075	0.0625	7.962	0.0021	1.785	<0.0038	N/A
122809	12281716	122	9.76	1190.72	9.5	100	0.0075	0.0875	11.146	0.0036	1.690	<0.0061	N/A
122810	12281717	147	9.76	1434.72	8	100	0.0075	0.0725	9.236	0.0025	1.741	<0.0043	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 74
PAGE 2 **OF** 2

DATE COLLECTED 12/28/2017
DATE RECEIVED 12/28/2017
DATE ANALYZED 12/28/2017
DATE REPORTED 12/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12281706	0.5	100	0.5/100
B2	12281707	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122811	12281718	Personal	Mark Conway-Equipment operator-Pump #LV-1	12:34 PM	2:42 PM	2.06	2.06
122812	12281719	Personal	Gary Reynolds-Cutting deck-Pump #LV-5	12:39 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122811	12281718	128	2.06	263.68	11.5	100	0.0075	0.1075	13.694	0.0200	1.635	<0.0327	0.013
122812	12281719	126	2.06	259.56	8.5	100	0.0075	0.0775	9.873	0.0146	1.720	<0.0252	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 2, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/29/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/29/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 75
PAGE 1 **OF** 2

DATE COLLECTED 12/29/2017
DATE RECEIVED 12/29/2017
DATE ANALYZED 12/29/2017
DATE REPORTED 1/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12291706	1	100	1/100
B2	12291707	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122901	12291708	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:30 AM	8:00 AM	2.06	2.06
122902	12291709	STEL	Jacob Johnson-Cutting & removing deck sections-Pump #LV-38	7:35 AM	8:05 AM	2.06	2.06
122903	12291710	STEL	Brent Hardinger-Equipment Operator-Pump #LV-36	7:38 AM	8:08 AM	2.06	2.06
122904	12291711	Area	NW Corner of Worksite-Pump #HV-33	7:40 AM	12:06 PM	9.76	9.76
122905	12291712	Area	End of Trestle 2-Pump #HV-8	7:43 AM	12:10 PM	9.76	9.76
122906	12291713	Area	Mid-Span of Trestle 2-Pump #HV-51	7:45 AM	12:13 PM	9.76	9.76
122907	12291714	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:01 AM	12:00 PM	2.06	2.06
122908	12291715	Personal	Jacob Johnson-Cutting & removing deck sections-Pump #LV-38	8:06 AM	12:02 PM	2.06	2.06
122909	12291716	Personal	Brent Hardinger-Equipment Operator-Pump #LV-36	8:09 AM	12:04 PM	2.06	2.06
122910	12291717	Area	NW Corner of Worksite-Pump #HV-33	12:07 PM	2:51 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122901	12291708	30	2.06	61.8	16	100	0.005	0.1550	19.745	0.1230	1.550	<0.1907	0.017
122902	12291709	30	2.06	61.8	14	100	0.005	0.1350	17.197	0.1071	1.590	<0.1703	0.016
122903	12291710	30	2.06	61.8	12	100	0.005	0.1150	14.650	0.0913	1.620	<0.1478	0.013
122904	12291711	266	9.76	2596.16	8.5	100	0.005	0.0800	10.191	0.0015	1.720	<0.0026	N/A
122905	12291712	267	9.76	2605.92	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
122906	12291713	268	9.76	2615.68	8	100	0.005	0.0750	9.554	0.0014	1.741	<0.0024	N/A
122907	12291714	239	2.06	492.34	10	100	0.005	0.0950	12.102	0.0095	1.670	<0.0158	0.017
122908	12291715	236	2.06	486.16	8.5	100	0.005	0.0800	10.191	0.0081	1.720	<0.0139	0.016
122909	12291716	235	2.06	484.1	7	100	0.005	0.0650	8.280	0.0066	1.785	<0.0118	0.013
122910	12291717	164	9.76	1600.64	6.5	100	0.005	0.0600	7.643	0.0018	1.810	<0.0033	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 75
PAGE 2 **OF** 2

DATE COLLECTED 12/29/2017
DATE RECEIVED 12/29/2017
DATE ANALYZED 12/29/2017
DATE REPORTED 1/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12291706	1	100	1/100
B2	12291707	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122911	12291718	Area	End of Trestle 2-Pump #HV-8	12:11 PM	2:55 PM	9.76	9.76
122912	12291719	Area	Mid-Span of Trestle 2-Pump #HV-51	12:15 PM	2:57 PM	9.76	9.76
122913	12291720	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:45 PM	2:40 PM	2.06	2.06
122914	12291721	Personal	Jacob Johnson-Cutting & removing deck sections-Pump #LV-38	12:47 PM	2:45 PM	2.06	2.06
122915	12291722	Personal	Brent Hardinger-Equipment Operator-Pump #LV-36	12:50 PM	2:50 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122911	12291718	164	9.76	1600.64	8.0	100	0.005	0.0750	9.554	0.0023	1.741	<0.0040	N/A
122912	12291719	162	9.76	1581.12	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0034	N/A
122913	12291720	115	2.06	236.9	9.0	100	0.005	0.0850	10.828	0.0176	1.705	<0.0300	0.017
122914	12291721	118	2.06	243.08	11	100	0.005	0.1050	13.376	0.0212	1.655	<0.0351	0.016
122915	12291722	120	2.06	247.2	9.5	100	0.005	0.0900	11.465	0.0179	1.690	<0.0302	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 5, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/04/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/04/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 55
PAGE 1 **OF** 2

DATE COLLECTED 12/4/2017
DATE RECEIVED 12/4/2017
DATE ANALYZED 12/4/2017
DATE REPORTED 12/5/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12041709	0.5	100	0.5/100
B2	12041710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter/Johnson

SAMPLES ANALYZED BY: Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120401	12041711	Area	End of Trestle 2-Pump #HV-33	6:55 AM	12:05 PM	9.76	9.76
120402	12041712	Area	Loading Area between Trestles-Pump #HV-8	6:59 AM	12:08 PM	9.76	9.76
120403	12041713	STEL	Kent Parker-Driving pylons & laboring-Pump #LV-1	7:01 AM	7:31 AM	2.06	2.06
120404	12041714	STEL	Jacob Johnson-Laying wood & removing tools/support-Pump #LV-5	7:05 AM	7:35 AM	2.06	2.06
120405	12041715	STEL	Eduardo Gonzalez-Firehose operator-Pump #LV-30	7:14 AM	7:44 AM	2.06	2.06
120406	12041716	Personal	Kent Parker-Driving pylons & laboring-Pump #LV-1	7:32 AM	12:15 PM	2.06	2.06
120407	12041717	Personal	Jacob Johnson-Laying wood & removing tools/support-Pump #LV-5	7:36 AM	12:01 PM	2.06	2.06
120408	12041718	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-30	7:45 AM	12:03 PM	2.06	2.06
120409	12041719	Personal	Jacob Johnson-Laying wood & removing tools/support-Pump #LV-5	12:02 PM	12:45 PM	2.06	2.06
120410	12041720	Area	End of Trestle 2-Pump #HV-33	12:06 PM	2:40 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120401	12041711	310	9.76	3025.6	8	100	0.005	0.0750	9.554	0.0012	1.741	<0.0021	N/A
120402	12041712	309	9.76	3015.84	7	100	0.005	0.0650	8.280	0.0011	1.785	<0.0019	N/A
120403	12041713	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.014
120404	12041714	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.011
120405	12041715	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
120406	12041716	283	2.06	582.98	11	100	0.005	0.1050	13.376	0.0088	1.655	<0.0146	0.014
120407	12041717	265	2.06	545.9	9	100	0.005	0.0850	10.828	0.0076	1.705	<0.0130	0.011
120408	12041718	258	2.06	531.48	7	100	0.005	0.0650	8.280	0.0060	1.785	<0.0107	0.011
120409	12041719	43	2.06	88.58	8	100	0.005	0.0750	9.554	0.0415	1.741	<0.0723	0.011
120410	12041720	154	9.76	1503.04	7.5	100	0.005	0.0700	8.917	0.0023	1.775	<0.0041	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 55
PAGE 2 **OF** 2

DATE COLLECTED 12/4/2017
DATE RECEIVED 12/4/2017
DATE ANALYZED 12/4/2017
DATE REPORTED 12/5/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12041709	0.5	100	0.5/100
B2	12041710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Carter/Johnson

SAMPLES ANALYZED BY: Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120411	12041721	Area	Loading Area between Trestles-Pump #HV-8	12:09 PM	2:42 PM	9.76	9.76
120412	12041722	Personal	Eduardo Gonzalez-Firehose operator-Pump #LV-30	12:47 PM	2:35 PM	2.06	2.06
120413	12041723	Personal	Kent Parker-Driving pylons & laborig-Pump #LV-1	1:26 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120411	12041721	153	9.76	1493.28	6	100	0.005	0.0550	7.006	0.0018	1.839	<0.0033	N/A
120412	12041722	108	2.06	222.48	9	100	0.005	0.0850	10.828	0.0187	1.705	<0.0319	0.011
120413	12041723	71	2.06	146.26	12	100	0.005	0.1150	14.650	0.0386	1.620	<0.0625	0.014

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 6, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/05/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/05/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 56
PAGE 1 **OF** 2

DATE COLLECTED 12/5/2017
DATE RECEIVED 12/5/2017
DATE ANALYZED 12/5/2017
DATE REPORTED 12/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12051709	1	100	1/100
B2	12051710	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120501	12051711	Area	End of Trestle 2-Pump #HV-705	6:57 AM	12:03 PM	9.21	9.21
120502	12051712	Area	Center of Loading Area-Pump #HV-706	7:00 AM	12:06 PM	9.21	9.21
120503	12051713	STEL	Mark Conway-Long reach operator-Pump #LV-30	7:09 AM	7:39 AM	2.06	2.06
120504	12051714	STEL	Mark Jeffers-Crane operator-Pump #LV-1	7:12 AM	7:42 AM	2.06	2.06
120505	12051715	STEL	Ever Bonilla-Firehose operator-Pump #LV-5	7:15 AM	7:45 AM	2.06	2.06
120506	12051716	Personal	Mark Conway-Long reach operator-Pump #LV-30	7:40 AM	12:00 PM	2.06	2.06
120507	12051717	Personal	Mark Jeffers-Crane operator-Pump #LV-1	7:43 AM	11:40 AM	2.06	2.06
120508	12051718	Personal	Ever Bonilla-Firehose operator-Pump #LV-5	7:46 AM	12:01 PM	2.06	2.06
120509	12051719	Area	End of Trestle 2-Pump #HV-705	12:04 PM	3:10 PM	9.21	9.21
120510	12051720	Area	Center of Loading Area-Pump #HV-706	12:07 PM	3:12 PM	9.21	9.21

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120501	12051711	306	9.21	2818.26	8	100	0.01	0.0700	8.917	0.0012	1.741	<0.0021	N/A
120502	12051712	306	9.21	2818.26	7.5	100	0.01	0.0650	8.280	0.0011	1.775	<0.0020	N/A
120503	12051713	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.011
120504	12051714	30	2.06	61.8	8.5	100	0.01	0.0750	9.554	0.0595	1.720	<0.1024	0.008
120505	12051715	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.012
120506	12051716	260	2.06	535.6	7.5	100	0.01	0.0650	8.280	0.0060	1.775	<0.0106	0.011
120507	12051717	237	2.06	488.22	9	100	0.01	0.0800	10.191	0.0080	1.705	<0.0137	0.008
120508	12051718	255	2.06	525.3	7.5	100	0.01	0.0650	8.280	0.0061	1.775	<0.0108	0.012
120509	12051719	186	9.21	1713.06	9	100	0.01	0.0800	10.191	0.0023	1.705	<0.0039	N/A
120510	12051720	185	9.21	1703.85	10	100	0.01	0.0900	11.465	0.0026	1.670	<0.0043	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 56
PAGE 2 **OF** 2

DATE COLLECTED 12/5/2017
DATE RECEIVED 12/5/2017
DATE ANALYZED 12/5/2017
DATE REPORTED 12/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12051709	1	100	1/100
B2	12051710	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120511	12051721	Personal	Ever Bonilla-Firehose operator-Pump #LV-5	12:09 PM	3:01 PM	2.06	2.06
120512	12051722	Personal	Mark Conway-Long reach operator-Pump #LV-30	12:31 PM	3:00 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120511	12051721	172	2.06	354.32	9	100	0.01	0.0800	10.191	0.0111	1.705	<0.0189	0.012
120512	12051722	149	2.06	306.94	9.5	100	0.01	0.0850	10.828	0.0136	1.690	<0.0230	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 7, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/06/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/06/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 57
PAGE 1 **OF** 2

DATE COLLECTED 12/6/2017
DATE RECEIVED 12/6/2017
DATE ANALYZED 12/6/2017
DATE REPORTED 12/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12061709	0	100	0/100
B2	12061710	1	100	1/100

SAMPLES COLLECTED BY: Sid Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120601	12061711	Area	End of Trestle 2-Pump #HV-33	6:55 AM	12:03 PM	9.76	9.76
120602	12061712	Area	Center Loading Area between Trestles-Pump #HV-8	7:00 AM	12:07 PM	9.76	9.76
120603	12061713	STEL	Brent Hardinger-Walking worksite-Pump #LV-30	7:06 AM	7:36 AM	2.06	2.06
120604	12061714	STEL	Mark Jeffers-Crane operator-Pump #LV-5	7:10 AM	7:40 AM	2.06	2.06
120605	12061715	STEL	Gary Reynolds-Loading debris by hand into dumpsters-Pump #LV-1	7:12 AM	7:42 AM	2.06	2.06
120606	12061716	Personal	Brent Hardinger-Walking worksite-Pump #LV-30	7:37 AM	12:00 PM	2.06	2.06
120607	12061717	Personal	Mark Jeffers-Crane operator-Pump #LV-5	7:41 AM	12:16 PM	2.06	2.06
120608	12061718	Personal	Gary Reynolds-Loading debris by hand into dumpsters-Pump #LV-1	7:43 AM	12:10 PM	2.06	2.06
120609	12061719	Personal	Brent Hardinger-Walking worksite-Pump #LV-30	12:01 PM	3:10 PM	2.06	2.06
120610	12061720	Area	End of Trestle 2-Pump #HV-33	12:04 PM	2:35 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120601	12061711	308	9.76	3006.08	11	100	0.005	0.1050	13.376	0.0017	1.655	<0.0028	N/A
120602	12061712	307	9.76	2996.32	9	100	0.005	0.0850	10.828	0.0014	1.705	<0.0024	N/A
120603	12061713	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
120604	12061714	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
120605	12061715	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
120606	12061716	263	2.06	541.78	8	100	0.005	0.0750	9.554	0.0068	1.741	<0.0118	0.010
120607	12061717	275	2.06	566.5	6.5	100	0.005	0.0600	7.643	0.0052	1.810	<0.0094	0.010
120608	12061718	267	2.06	550.02	10	100	0.005	0.0950	12.102	0.0085	1.670	<0.0141	0.011
120609	12061719	189	2.06	389.34	7.5	100	0.005	0.0700	8.917	0.0088	1.775	<0.0157	0.010
120610	12061720	151	9.76	1473.76	6.5	100	0.005	0.0600	7.643	0.0020	1.810	<0.0036	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 57
PAGE 2 **OF** 2

DATE COLLECTED 12/6/2017
DATE RECEIVED 12/6/2017
DATE ANALYZED 12/6/2017
DATE REPORTED 12/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12061709	0	100	0/100
B2	12061710	1	100	1/100

SAMPLES COLLECTED BY: Sid Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120611	12061721	Area	Center Loading Area between Trestles-Pump #HV-8	12:08 PM	2:37 PM	9.76	9.76
120612	12061722	Personal	Gary Reynolds-Loading debris by hand into dumpsters-Pump #LV-1	12:11 PM	2:40 PM	2.06	2.06
120613	12061723	Personal	Mark Jeffers-Crane operator-Pump #LV-5	12:17 PM	2:39 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120611	12061721	149	9.76	1454.24	6.5	100	0.005	0.0600	7.643	0.0020	1.810	<0.0037	N/A
120612	12061722	149	2.06	306.94	6.5	100	0.005	0.0600	7.643	0.0096	1.810	<0.0174	0.011
120613	12061723	142	2.06	292.52	6.5	100	0.005	0.0600	7.643	0.0101	1.810	<0.0182	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 8, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/07/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/07/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 58
PAGE 1 **OF** 2

DATE COLLECTED 12/7/2017
DATE RECEIVED 12/7/2017
DATE ANALYZED 12/7/2017
DATE REPORTED 12/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12071709	0.5	100	0.5/100
B2	12071710	1	100	1/100

SAMPLES COLLECTED BY: Sid Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120701	12071711	Area	End of Trestle 2-Pump #HV-33	6:55 AM	12:10 PM	9.76	9.76
120702	12071712	Area	Center Loading Area between Trestles-Pump #HV-08	6:58 AM	12:05 PM	9.76	9.76
120703	12071713	STEL	Justin Scott-Laborer assisting crane-Pump #LV-1	7:15 AM	7:45 AM	2.06	2.06
120704	12071714	STEL	Ever Bonilla-Loading debris by hand into dumpster-Pump #LV-5	7:23 AM	7:53 AM	2.06	2.06
120705	12071715	STEL	Mark Conway-Excavator operator-Pump #LV-30	7:29 AM	7:59 AM	2.06	2.06
120706	12071716	Personal	Justin Scott-Laborer assisting crane-Pump #LV-1	7:46 AM	12:13 PM	2.06	2.06
120707	12071717	Personal	Ever Bonilla-Loading debris by hand into dumpster-Pump #LV-5	7:54 AM	12:00 PM	2.06	2.06
120708	12071718	Personal	Mark Conway-Excavator operator-Pump #LV-30	8:00 AM	12:11 PM	2.06	2.06
120709	12071719	Area	Center Loading Area between Trestles-Pump #HV-08	12:06 PM	2:42 PM	9.76	9.76
120710	12071720	Area	End of Trestle 2-Pump #HV-33	12:11 PM	2:40 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120701	12071711	315	9.76	3074.4	7.5	100	0.0075	0.0675	8.599	0.0011	1.775	<0.0019	N/A
120702	12071712	307	9.76	2996.32	9.5	100	0.0075	0.0875	11.146	0.0014	1.690	<0.0024	N/A
120703	12071713	30	2.06	61.8	11	100	0.0075	0.1025	13.057	0.0813	1.655	<0.1346	0.013
120704	12071714	30	2.06	61.8	11	100	0.0075	0.1025	13.057	0.0813	1.655	<0.1346	0.011
120705	12071715	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.012
120706	12071716	267	2.06	550.02	8	100	0.0075	0.0725	9.236	0.0065	1.741	<0.0113	0.013
120707	12071717	246	2.06	506.76	7	100	0.0075	0.0625	7.962	0.0060	1.785	<0.0108	0.011
120708	12071718	251	2.06	517.06	10	100	0.0075	0.0925	11.783	0.0088	1.670	<0.0147	0.012
120709	12071719	156	9.76	1522.56	10.5	100	0.0075	0.0975	12.420	0.0031	1.660	<0.0052	N/A
120710	12071720	149	9.76	1454.24	12.5	100	0.0075	0.1175	14.968	0.0040	1.620	<0.0064	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 58
PAGE 2 **OF** 2

DATE COLLECTED 12/7/2017
DATE RECEIVED 12/7/2017
DATE ANALYZED 12/7/2017
DATE REPORTED 12/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12071709	0.5	100	0.5/100
B2	12071710	1	100	1/100

SAMPLES COLLECTED BY: Sid Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120711	12071721	Personal	Ever Bonilla-Loading debris by hand into dumpster-Pump #LV-5	12:33 PM	2:30 PM	2.06	2.06
120712	12071722	Personal	Mark Conway-Excavator operator-Pump #LV-30	12:45 PM	2:35 PM	2.06	2.06
120713	12071723	Personal	Justin Scott-Laborer assisting crane-Pump #LV-1	12:47 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120711	12071721	117	2.06	241.02	7	100	0.0075	0.0625	7.962	0.0127	1.785	<0.0227	0.011
120712	12071722	110	2.06	226.6	7.5	100	0.0075	0.0675	8.599	0.0146	1.775	<0.0259	0.012
120713	12071723	110	2.06	226.6	9.5	100	0.0075	0.0875	11.146	0.0189	1.690	<0.0320	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 11, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/08/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/08/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 59
PAGE 1 **OF** 2

DATE COLLECTED 12/8/2017
DATE RECEIVED 12/8/2017
DATE ANALYZED 12/8/2017
DATE REPORTED 12/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12081709	1	100	1/100
B2	12081710	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120801	12081711	STEL	Ever Bonilla-Firehose operator-Pump #LV-1	7:00 AM	7:30 AM	2.06	2.06
120802	12081712	STEL	Mark Jeffers-Crane operator-Pump #LV-30	7:05 AM	7:35 AM	2.06	2.06
120803	12081713	STEL	Gary Reynolds-Forklift operator-Pump #LV-2	7:07 AM	7:37 AM	2.06	2.06
120804	12081714	Area	End of Trestle 2-Pump #HV-33	7:12 AM	12:05 PM	9.76	9.76
120805	12081715	Area	Center Loading Area-Pump #HV-8	7:14 AM	12:07 PM	9.76	9.76
120806	12081716	Personal	Ever Bonilla-Firehose operator-Pump #LV-1	7:31 AM	12:02 PM	2.06	2.06
120807	12081717	Personal	Mark Jeffers-Crane operator-Pump #LV-30	7:36 AM	12:03 PM	2.06	2.06
120808	12081718	Personal	Gary Reynolds-Forklift operator-Pump #LV-2	7:38 AM	12:00 PM	2.06	2.06
120809	12081719	Area	End of Trestle 2-Pump #HV-33	12:06 PM	2:52 PM	9.76	9.76
120810	12081720	Area	Center Loading Area-Pump #HV-8	12:08 PM	2:54 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120801	12081711	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.011
120802	12081712	30	2.06	61.8	8.5	100	0.005	0.0800	10.191	0.0635	1.720	<0.1092	0.012
120803	12081713	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
120804	12081714	293	9.76	2859.68	7.5	100	0.005	0.0700	8.917	0.0012	1.775	<0.0021	N/A
120805	12081715	293	9.76	2859.68	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0019	N/A
120806	12081716	271	2.06	558.26	8	100	0.005	0.0750	9.554	0.0066	1.741	<0.0115	0.011
120807	12081717	267	2.06	550.02	9	100	0.005	0.0850	10.828	0.0076	1.705	<0.0129	0.012
120808	12081718	262	2.06	539.72	9.5	100	0.005	0.0900	11.465	0.0082	1.690	<0.0138	0.010
120809	12081719	166	9.76	1620.16	10.5	100	0.005	0.1000	12.739	0.0030	1.660	<0.0050	N/A
120810	12081720	166	9.76	1620.16	8.0	100	0.005	0.0750	9.554	0.0023	1.741	<0.0040	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 59
PAGE 2 **OF** 2

DATE COLLECTED 12/8/2017
DATE RECEIVED 12/8/2017
DATE ANALYZED 12/8/2017
DATE REPORTED 12/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12081709	1	100	1/100
B2	12081711	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120811	12081721	Personal	Gary Reynolds-Forklift operator-Pump #LV-2	12:30 PM	2:45 PM	2.06	2.06
120812	12081722	Personal	Ever Bonilla-Firehose operator-Pump #LV-1	12:35 PM	2:38 PM	2.06	2.06
120813	12081723	Personal	Mark Jeffers-Crane operator-Pump #LV-30	12:45 PM	2:00 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
120811	12081721	135	2.06	278.1	6.5	100	0.005	0.0600	7.643	0.0106	1.810	<0.0192	0.010
120812	12081722	123	2.06	253.38	10	100	0.005	0.0950	12.102	0.0184	1.670	<0.0307	0.011
120813	12081723	75	2.06	154.5	7.5	100	0.005	0.0700	8.917	0.0222	1.775	<0.0394	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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Clean your world.

December 11, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/09/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/09/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 60
PAGE 1 **OF** 1

DATE COLLECTED 12/9/2017
DATE RECEIVED 12/9/2017
DATE ANALYZED 12/9/2017
DATE REPORTED 12/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12091709	1	100	1/100
B2	12091710	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Pete Coleman

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
120901	12091711	Area	East-end of Ramp on Trestle 2-Pump #HV-31	7:25 AM	12:07 PM	9.76	9.76
120902	12091712	Area	Center Loading Area between Trestle 1 & Trestle 2-Pump #HV-33	7:28 AM	12:01 PM	9.76	9.76
120903	12091713	STEL	Ever Bonilla-Firehose operator-Pump #LV-1	7:37 AM	8:07 AM	2.06	2.06
120904	12091714	STEL	Brent Hardinger-Excavator operator-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
120905	12091715	Personal	Ever Bonilla-Firehose operator-Pump #LV-1	8:08 AM	12:20 PM	2.06	2.06
120906	12091716	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	8:11 AM	12:28 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
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120902	12091712	273	9.76	2664.48	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
120903	12091713	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.007
120904	12091714	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.007
120905	12091715	252	2.06	519.12	9	100	0.0075	0.0825	10.510	0.0078	1.705	<0.0133	0.007
120906	12091716	257	2.06	529.42	8	100	0.0075	0.0725	9.236	0.0067	1.741	<0.0117	0.007

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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December 12, 2017

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Bothell, WA 98011

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/11/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 61
PAGE 1 **OF** 1

DATE COLLECTED 12/11/2017
DATE RECEIVED 12/11/2017
DATE ANALYZED 12/11/2017
DATE REPORTED 12/12/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12111706	0.5	100	0.5/100
B2	12111707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121101	12111708	Area	Ramp of Trestle 2-Pump #HV-8	7:12 AM	12:02 PM	9.76	9.76
121102	12111709	Area	Center Loading Area-Pump #HV-33	7:18 AM	12:00 PM	9.76	9.76
121103	12111710	STEL	Mark Conway-Excavator operator-Pump #LV-1	7:20 AM	7:50 AM	2.06	2.06
121104	12111711	STEL	Luis Penarah-Laborer-Pump #LV-5	7:24 AM	7:54 AM	2.06	2.06
121105	12111712	Personal	Mark Conway-Excavator operator-Pump #LV-1	7:51 AM	12:31 PM	2.06	2.06
121106	12111713	Personal	Luis Penarah-Laborer-Pump #LV-5	7:55 AM	12:07 PM	2.06	2.06
121107	12111714	Area	Center Loading Area-Pump #HV-33	12:01 PM	2:30 PM	9.76	9.76
121108	12111715	Area	Ramp of Trestle 2-Pump #HV-8	12:03 PM	2:33 PM	9.76	9.76
121109	12111716	Personal	Luis Penarah-Laborer-Pump #LV-5	12:30 PM	2:34 PM	2.06	2.06
121110	12111717	Personal	Mark Conway-Excavator operator-Pump #LV-1	12:32 PM	2:36 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121101	12111708	290	9.76	2830.4	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0019	N/A
121102	12111709	282	9.76	2752.32	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
121103	12111710	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
121104	12111711	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.013
121105	12111712	280	2.06	576.8	8.5	100	0.005	0.0800	10.191	0.0068	1.720	<0.0117	0.010
121106	12111713	252	2.06	519.12	10	100	0.005	0.0950	12.102	0.0090	1.670	<0.0150	0.013
121107	12111714	149	9.76	1454.24	8.5	100	0.005	0.0800	10.191	0.0027	1.720	<0.0046	N/A
121108	12111715	150	9.76	1464	6.5	100	0.005	0.0600	7.643	0.0020	1.810	<0.0036	N/A
121109	12111716	124	2.06	255.44	12	100	0.005	0.1150	14.650	0.0221	1.620	<0.0358	0.013
121110	12111717	124	2.06	255.44	7	100	0.005	0.0650	8.280	0.0125	1.785	<0.0223	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 13, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/12/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/12/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 62
PAGE 1 **OF** 1

DATE COLLECTED 12/12/2017
DATE RECEIVED 12/12/2017
DATE ANALYZED 12/12/2017
DATE REPORTED 12/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12121706	0.5	100	0.5/100
B2	12121707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121201	12121708	Area	Center Loading Area-Pump #HV-33	6:50 AM	12:03 PM	9.76	9.76
121202	12121709	Area	Ramp of Trestle 2-Pump #HV-8	6:51 AM	12:01 PM	9.76	9.76
121203	12121710	STEL	Ever Bonilla-Firehose operator-Pump #LV-1	6:54 AM	7:24 AM	2.06	2.06
121204	12121711	STEL	Brent Hardinger-Excavator operator-Pump #LV-5	7:00 AM	7:30 AM	2.06	2.06
121205	12121712	Personal	Ever Bonilla-Firehose operator-Pump #LV-1	7:25 AM	11:57 AM	2.06	2.06
121206	12121713	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	7:31 AM	12:00 PM	2.06	2.06
121207	12121714	Area	Ramp of Trestle 2-Pump #HV-8	12:02 PM	2:51 PM	9.76	9.76
121208	12121715	Area	Center Loading Area-Pump #HV-33	12:04 PM	2:50 PM	9.76	9.76
121209	12121716	Personal	Ever Bonilla-Firehose operator-Pump #LV-1	12:35 PM	2:54 PM	2.06	2.06
121210	12121717	Personal	Brent Hardinger-Excavator operator-Pump #LV-5	12:40 PM	2:53 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121201	12121708	313	9.76	3054.88	10	100	0.005	0.0950	12.102	0.0015	1.670	<0.0025	N/A
121202	12121709	310	9.76	3025.6	8.5	100	0.005	0.0800	10.191	0.0013	1.720	<0.0022	N/A
121203	12121710	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.012
121204	12121711	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
121205	12121712	272	2.06	560.32	6.5	100	0.005	0.0600	7.643	0.0053	1.810	<0.0095	0.012
121206	12121713	269	2.06	554.14	7.5	100	0.005	0.0700	8.917	0.0062	1.775	<0.0110	0.011
121207	12121714	169	9.76	1649.44	8	100	0.005	0.0750	9.554	0.0022	1.741	<0.0039	N/A
121208	12121715	166	9.76	1620.16	6.5	100	0.005	0.0600	7.643	0.0018	1.810	<0.0033	N/A
121209	12121716	139	2.06	286.34	10	100	0.005	0.0950	12.102	0.0163	1.670	<0.0272	0.012
121210	12121717	133	2.06	273.98	9	100	0.005	0.0850	10.828	0.0152	1.705	<0.0259	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 14, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/13/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/13/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 63
PAGE 1 **OF** 1

DATE COLLECTED 12/13/2017
DATE RECEIVED 12/13/2017
DATE ANALYZED 12/13/2017
DATE REPORTED 12/14/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12131706	1	100	1/100
B2	12131707	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121301	12131708	Area	Trestle 2-Pump #HV-33	6:58 AM	12:03 PM	9.76	9.76
121302	12131709	Area	Northside of Worksite-Pump #HV-8	7:08 AM	12:00 PM	9.76	9.76
121303	12131710	STEL	Luis Peneda-Cutting & removing deck by hand-Pump #LV-1	7:18 AM	7:48 AM	2.06	2.06
121304	12131711	STEL	Eduardo Gonzalez-Firehose Operator-Pump #LV-5	7:22 AM	7:52 AM	2.06	2.06
121305	12131712	Personal	Luis Peneda-Cutting & removing deck by hand-Pump #LV-1	7:49 AM	12:40 PM	2.06	2.06
121306	12131713	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-5	7:53 AM	12:10 PM	2.06	2.06
121307	12131714	Area	Northside of Worksite-Pump #HV-8	12:01 PM	2:42 PM	9.76	9.76
121308	12131715	Area	Trestle 2-Pump #HV-33	12:04 PM	2:47 PM	9.76	9.76
121309	12131716	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-5	12:39 PM	2:35 PM	2.06	2.06
121310	12131717	Personal	Luis Peneda-Cutting & removing deck by hand-Pump #LV-1	12:41 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121301	12131708	305	9.76	2976.8	8.5	100	0.005	0.0800	10.191	0.0013	1.720	<0.0023	N/A
121302	12131709	292	9.76	2849.92	7	100	0.005	0.0650	8.280	0.0011	1.785	<0.0020	N/A
121303	12131710	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.012
121304	12131711	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.014
121305	12131712	291	2.06	599.46	10	100	0.005	0.0950	12.102	0.0078	1.670	<0.0130	0.012
121306	12131713	257	2.06	529.42	8.5	100	0.005	0.0800	10.191	0.0074	1.720	<0.0127	0.014
121307	12131714	161	9.76	1571.36	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0039	N/A
121308	12131715	163	9.76	1590.88	9	100	0.005	0.0850	10.828	0.0026	1.705	<0.0045	N/A
121309	12131716	116	2.06	238.96	11	100	0.005	0.1050	13.376	0.0216	1.655	<0.0357	0.014
121310	12131717	109	2.06	224.54	9	100	0.005	0.0850	10.828	0.0186	1.705	<0.0317	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 15, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/14/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/14/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 64
PAGE 1 **OF** 1

DATE COLLECTED 12/14/2017
DATE RECEIVED 12/14/2017
DATE ANALYZED 12/14/2017
DATE REPORTED 12/15/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12141706	1	100	1/100
B2	12141707	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121401	12141708	Area	East End of Trestle 2-Pump #HV-08	7:25 AM	12:48 PM	9.76	9.76
121402	12141709	Area	Northwest Corner of Worksite-Pump #HV-33	7:28 AM	12:40 PM	9.76	9.76
121403	12141710	STEL	Gary Reynolds-Cutting decking by hand-Pump #LV-5	7:33 AM	8:03 AM	2.06	2.06
121404	12141711	STEL	Mark Conway-Excavator Operator-Pump #LV-1	7:37 AM	8:07 AM	2.06	2.06
121405	12141712	Personal	Gary Reynolds-Cutting decking by hand-Pump #LV-5	8:04 AM	12:32 PM	2.06	2.06
121406	12141713	Personal	Mark Conway-Excavator Operator-Pump #LV-1	8:08 AM	12:38 PM	2.06	2.06
121407	12141714	Personal	Gary Reynolds-Cutting decking by hand-Pump #LV-5	12:33 PM	2:59 PM	2.06	2.06
121408	12141715	Personal	Mark Conway-Excavator Operator-Pump #LV-1	12:04 PM	2:47 PM	2.06	2.06
121409	12141716	Area	East End of Trestle 2-Pump #HV-08	12:49 PM	3:06 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121401	12141708	323	9.76	3152.48	11	100	0.01	0.1000	12.739	0.0016	1.655	<0.0026	N/A
121402	12141709	312	9.76	3045.12	9.5	100	0.01	0.0850	10.828	0.0014	1.690	<0.0023	N/A
121403	12141710	30	2.06	61.8	8.5	100	0.01	0.0750	9.554	0.0595	1.720	<0.1024	0.011
121404	12141711	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
121405	12141712	268	2.06	552.08	8	100	0.01	0.0700	8.917	0.0062	1.741	<0.0108	0.011
121406	12141713	270	2.06	556.2	8	100	0.01	0.0700	8.917	0.0062	1.741	<0.0107	0.011
121407	12141714	146	2.06	300.76	9.5	100	0.01	0.0850	10.828	0.0139	1.690	<0.0234	0.011
121408	12141715	163	2.06	335.78	9.5	100	0.01	0.0850	10.828	0.0124	1.690	<0.0210	0.011
121409	12141716	137	9.76	1337.12	10	100	0.01	0.0900	11.465	0.0033	1.670	<0.0055	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 18, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/15/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/15/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 65
PAGE 1 **OF** 1

DATE COLLECTED 12/15/2017
DATE RECEIVED 12/15/2017
DATE ANALYZED 12/15/2017
DATE REPORTED 12/18/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12151706	0.5	100	0.5/100
B2	12151707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Rate Start	Flow Rate End
121501	12151708	STEL	Brent Hardinger-Excavator Operator-Pump #LV-1	7:20 AM	7:50 AM	2.06	2.06
121502	12151709	STEL	Luis Penaraha-Firehose Operator-Pump #LV-5	7:22 AM	7:52 AM	2.06	2.06
121503	12151710	Area	Trestle 2 Ramp-Pump #HV-8	7:24 AM	12:00 PM	9.76	9.76
121504	12151711	Area	Northwest Corner of Worksite	7:26 AM	12:02 PM	9.76	9.76
121505	12151712	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	7:51 AM	12:05 PM	2.06	2.06
121506	12151713	Personal	Luis Penaraha-Firehose Operator-Pump #LV-5	7:53 AM	12:20 PM	2.06	2.06
121507	12151714	Area	Trestle 2 Ramp-Pump #HV-8	12:01 PM	2:33 PM	9.76	9.76
121508	12151715	Area	Northwest Corner of Worksite	12:03 PM	2:35 PM	9.76	9.76
121509	12151716	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	12:45 PM	2:30 PM	2.06	2.06
121510	12151717	Personal	Luis Penaraha-Firehose Operator-Pump #LV-5	12:50 PM	2:31 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121501	12151708	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.010
121502	12151709	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.012
121503	12151710	276	9.76	2693.76	8.5	100	0.0075	0.0775	9.873	0.0014	1.720	<0.0024	N/A
121504	12151711	276	9.76	2693.76	7	100	0.0075	0.0625	7.962	0.0011	1.785	<0.0020	N/A
121505	12151712	254	2.06	523.24	7	100	0.0075	0.0625	7.962	0.0059	1.785	<0.0105	0.010
121506	12151713	267	2.06	550.02	10.5	100	0.0075	0.0975	12.420	0.0087	1.660	<0.0144	0.012
121507	12151714	152	9.76	1483.52	12	100	0.0075	0.1125	14.331	0.0037	1.620	<0.0060	N/A
121508	12151715	152	9.76	1483.52	7.5	100	0.0075	0.0675	8.599	0.0022	1.775	<0.0040	N/A
121509	12151716	105	2.06	216.3	8	100	0.0075	0.0725	9.236	0.0164	1.741	<0.0286	0.010
121510	12151717	101	2.06	208.06	8	100	0.0075	0.0725	9.236	0.0171	1.741	<0.0297	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 19, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/16/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/16/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 66
PAGE 1 **OF** 1

DATE COLLECTED 12/16/2017
DATE RECEIVED 12/16/2017
DATE ANALYZED 12/16/2017
DATE REPORTED 12/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12161706	1	100	1/100
B2	12161707	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121601	12161708	STEL	Brent Hardinger-Excavator Operator-Pump #LV-30	7:04 AM	7:34 AM	2.06	2.06
121602	12161709	STEL	Eduardo Gonzalez-Firehose Operator-Pump #LV-1	7:06 AM	7:36 AM	2.06	2.06
121603	12161710	Area	End of Trestle 2-Pump #HV-8	7:10 AM	12:10 PM	9.76	9.76
121604	12161711	Area	End of Trestle 1-Pump #HV-33	7:15 AM	12:15 PM	9.76	9.76
121605	12161712	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-1	7:37 AM	12:00 PM	2.06	2.06
121606	12161713	Personal	Brent Hardinger-Excavator Operator-Pump #LV-30	7:41 AM	12:20 PM	2.06	2.06
121607	12161714	Area	End of Trestle 2-Pump #HV-8	12:11 PM	2:41 PM	9.76	9.76
121608	12161715	Area	End of Trestle 1-Pump #HV-33	12:16 PM	2:42 PM	9.76	9.76
121609	12161716	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-1	12:40 PM	2:37 PM	2.06	2.06
121610	12161717	Personal	Brent Hardinger-Excavator Operator-Pump #LV-30	12:50 PM	2:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121601	12161708	30	2.06	61.8	13	100	0.005	0.1250	15.924	0.0992	1.610	<0.1597	0.012
121602	12161709	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
121603	12161710	300	9.76	2928	8	100	0.005	0.0750	9.554	0.0013	1.741	<0.0022	N/A
121604	12161711	300	9.76	2928	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0018	N/A
121605	12161712	263	2.06	541.78	11	100	0.005	0.1050	13.376	0.0095	1.655	<0.0157	0.009
121606	12161713	279	2.06	574.74	6.5	100	0.005	0.0600	7.643	0.0051	1.810	<0.0093	0.012
121607	12161714	150	9.76	1464	7	100	0.005	0.0650	8.280	0.0022	1.785	<0.0039	NA
121608	12161715	146	9.76	1424.96	10	100	0.005	0.0950	12.102	0.0033	1.670	<0.0055	N/A
121609	12161716	117	2.06	241.02	11.5	100	0.005	0.1100	14.013	0.0224	1.635	<0.0366	0.009
121610	12161717	105	2.06	216.3	6.5	100	0.005	0.0600	7.643	0.0136	1.810	<0.0246	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 19, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/18/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/18/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 67
PAGE 1 **OF** 2

DATE COLLECTED 12/18/2017
DATE RECEIVED 12/18/2017
DATE ANALYZED 12/18/2017
DATE REPORTED 12/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12181706	1	100	1/100
B2	12181707	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121801	12181708	Area	End of Trestle 2-Pump #HV-08	7:25 AM	12:10 PM	9.76	9.76
121802	12181709	Area	Mid-span of Trestle 1-Pump #HV-33	7:30 AM	12:12 PM	9.76	9.76
121803	12181710	STEL	Mark Jeffers-Crane Operator-Pump #LV-38	7:44 AM	8:14 AM	2.06	2.06
121804	12181711	STEL	Brent Hardinger-Excavator Operator-Pump #LV-32	7:47 AM	8:17 AM	2.06	2.06
121805	12181712	STEL	Travis Harrison-Poly lining dumpsters & trucks-Pump #LV-1	7:49 AM	8:19 AM	2.06	2.06
121806	12181713	Personal	Mark Jeffers-Crane Operator-Pump #LV-38	8:15 AM	12:01 PM	2.06	2.06
121807	12181714	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	8:18 AM	12:03 PM	2.06	2.06
121808	12181715	Personal	Travis Harrison-Poly lining dumpsters & trucks-Pump #LV-1	8:20 AM	12:04 PM	2.06	2.06
121809	12181716	Area	End of Trestle 2-Pump #HV-08	12:11 PM	2:52 PM	9.76	9.76
121810	12181717	Area	Mid-span of Trestle 1-Pump #HV-33	12:13 PM	2:55 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121801	12181708	285	9.76	2781.6	8	100	0.005	0.0750	9.554	0.0013	1.741	<0.0023	N/A
121802	12181709	282	9.76	2752.32	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
121803	12181710	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.009
121804	12181711	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.012
121805	12181712	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
121806	12181713	226	2.06	465.56	6.5	100	0.005	0.0600	7.643	0.0063	1.810	<0.0114	0.009
121807	12181714	225	2.06	463.5	9	100	0.005	0.0850	10.828	0.0090	1.705	<0.0153	0.012
121808	12181715	224	2.06	461.44	6.5	100	0.005	0.0600	7.643	0.0064	1.810	<0.0115	0.009
121809	12181716	161	9.76	1571.36	9.5	100	0.005	0.0900	11.465	0.0028	1.690	<0.0047	N/A
121810	12181717	162	9.76	1581.12	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0034	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 67
PAGE 2 **OF** 2

DATE COLLECTED 12/18/2017
DATE RECEIVED 12/18/2017
DATE ANALYZED 12/18/2017
DATE REPORTED 12/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12181706	1	100	1/100
B2	12181707	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121811	12181718	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	12:41 PM	2:48 PM	2.06	2.06
121812	12181719	Personal	Travis Harrison-Poly lining dumpsters & trucks-Pump #LV-1	12:45 PM	2:50 PM	2.06	2.06
121813	12181720	Personal	Mark Jeffers-Crane Operator-Pump #LV-38	1:10 PM	2:46 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121811	12181718	127	2.06	261.62	10	100	0.005	0.0950	12.102	0.0178	1.670	<0.0297	0.012
121812	12181719	125	2.06	257.5	6.5	100	0.005	0.0600	7.643	0.0114	1.810	<0.0207	0.009
121813	12181720	96	2.06	197.76	6.5	100	0.005	0.0600	7.643	0.0149	1.810	<0.0269	0.009

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/19/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/19/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 68
PAGE 1 **OF** 2

DATE COLLECTED 12/19/2017
DATE RECEIVED 12/19/2017
DATE ANALYZED 12/19/2017
DATE REPORTED 12/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12191706	0.5	100	0.5/100
B2	12191707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121901	12191708	STEL	Eduardo Gonzalez-Firehose Operator-Pump #LV-32	7:23 AM	7:53 AM	2.06	2.06
121902	12191709	STEL	Mark Jeffers-Crane Operator-Pump #LV-34	7:25 AM	7:55 AM	2.06	2.06
121903	12191710	STEL	Mark Conway-Excavator Operator-Pump #LV-38	7:27 AM	7:57 AM	2.06	2.06
121904	12191711	Area	Mid-Point of Trestle 1-Pump #HV-8	7:30 AM	12:02 PM	9.76	9.76
121905	12191712	Area	End of Trestle 2-Pump #HV-33	7:35 AM	12:05 PM	9.76	9.76
121906	12191713	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-32	7:54 AM	11:50 AM	2.06	2.06
121907	12191714	Personal	Mark Jeffers-Crane Operator-Pump #LV-34	7:56 AM	12:00 PM	2.06	2.06
121908	12191715	Personal	Mark Conway-Excavator Operator-Pump #LV-38	7:58 AM	11:55 AM	2.06	2.06
121909	12191716	Area	Mid-Point of Trestle 1-Pump #HV-8	12:03 PM	2:45 PM	9.76	9.76
121910	12191717	Area	End of Trestle 2-Pump #HV-33	12:06 PM	2:47 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121901	12191708	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.011
121902	12191709	30	2.06	61.8	10.5	100	0.0075	0.0975	12.420	0.0774	1.660	<0.1284	0.012
121903	12191710	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.012
121904	12191711	272	9.76	2654.72	11.5	100	0.0075	0.1075	13.694	0.0020	1.635	<0.0032	N/A
121905	12191712	270	9.76	2635.2	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
121906	12191713	236	2.06	486.16	7.5	100	0.0075	0.0675	8.599	0.0068	1.775	<0.0121	0.011
121907	12191714	244	2.06	502.64	6.5	100	0.0075	0.0575	7.325	0.0056	1.810	<0.0102	0.012
121908	12191715	237	2.06	488.22	9	100	0.0075	0.0825	10.510	0.0083	1.705	<0.0141	0.012
121909	12191716	162	9.76	1581.12	6.5	100	0.0075	0.0575	7.325	0.0018	1.810	<0.0032	N/A
121910	12191717	161	9.76	1571.36	8.5	100	0.0075	0.0775	9.873	0.0024	1.720	<0.0042	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 68
PAGE 2 **OF** 2

DATE COLLECTED 12/19/2017
DATE RECEIVED 12/19/2017
DATE ANALYZED 12/19/2017
DATE REPORTED 12/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12191706	0.5	100	0.5/100
B2	12191707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
121911	12191718	Personal	Eduardo Gonzalez-Firehose Operator-Pump #LV-32	12:23 PM	2:35 PM	2.06	2.06
121912	12191719	Personal	Mark Jeffers-Crane Operator-Pump #LV-34	12:35 PM	2:38 PM	2.06	2.06
121913	12191720	Personal	Mark Conway-Excavator Operator-Pump #LV-38	12:40 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
121911	12191718	132	2.06	271.92	8	100	0.0075	0.0725	9.236	0.0131	1.741	<0.0228	0.011
121912	12191719	123	2.06	253.38	9.5	100	0.0075	0.0875	11.146	0.0169	1.690	<0.0286	0.012
121913	12191720	120	2.06	247.2	10	100	0.0075	0.0925	11.783	0.0184	1.670	<0.0306	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 21, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/20/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/20/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 69
PAGE 1 **OF** 2

DATE COLLECTED 12/20/2017
DATE RECEIVED 12/20/2017
DATE ANALYZED 12/20/2017
DATE REPORTED 12/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12201706	1	100	1/100
B2	12201707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122001	12201708	Area	Mid-point of Trestle 2/NW Corner beyond fence of worksite-Pump #HV-8	7:20 AM	12:01 PM	9.76	9.76
122002	12201709	Area	End of Trestle 2-Pump #HV-33	7:25 AM	7:55 AM	9.76	9.76
122003	12201710	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:31 AM	8:01 AM	2.06	2.06
122004	12201711	STEL	Brent Hardinger-Excavator Operator-Pump #LV-1	7:36 AM	8:06 AM	2.06	2.06
122005	12201712	STEL	Ever Bonilla-Firehose Operator-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
122006	12201713	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:02 AM	11:55 AM	2.06	2.06
122007	12201714	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	8:07 AM	11:58 AM	2.06	2.06
122008	12201715	Personal	Ever Bonilla-Firehose Operator-Pump #LV-5	8:11 AM	12:00 PM	2.06	2.06
122009	12201716	Area	Mid-point of Trestle 2/NW Corner beyond fence of worksite-Pump #HV-8	12:02 PM	2:45 PM	9.76	9.76
122010	12201717	Area	End of Trestle 2-Pump #HV-33	12:06 PM	2:48 AM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122001	12201708	281	9.76	2742.56	9	100	0.01	0.0800	10.191	0.0014	1.705	<0.0024	N/A
122002	12201709	30	9.76	292.8	11.0	100	0.01	0.1000	12.739	0.0168	1.655	<0.0277	N/A
122003	12201710	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
122004	12201711	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.016
122005	12201712	30	2.06	61.8	12	100	0.01	0.1100	14.013	0.0873	1.620	<0.1414	0.015
122006	12201713	233	2.06	479.98	8	100	0.01	0.0700	8.917	0.0072	1.741	<0.0124	0.011
122007	12201714	231	2.06	475.86	8.5	100	0.01	0.0750	9.554	0.0077	1.720	<0.0133	0.016
122008	12201715	229	2.06	471.74	13.5	100	0.01	0.1250	15.924	0.0130	1.600	<0.0208	0.015
122009	12201716	163	9.76	1590.88	8.5	100	0.01	0.0750	9.554	0.0023	1.720	<0.0040	N/A
122010	12201717	882	9.76	8608.32	15	100	0.01	0.1400	17.834	0.0008	1.575	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 69
PAGE 2 **OF** 2

DATE COLLECTED 12/20/2017
DATE RECEIVED 12/20/2017
DATE ANALYZED 12/20/2017
DATE REPORTED 12/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12201706	1	100	1/100
B2	12201707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122011	12201718	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:30 PM	2:35 PM	2.06	2.06
122012	12201719	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	12:31 PM	2:37 PM	2.06	2.06
122013	12201720	Personal	Ever Bonilla-Firehose Operator-Pump #LV-5	12:33 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122011	12201718	125	2.06	257.5	10	100	0.01	0.0900	11.465	0.0171	1.670	<0.0286	0.011
122012	12201719	126	2.06	259.56	16	100	0.01	0.1500	19.108	0.0283	1.550	<0.0439	0.016
122013	12201720	127	2.06	261.62	8	100	0.01	0.0700	8.917	0.0131	1.741	<0.0228	0.015

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 3, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/02/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/02/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 76
PAGE 1 **OF** 2

DATE COLLECTED 1/2/2018
DATE RECEIVED 1/2/2018
DATE ANALYZED 1/2/2018
DATE REPORTED 1/3/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1021801	0	100	0/100
B2	1021802	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10201	1021803	Area	End of Trestle 2-Pump #HV-8	7:30 AM	12:08 PM	9.76	9.76
10202	1021804	Area	Northwest corner of work site-Pump #HV-38	7:35 AM	8:05 AM	9.76	9.76
10203	1021805	Area	End of Trestle 1-Pump #HV-51	7:40 AM	12:13 PM	9.76	9.76
10204	1021806	STEL	Mark Jeffers-Crane operator-Pump #LV-1	7:42 AM	8:12 AM	2.06	2.06
10205	1021807	STEL	Brent Hardinger-Excavator operator-Pump #LV-30	7:44 AM	8:14 AM	2.06	2.06
10206	1021808	STEL	Richard Stuart-Lining dumpsters-Pump #LV-5	7:47 AM	8:17 AM	2.06	2.06
10207	1021809	Personal	Mark Jeffers-Crane operator-Pump #LV-1	8:13 AM	11:55 AM	2.06	2.06
10208	1021810	Personal	Brent Hardinger-Excavator operator-Pump #LV-30	8:15 AM	12:00 PM	2.06	2.06
10209	1021811	Personal	Richard Stuart-Lining dumpsters-Pump #LV-5	8:18 AM	12:05 PM	2.06	2.06
10210	1021812	Area	End of Trestle 2-Pump #HV-8	12:09 PM	2:30 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10201	1021803	278	9.76	2713.28	8.5	100	0.005	0.0800	10.191	0.0014	1.720	<0.0025	N/A
10202	1021804	30	9.76	292.8	7	100	0.005	0.0650	8.280	0.0109	1.785	<0.0194	N/A
10203	1021805	273	9.76	2664.48	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
10204	1021806	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
10205	1021807	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.015
10206	1021808	30	2.06	61.8	12	100	0.005	0.1150	14.650	0.0913	1.620	<0.1478	0.013
10207	1021809	222	2.06	457.32	6.5	100	0.005	0.0600	7.643	0.0064	1.810	<0.0116	0.010
10208	1021810	225	2.06	463.5	7	100	0.005	0.0650	8.280	0.0069	1.785	<0.0123	0.015
10209	1021811	227	2.06	467.62	10	100	0.005	0.0950	12.102	0.0100	1.670	<0.0166	0.013
10210	1021812	141	9.76	1376.16	11	100	0.005	0.1050	13.376	0.0037	1.655	<0.0062	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 76
PAGE 2 **OF** 2

DATE COLLECTED 1/2/2018
DATE RECEIVED 1/2/2018
DATE ANALYZED 1/2/2018
DATE REPORTED 1/3/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12291706	1	100	1/100
B2	12291707	0	100	0/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10211	1021813	Area	Northwest corner of work site-Pump #HV-38	12:11 PM	2:33 PM	9.76	9.76
10212	1021814	Area	End of Trestle 1-Pump #HV-51	12:14 PM	2:35 PM	9.76	9.76
10213	1021815	Personal	Mark Jeffers-Crane operator-Pump #LV-1	12:35 PM	2:40 PM	2.06	2.06
10214	1021816	Personal	Brent Hardinger-Excavator operator-Pump #LV-30	12:40 PM	2:45 PM	2.06	2.06
10215	1021817	Personal	Richard Stuart-Lining dumpsters-Pump #LV-5	12:41 PM	2:38 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10211	1021813	142	9.76	1385.92	14	100	0.005	0.1350	17.197	0.0048	1.590	<0.0076	N/A
10212	1021814	141	9.76	1376.16	9	100	0.005	0.0850	10.828	0.0030	1.705	<0.0052	N/A
10213	1021815	125	2.06	257.5	7	100	0.005	0.0650	8.280	0.0124	1.785	<0.0221	0.010
10214	1021816	125	2.06	257.5	15	100	0.005	0.1450	18.471	0.0276	1.575	<0.0435	0.015
10215	1021817	117	2.06	241.02	6.5	100	0.005	0.0600	7.643	0.0122	1.810	<0.0221	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/03/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/03/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 77
PAGE 1 **OF** 2

DATE COLLECTED 1/3/2018
DATE RECEIVED 1/3/2018
DATE ANALYZED 1/3/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1031806	0.5	100	0.5/100
B2	1031807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10301	1031808	Area	End of Trestle 1-Pump #HV-8	7:41 AM	12:05 PM	9.76	9.76
10302	1031809	Area	End of Trestle 2-Pump #HV-33	7:50 AM	12:08 PM	9.76	9.76
10303	1031810	STEL	Jacob Johnson-Cutting & removing deck sections-Pump #LV-1	7:55 AM	8:25 AM	2.06	2.06
10304	1031811	STEL	Mark Conway-Excavator operator-Pump #LV-5	8:00 AM	8:30 AM	2.06	2.06
10305	1031812	STEL	Kent Parker-Lead-Pump #LV-36	8:05 AM	8:35 AM	2.06	2.06
10306	1031813	Area	Northside of Regulated Area-Pump #HV-51	8:10 AM	12:11 PM	9.76	9.76
10307	1031814	Personal	Jacob Johnson-Cutting & removing deck sections-Pump #LV-1	8:26 AM	11:50 AM	2.06	2.06
10308	1031815	Personal	Mark Conway-Excavator operator-Pump #LV-5	8:31 AM	12:00 PM	2.06	2.06
10309	1031816	Personal	Kent Parker-Lead-Pump #LV-36	8:36 AM	12:02 PM	2.06	2.06
10310	1031817	Area	End of Trestle 1-Pump #HV-8	12:06 PM	2:55 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10301	1031808	264	9.76	2576.64	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
10302	1031809	258	9.76	2518.08	8	100	0.0075	0.0725	9.236	0.0014	1.741	<0.0025	N/A
10303	1031810	30	2.06	61.8	10.5	100	0.0075	0.0975	12.420	0.0774	1.660	<0.1284	0.013
10304	1031811	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.012
10305	1031812	30	2.06	61.8	12	100	0.0075	0.1125	14.331	0.0893	1.620	<0.1446	0.013
10306	1031813	241	9.76	2352.16	7	100	0.0075	0.0625	7.962	0.0013	1.785	<0.0023	N/A
10307	1031814	204	2.06	420.24	11	100	0.0075	0.1025	13.057	0.0120	1.655	<0.0198	0.013
10308	1031815	209	2.06	430.54	11.5	100	0.0075	0.1075	13.694	0.0122	1.635	<0.0200	0.012
10309	1031816	206	2.06	424.36	10	100	0.0075	0.0925	11.783	0.0107	1.670	<0.0179	0.013
10310	1031817	169	9.76	1649.44	7.5	100	0.0075	0.0675	8.599	0.0020	1.775	<0.0036	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 77
PAGE 2 **OF** 2

DATE COLLECTED 1/3/2018
DATE RECEIVED 1/3/2018
DATE ANALYZED 1/3/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1031806	0.5	100	0.5/100
B2	1031807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10311	1031818	Area	End of Trestle 2-Pump #HV-33	12:09 PM	3:08 PM	9.76	9.76
10312	1031819	Area	Northside of Regulated Area-Pump #HV-51	12:12 PM	3:10 PM	9.76	9.76
10313	1031820	Personal	Jacob Johnson-Cutting & removing deck sections-Pump #LV-1	12:48 PM	2:46 PM	2.06	2.06
10314	1031821	Personal	Mark Conway-Excavator operator-Pump #LV-5	12:50 PM	2:50 PM	2.06	2.06
10315	1031822	Personal	Kent Parker-Lead-Pump #LV-36	12:52 PM	2:52 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10311	1031818	179	9.76	1747.04	9	100	0.0075	0.0825	10.510	0.0023	1.705	<0.0039	N/A
10312	1031819	178	9.76	1737.28	10.5	100	0.0075	0.0975	12.420	0.0028	1.660	<0.0046	N/A
10313	1031820	118	2.06	243.08	7.5	100	0.0075	0.0675	8.599	0.0136	1.775	<0.0242	0.013
10314	1031821	120	2.06	247.2	7	100	0.0075	0.0625	7.962	0.0124	1.785	<0.0221	0.012
10315	1031822	120	2.06	247.2	7	100	0.0075	0.0625	7.962	0.0124	1.785	<0.0221	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 70
PAGE 2 **OF** 2

DATE COLLECTED 12/21/2017
DATE RECEIVED 12/21/2017
DATE ANALYZED 12/21/2017
DATE REPORTED 12/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12211706	0	100	0/100
B2	12211707	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122111	12211718	Area	End of Trestle 2-Pump #HV-33	12:03 PM	2:48 PM	9.76	9.76
121112	12211719	Area	Northside of deck-Pump #HV-08	12:05 PM	2:50 PM	9.76	9.76
121113	12211720	Personal	Gary Reynolds-Equipment operator/moving dumpsters-Pump #LV-30	12:30 PM	2:40 PM	2.06	2.06
121114	12211721	Personal	Little Steward-Lining & sealing dumpsters/trucks with poly-Pump #LV-5	12:40 PM	2:38 PM	2.06	2.06
121115	12211722	Personal	Ryan Okada-Boat activities & moving debris-Pump #LV-1	12:45 PM	2:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122111	12211718	165	9.76	1610.4	9	100	0.0025	0.0875	11.146	0.0027	1.705	<0.0045	N/A
121112	12211719	165	9.76	1610.4	6	100	0.0025	0.0575	7.325	0.0018	1.839	<0.0032	N/A
121113	12211720	130	2.06	267.8	8	100	0.0025	0.0775	9.873	0.0142	1.741	<0.0247	0.010
121114	12211721	118	2.06	243.08	6.5	100	0.0025	0.0625	7.962	0.0126	1.810	<0.0228	0.013
121115	12211722	110	2.06	226.6	10.5	100	0.0025	0.1025	13.057	0.0222	1.660	<0.0368	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 71
PAGE 2 **OF** 2

DATE COLLECTED 12/22/2017
DATE RECEIVED 12/22/2017
DATE ANALYZED 12/22/2017
DATE REPORTED 12/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	12221706	1	100	1/100
B2	12221707	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
122211	12221718	Area	End of Trestle 2-Pump #HV-8	12:06 PM	2:50 PM	9.76	9.76
122212	12221719	Area	NW Corner of worksite, beyond fence-Pump #HV-33	12:10 PM	2:45 PM	9.76	9.76
122213	12221720	Personal	Mark Conway-Excavator operator-pump #LV-36	12:34 PM	2:35 PM	2.06	2.06
122214	12221721	Personal	Gary Reynolds-Equipment operator/moving dumpsters-Pump #LV-30	12:35 PM	2:30 PM	2.06	2.06
122215	12221722	Personal	Mark Jeffers-Crane operator-Pump #LV-38	12:40 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
122211	12221718	164	9.76	1600.64	7.5	100	0.01	0.0650	8.280	0.0020	1.775	<0.0035	N/A
122212	12221719	155	9.76	1512.8	9.5	100	0.01	0.0850	10.828	0.0028	1.690	<0.0047	N/A
122213	12221720	121	2.06	249.26	10.5	100	0.01	0.0950	12.102	0.0187	1.660	<0.0310	0.013
122214	12221721	115	2.06	236.9	7.5	100	0.01	0.0650	8.280	0.0135	1.775	<0.0239	0.012
122215	12221722	120	2.06	247.2	13.5	100	0.01	0.1250	15.924	0.0248	1.600	<0.0397	0.016

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/04/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/04/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 78
PAGE 1 **OF** 2

DATE COLLECTED 1/4/2018
DATE RECEIVED 1/4/2018
DATE ANALYZED 1/4/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1041806	0.5	100	0.5/100
B2	1041807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10401	1041808	Area	Mid-Point of Trestle 1-Pump #HV-8	7:25 AM	12:05 PM	9.76	9.76
10402	1041809	Area	Northside of Regulated Area-Pump #HV-51	7:33 AM	12:38 PM	9.76	9.76
10403	1041810	Area	End of Trestle 2-Pump #HV-33	7:43 AM	12:02 PM	9.76	9.76
10404	1041811	STEL	Justin Scott-Running saw pump-Pump #LV-5	7:45 AM	8:15 AM	2.06	2.06
10405	1041812	STEL	Jacob Johnson-Operating saw on deck-Pump #LV-1	7:50 AM	8:20 AM	2.06	2.06
10406	1041813	STEL	Gary Reynolds-Equipment operator-Pump #LV-38	7:55 AM	8:25 AM	2.06	2.06
10407	1041814	Personal	Justin Scott-Running saw pump-Pump #LV-5	8:16 AM	12:05 PM	2.06	2.06
10408	1041815	Personal	Jacob Johnson-Operating saw on deck-Pump #LV-1	8:21 AM	12:01 PM	2.06	2.06
10409	1041816	Personal	Gary Reynolds-Equipment operator-Pump #LV-38	8:26 AM	12:00 PM	2.06	2.06
10410	1041817	Area	End of Trestle 2-Pump #HV-33	12:03 PM	3:08 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10401	1041808	280	9.76	2732.8	10.5	100	0.005	0.1000	12.739	0.0018	1.660	<0.0030	N/A
10402	1041809	305	9.76	2976.8	13	100	0.005	0.1250	15.924	0.0021	1.610	<0.0033	N/A
10403	1041810	259	9.76	2527.84	9	100	0.005	0.0850	10.828	0.0016	1.705	<0.0028	N/A
10404	1041811	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.013
10405	1041812	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.012
10406	1041813	30	2.06	61.8	8	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.008
10407	1041814	229	2.06	471.74	9.5	100	0.005	0.0900	11.465	0.0094	1.690	<0.0158	0.013
10408	1041815	220	2.06	453.2	10.0	100	0.005	0.0950	12.102	0.0103	1.670	<0.0172	0.012
10409	1041816	214	2.06	440.84	9	100	0.005	0.0850	10.828	0.0095	1.705	<0.0161	0.008
10410	1041817	185	9.76	1805.6	9.5	100	0.005	0.0900	11.465	0.0024	1.690	<0.0041	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 78
PAGE 2 **OF** 2

DATE COLLECTED 1/4/2018
DATE RECEIVED 1/4/2018
DATE ANALYZED 1/4/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1041806	0.5	100	0.5/100
B2	1041807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10411	1041818	Area	Mid-Point of Trestle 1-Pump #HV-8	12:06 PM	3:00 PM	9.76	9.76
10412	1041819	Area	Northside of Regulated Area-Pump #HV-51	12:39 PM	3:05 PM	9.76	9.76
10413	1041820	Personal	Jacob Johnson-Operating saw on deck-Pump #LV-1	1:00 PM	2:50 PM	2.06	2.06
10414	1041821	Personal	Justin Scott-Running saw pump-Pump #LV-5	1:05 PM	2:55 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10411	1041818	174	9.76	1698.24	12	100	0.005	0.1150	14.650	0.0033	1.620	<0.0054	N/A
10412	1041819	146	9.76	1424.96	10	100	0.005	0.0950	12.102	0.0033	1.670	<0.0055	N/A
10413	1041820	110	2.06	226.6	7.5	100	0.005	0.0700	8.917	0.0152	1.775	<0.0269	0.012
10414	1041821	110	2.06	226.6	8	100	0.005	0.0750	9.554	0.0162	1.741	<0.0283	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/05/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/05/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 92
PAGE 1 **OF** 2

DATE COLLECTED 1/22/2018
DATE RECEIVED 1/22/2018
DATE ANALYZED 1/22/2018
DATE REPORTED 1/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1221806	1	100	1/100
B2	1221807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12201	1221808	Area	End of Trestle 1-Pump #HV-8	7:25 AM	12:10 PM	9.76	9.76
12202	1221809	Area	Mid-point of Trestle 2-Pump #HV-33	7:30 AM	12:40 PM	9.76	9.76
12203	1221810	STEL	Ever Bonilla-Working on deck/assisting in cutting-Pump #LV-1	7:35 AM	8:05 AM	2.06	2.06
12204	1221811	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:40 AM	8:10 AM	2.06	2.06
12205	1221812	STEL	Brent Hardinger-Equipment Operator-Pump #LV-32	7:44 AM	8:14 AM	2.06	2.06
12206	1221813	Personal	Ever Bonilla-Working on deck/assisting in cutting-Pump #LV-1	8:06 AM	12:00 PM	2.06	2.06
12207	1221814	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:11 AM	12:07 PM	2.06	2.06
12208	1221815	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	8:15 AM	12:04 PM	2.06	2.06
12209	1221816	Area	End of Trestle 1-Pump #HV-8	12:11 PM	2:45 PM	9.76	9.76
12210	1221817	Personal	Ever Bonilla-Working on deck/assisting in cutting-Pump #LV-1	12:30 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12201	1221808	285	9.76	2781.6	13	100	0.01	0.1200	15.287	0.0021	1.610	<0.0034	N/A
12202	1221809	310	9.76	3025.6	7.5	100	0.01	0.0650	8.280	0.0011	1.775	<0.0019	N/A
12203	1221810	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.013
12204	1221811	30	2.06	61.8	11	100	0.01	0.1000	12.739	0.0794	1.655	<0.1313	0.013
12205	1221812	30	2.06	61.8	9.5	100	0.01	0.0850	10.828	0.0675	1.690	<0.1140	0.012
12206	1221813	234	2.06	482.04	10	100	0.01	0.0900	11.465	0.0092	1.670	<0.0153	0.013
12207	1221814	236	2.06	486.16	8	100	0.01	0.0700	8.917	0.0071	1.741	<0.0123	0.013
12208	1221815	229	2.06	471.74	8	100	0.01	0.0700	8.917	0.0073	1.741	<0.0127	0.012
12209	1221816	154	9.76	1503.04	8	100	0.01	0.0700	8.917	0.0023	1.741	<0.0040	N/A
12210	1221817	130	2.06	267.8	12	100	0.01	0.1100	14.013	0.0201	1.620	<0.0326	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 92
PAGE 2 **OF** 2

DATE COLLECTED 1/22/2018
DATE RECEIVED 1/22/2018
DATE ANALYZED 1/22/2018
DATE REPORTED 1/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1221806	1	100	1/100
B2	1221807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12211	1221818	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	12:35 PM	2:42 PM	2.06	2.06
12212	1221819	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:38 PM	2:37 PM	2.06	2.06
12213	1221820	Area	Mid-point of Trestle 2-Pump #HV-33	12:41 PM	2:47 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12211	1221818	127	2.06	261.62	9.5	100	0.01	0.0850	10.828	0.0159	1.690	<0.0269	0.012
12212	1221819	119	2.06	245.14	10	100	0.01	0.0900	11.465	0.0180	1.670	<0.0301	0.013
12213	1221820	126	9.76	1229.76	10	100	0.01	0.0900	11.465	0.0036	1.670	<0.0060	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 79
PAGE 1 **OF** 2

DATE COLLECTED 1/5/2018
DATE RECEIVED 1/5/2018
DATE ANALYZED 1/5/2018
DATE REPORTED 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1051806	1	100	1/100
B2	1051807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10501	1051808	STEL	Jacob Johnson-Cutting deck with saw-Pump #LV-1	7:28 AM	7:58 AM	2.06	2.06
10502	1051809	STEL	Mark Conway-Long Reach operator-Pump #LV-38	7:30 AM	8:00 AM	2.06	2.06
10503	1051810	STEL	Mark Jeffers-Crane Operator- Pump #LV-36	7:34 AM	8:04 AM	2.06	2.06
10504	1051811	Area	End of Trestle 2-Pumpt #HV-8	7:36 AM	12:10 PM	9.76	9.76
10505	1051812	Area	End of Trestle 1-Pump #HV-33	7:38 AM	12:15 PM	9.76	9.76
10506	1051813	Area	NW Corner of Regulated Area-Pump #HV-51	7:40 AM	12:17 PM	9.76	9.76
10507	1051814	Personal	Jacob Johnson-Cutting deck with saw-Pump #LV-1	7:59 AM	11:58 AM	2.06	2.06
10508	1051815	Personal	Mark Conway-Long Reach operator-Pump #LV-38	8:01 AM	12:38 PM	2.06	2.06
10509	1051816	Personal	Mark Jeffers-Crane Operator- Pump #LV-36	8:05 AM	12:03 PM	2.06	2.06
10510	1051817	Area	End of Trestle 2-Pumpt #HV-8	12:11 PM	2:30 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10501	1051808	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.013
10502	1051809	30	2.06	61.8	10.5	100	0.01	0.0950	12.102	0.0754	1.660	<0.1252	0.011
10503	1051810	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.013
10504	1051811	274	9.76	2674.24	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
10505	1051812	277	9.76	2703.52	8	100	0.01	0.0700	8.917	0.0013	1.741	<0.0022	N/A
10506	1051813	277	9.76	2703.52	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
10507	1051814	239	2.06	492.34	8	100	0.01	0.0700	8.917	0.0070	1.741	<0.0121	0.013
10508	1051815	277	2.06	570.62	7.5	100	0.01	0.0650	8.280	0.0056	1.775	<0.0099	0.011
10509	1051816	238	2.06	490.28	9.5	100	0.01	0.0850	10.828	0.0085	1.690	<0.0144	0.013
10510	1051817	139	9.76	1356.64	10	100	0.01	0.0900	11.465	0.0033	1.670	<0.0054	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 79
PAGE 2 **OF** 2

DATE COLLECTED 1/5/2018
DATE RECEIVED 1/5/2018
DATE ANALYZED 1/5/2018
DATE REPORTED 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1051806	1	100	1/100
B2	1051807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10511	1051818	Area	End of Trestle 1-Pump #HV-33	12:16 PM	2:35 PM	9.76	9.76
10512	1051819	Area	NW Corner of Regulated Area-Pump #HV-51	12:18 PM	2:37 PM	9.76	9.76
10513	1051820	Personal	Mark Conway-Long Reach operator-Pump #LV-38	12:38 PM	2:43 PM	2.06	2.06
10514	1051821	Personal	Jacob Johnson-Cutting deck with saw-Pump #LV-1	12:40 PM	2:40 PM	2.06	2.06
10515	1051822	Personal	Mark Jeffers-Crane Operator- Pump #LV-36	12:43 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10511	1051818	139	9.76	1356.64	8.5	100	0.01	0.0750	9.554	0.0027	1.720	<0.0047	N/A
10512	1051819	139	9.76	1356.64	10	100	0.01	0.0900	11.465	0.0033	1.670	<0.0054	N/A
10513	1051820	125	2.06	257.5	8	100	0.01	0.0700	8.917	0.0133	1.741	<0.0232	0.011
10514	1051821	120	2.06	247.2	11	100	0.01	0.1000	12.739	0.0198	1.655	<0.0328	0.013
10515	1051822	122	2.06	251.32	11	100	0.01	0.1000	12.739	0.0195	1.655	<0.0323	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/06/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/05/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 80
PAGE 1 **OF** 2

DATE COLLECTED 1/6/2018
DATE RECEIVED 1/6/2018
DATE ANALYZED 1/6/2018
DATE REPORTED 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1061806	0.5	100	0.5/100
B2	1061807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10601	1061808	Personal	Jacob Johnson-Cutting out sections of deck-Pump #LV-5	7:30 AM	11:27 AM	2.06	2.06
10602	1061809	Personal	Brent Hardinger-Equipment Operator-Pump #LV-38	7:32 AM	11:30 AM	2.06	2.06
10603	1061810	Area	End of Trestle 1-Pump #HV-8	7:34 AM	12:00 PM	9.76	9.76
10604	1061811	Area	End of Trestle 2-Pump #HV-33	7:38 AM	12:02 PM	9.76	9.76
10605	1061812	Area	NW Corner of Regulated Area-Pump #HV-51	7:40 AM	12:04 PM	9.76	9.76
10606	1061813	STEL	Jacob Johnson-Cutting out sections of deck-Pump #LV-5	11:28 AM	11:58 AM	2.06	2.06
10607	1061814	STEL	Brent Hardinger-Equipment Operator-Pump #LV-38	11:31 AM	12:01 PM	2.06	2.06
10608	1061815	Area	End of Trestle 1-Pump #HV-8	12:00 PM	2:30 PM	9.76	9.76
10609	1061816	Area	End of Trestle 2-Pump #HV-33	12:03 PM	2:32 PM	9.76	9.76
10610	1061817	Area	NW Corner of Regulated Area-Pump #HV-51	12:05 PM	2:35 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10601	1061808	237	2.06	488.22	10	100	0.0075	0.0925	11.783	0.0093	1.670	<0.0155	0.015
10602	1061809	238	2.06	490.28	8	100	0.0075	0.0725	9.236	0.0073	1.741	<0.0126	0.010
10603	1061810	266	9.76	2596.16	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0023	N/A
10604	1061811	264	9.76	2576.64	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
10605	1061812	264	9.76	2576.64	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0023	N/A
10606	1061813	30	2.06	61.8	12	100	0.0075	0.1125	14.331	0.0893	1.620	<0.1446	0.015
10607	1061814	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
10608	1061815	150	9.76	1464	9.0	100	0.0075	0.0825	10.510	0.0028	1.705	<0.0047	N/A
10609	1061816	149	9.76	1454.24	8.5	100	0.0075	0.0775	9.873	0.0026	1.720	<0.0045	N/A
10610	1061817	150	9.76	1464	8	100	0.0075	0.0725	9.236	0.0024	1.741	<0.0042	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 80
PAGE 2 **OF** 2

DATE COLLECTED 1/6/2018
DATE RECEIVED 1/6/2018
DATE ANALYZED 1/6/2018
DATE REPORTED 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1061806	0.5	100	0.5/100
B2	1061807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10611	1061818	Personal	Jacob Johns-Cutting out sections of deck-Pump #LV-5	12:40 PM	2:40 PM	2.06	2.06
10612	1061819	Personal	Brent Hardinger-Equipment Operator-Pump #LV-38	12:43 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10611	1061818	120	2.06	247.2	9.5	100	0.0075	0.0875	11.146	0.0174	1.690	<0.0293	0.015
10612	1061819	122	2.06	251.32	6.5	100	0.0075	0.0575	7.325	0.0112	1.810	<0.0203	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 11, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/08/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/08/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 81
PAGE 1 **OF** 2

DATE COLLECTED 1/8/2018
DATE RECEIVED 1/8/2018
DATE ANALYZED 1/8/2018
DATE REPORTED 1/9/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1081806	1	100	1/100
B2	1081807	1	100	1/100

SAMPLES COLLECTED BY: Sid Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10801	1081808	Area	Mid-span of Trestle 1-Pump #HV-33	7:24 AM	12:10 PM	9.76	9.76
10802	1081809	Area	End of Trestle 2-Pump #HV-8	7:29 AM	12:13 PM	9.76	9.76
10803	1081810	Area	Northside of Regulated Area-Pump #HV-51	7:32 AM	12:16 PM	9.76	9.76
10804	1081811	STEL	Luis Guzman-Running hoses & cutting deck-Pump #LV-5	7:40 AM	8:10 AM	2.06	2.06
10805	1081812	STEL	Mark Conway-Equipment Operator-Pump #LV-36	7:43 AM	8:13 AM	2.06	2.06
10806	1081813	STEL	Justin Scott-Overseeing decking removal-Pump #LV-38	7:45 AM	8:15 AM	2.06	2.06
10807	1081814	Personal	Luis Guzman-Running hoses & cutting deck-Pump #LV-5	8:11 AM	12:02 PM	2.06	2.06
10808	1081815	Personal	Mark Conway-Equipment Operator-Pump #LV-36	8:14 AM	12:05 PM	2.06	2.06
10809	1081816	Personal	Justin Scott-Overseeing decking removal-Pump #LV-38	8:16 AM	12:04 PM	2.06	2.06
10810	1081817	Area	Mid-span of Trestle 1-Pump #HV-33	12:11 PM	2:46 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10801	1081808	286	9.76	2791.36	8	100	0.01	0.0700	8.917	0.0012	1.741	<0.0021	N/A
10802	1081809	284	9.76	2771.84	12	100	0.01	0.1100	14.013	0.0019	1.620	<0.0032	N/A
10803	1081810	284	9.76	2771.84	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0020	N/A
10804	1081811	30	2.06	61.8	11	100	0.01	0.1000	12.739	0.0794	1.655	<0.1313	0.012
10805	1081812	30	2.06	61.8	11.5	100	0.01	0.1050	13.376	0.0833	1.635	<0.1362	0.013
10806	1081813	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.011
10807	1081814	231	2.06	475.86	7.5	100	0.01	0.0650	8.280	0.0067	1.775	<0.0119	0.012
10808	1081815	231	2.06	475.86	10	100	0.01	0.0900	11.465	0.0093	1.670	<0.0155	0.013
10809	1081816	228	2.06	469.68	8	100	0.01	0.0700	8.917	0.0073	1.741	<0.0127	0.011
10810	1081817	155	9.76	1512.8	8	100	0.01	0.0700	8.917	0.0023	1.741	<0.0040	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 81
PAGE 2 **OF** 2

DATE COLLECTED 1/8/2018
DATE RECEIVED 1/8/2018
DATE ANALYZED 1/8/2018
DATE REPORTED 1/9/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1081806	1	100	1/100
B2	1081807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10811	1081818	Area	End of Trestle 2-Pump #HV-8	12:14 PM	2:48 PM	9.76	9.76
10812	1081819	Area	Northside of Regulated Area-Pump #HV-51	12:17 PM	2:55 PM	9.76	9.76
10813	1081820	Personal	Luis Guzman-Running hoses & cutting deck-Pump #LV-5	12:33 PM	2:35 PM	2.06	2.06
10814	1081821	Personal	Justin Scott-Overseeing decking removal-Pump #LV-38	12:35 PM	2:40 PM	2.06	2.06
10815	1081822	Personal	Mark Conway-Equipment Operator-Pump #LV-36	12:41 PM	2:42 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10811	1081818	154	9.76	1503.04	11.0	100	0.01	0.1000	12.739	0.0033	1.655	<0.0054	N/A
10812	1081819	158	9.76	1542.08	8.5	100	0.01	0.0750	9.554	0.0024	1.720	<0.0041	N/A
10813	1081820	122	2.06	251.32	9.5	100	0.01	0.0850	10.828	0.0166	1.690	<0.0280	0.012
10814	1081821	125	2.06	257.5	9	100	0.01	0.0800	10.191	0.0152	1.705	<0.0260	0.011
10815	1081822	121	2.06	249.26	7.5	100	0.01	0.0650	8.280	0.0128	1.775	<0.0227	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 11, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/09/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/09/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 82
PAGE 1 **OF** 2

DATE COLLECTED 1/9/2018
DATE RECEIVED 1/9/2018
DATE ANALYZED 1/9/2018
DATE REPORTED 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1091806	0.5	100	0.5/100
B2	1091807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10901	1091808	Area	Northwest Corner of Regulated Area-Pump #HV-51	7:30 AM	12:05 PM	9.76	9.76
10902	1091809	Area	Mid-point of Trestle 1-Pump #HV-8	7:35 AM	12:10 PM	9.76	9.76
10903	1091810	Area	End of Trestle 2-Pump #HV-33	7:32 AM	12:08 PM	9.76	9.76
10904	1091811	STEL	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-1	7:39 AM	8:09 AM	2.06	2.06
10905	1091812	STEL	Mark Conway-Equipment Operator-Pump #LV-32	7:41 AM	8:11 AM	2.06	2.06
10906	1091813	Personal	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-1	8:10 AM	11:58 AM	2.06	2.06
10907	1091814	Personal	Mark Conway-Equipment Operator-Pump #LV-32	8:12 AM	12:03 PM	2.06	2.06
10908	1091815	Area	Northwest Corner of Regulated Area-Pump #HV-51	12:06 PM	2:38 PM	9.76	9.76
10909	1091816	Area	End of Trestle 2-Pump #HV-33	12:09 PM	2:40 PM	9.76	9.76
10910	1091817	Area	Mid-point of Trestle 1-Pump #HV-8	12:11 PM	2:43 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10901	1091808	275	9.76	2684	7	100	0.0075	0.0625	7.962	0.0011	1.785	<0.0020	N/A
10902	1091809	275	9.76	2684	9.5	100	0.0075	0.0875	11.146	0.0016	1.690	<0.0027	N/A
10903	1091810	276	9.76	2693.76	11.5	100	0.0075	0.1075	13.694	0.0020	1.635	<0.0032	N/A
10904	1091811	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.012
10905	1091812	30	2.06	61.8	11.5	100	0.0075	0.1075	13.694	0.0853	1.635	<0.1395	0.010
10906	1091813	228	2.06	469.68	7.5	100	0.0075	0.0675	8.599	0.0070	1.775	<0.0125	0.012
10907	1091814	231	2.06	475.86	10.5	100	0.0075	0.0975	12.420	0.0100	1.660	<0.0167	0.010
10908	1091815	152	9.76	1483.52	7.5	100	0.0075	0.0675	8.599	0.0022	1.775	<0.0040	N/A
10909	1091816	151	9.76	1473.76	7.5	100	0.0075	0.0675	8.599	0.0022	1.775	<0.0040	N/A
10910	1091817	152	9.76	1483.52	8.5	100	0.0075	0.0775	9.873	0.0026	1.720	<0.0044	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 82
PAGE 2 **OF** 2

DATE COLLECTED 1/9/2018
DATE RECEIVED 1/9/2018
DATE ANALYZED 1/9/2018
DATE REPORTED 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1091806	0.5	100	0.5/100
B2	1091807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
10911	1091818	Personal	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-1	12:40 PM	2:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
10911	1091818	113	2.06	232.78	10	100	0.0075	0.0925	11.783	0.0195	1.670	<0.0325	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 11, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/10/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/10/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 83
PAGE 1 **OF** 2

DATE COLLECTED 1/10/2018
DATE RECEIVED 1/10/2018
DATE ANALYZED 1/10/2018
DATE REPORTED 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1101806	1	100	1/100
B2	1101807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
11001	11011808	Area	Northside of Regulated Area-Pump #HV-51	7:30 AM	12:14 PM	9.76	9.76
11002	11011809	Area	Mid-Span of Trestle 2-Pump #HV-8	7:34 AM	12:11 PM	9.76	9.76
11003	11011810	Area	Mid-Span of Trestle 1-Pump #HV-33	7:40 AM	12:08 PM	9.76	9.76
11004	11011811	Personal	Luis Penaraha-Cutting deck-Pump #LV-1	7:50 AM	12:00 PM	2.06	2.06
11005	11011812	STEL	Brent Hardinger-Equipment Operator-Pump #LV-32	7:58 AM	8:28 AM	2.06	2.06
11006	11011813	STEL	Mark Conway-Equipment Operator-Pump #LV-30	8:04 AM	8:34 AM	2.06	2.06
11007	11011814	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	8:29 AM	12:02 PM	2.06	2.06
11008	11011815	Personal	Mark Conway-Equipment Operator-Pump #LV-30	8:35 AM	12:06 PM	2.06	2.06
11009	11011816	Area	Mid-Span of Trestle 1-Pump #HV-33	12:09 PM	2:40 PM	9.76	9.76
11010	11011817	Area	Mid-Span of Trestle 2-Pump #HV-8	12:12 PM	2:43 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11001	11011808	284	9.76	2771.84	10.5	100	0.01	0.0950	12.102	0.0017	1.660	<0.0028	N/A
11002	11011809	277	9.76	2703.52	8	100	0.01	0.0700	8.917	0.0013	1.741	<0.0022	N/A
11003	11011810	268	9.76	2615.68	12	100	0.01	0.1100	14.013	0.0021	1.620	<0.0033	N/A
11004	11011811	250	2.06	515	9	100	0.01	0.0800	10.191	0.0076	1.705	<0.0130	0.013
11005	11011812	30	2.06	61.8	9.5	100	0.01	0.0850	10.828	0.0675	1.690	<0.1140	0.012
11006	11011813	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.012
11007	11011814	213	2.06	438.78	10	100	0.01	0.0900	11.465	0.0101	1.670	<0.0168	0.012
11008	11011815	211	2.06	434.66	9	100	0.01	0.0800	10.191	0.0090	1.705	<0.0154	0.012
11009	11011816	151	9.76	1473.76	7.5	100	0.01	0.0650	8.280	0.0022	1.775	<0.0038	N/A
11010	11011817	151	9.76	1473.76	10	100	0.01	0.0900	11.465	0.0030	1.670	<0.0050	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 83
PAGE 2 **OF** 2

DATE COLLECTED 1/10/2018
DATE RECEIVED 1/10/2018
DATE ANALYZED 1/10/2018
DATE REPORTED 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1101806	1	100	1/100
B2	1101807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of	Sample Location / Work Performed / Respiratory Protection	Time	Time	Flow	Flow Rate
11011	11011818	Area	Northside of Regulated Area-Pump #HV-51	12:15 PM	2:42 PM	9.76	9.76
11012	11011819	STEL	Luis Penaraha-Cutting deck-Pump #LV-1	12:31 PM	1:01 PM	2.06	2.06
11013	11011820	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	12:35 PM	2:33 PM	2.06	2.06
11014	11011821	Personal	Mark Conway-Equipment Operator-Pump #LV-30	12:38 PM	2:38 PM	2.06	2.06
11015	11011822	Personal	Luis Penaraha-Cutting deck-Pump #LV-1	1:02 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total	Average	Sample	fibers	fields	Average	Adjusted	fibers / mm^2	fibers/cc	Variation	95%	8-hour TWA
11011	11011818	147	9.76	1434.72	8	100	0.01	0.0700	8.917	0.0024	1.741	<0.0042	N/A
11012	11011819	30	2.06	61.8	11.5	100	0.01	0.1050	13.376	0.0833	1.635	<0.1362	0.013
11013	11011820	118	2.06	243.08	8	100	0.01	0.0700	8.917	0.0141	1.741	<0.0246	0.012
11014	11011821	120	2.06	247.2	7.5	100	0.01	0.0650	8.280	0.0129	1.775	<0.0229	0.012
11015	11011822	88	2.06	181.28	8.5	100	0.01	0.0750	9.554	0.0203	1.720	<0.0349	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/11/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/11/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 84
PAGE 1 **OF** 2

DATE COLLECTED 1/11/2018
DATE RECEIVED 1/11/2018
DATE ANALYZED 1/11/2018
DATE REPORTED 1/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1111806	0	100	0/100
B2	1111807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
11101	1111808	STEL	Daniel McConnell-Work on deck/assisting in cutting-Pump #LV-1	7:50 AM	8:20 AM	2.06	2.06
11102	1111809	STEL	Bryan Okada-Working from boat/removing debris-Pump #LV-5	7:55 AM	8:25 AM	2.06	2.06
11103	1111810	STEL	Brent Hardinger-Excavator Operator-Pump #LV-32	7:59 AM	8:29 AM	2.06	2.06
11104	1111811	Personal	Daniel McConnell-Work on deck/assisting in cutting-Pump #LV-1	8:21 AM	12:02 PM	2.06	2.06
11105	1111812	Personal	Bryan Okada-Working from boat/removing debris-Pump #LV-5	8:26 AM	11:55 AM	2.06	2.06
11106	1111813	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	8:30 AM	11:58 AM	2.06	2.06
11107	1111814	Area	North end of Regulated Area-Pump #HV-33	9:35 AM	12:15 PM	9.76	9.76
11108	1111815	Area	Mid-span of Trestle 2-Pump #HV-51	9:39 AM	12:13 PM	9.76	9.76
11109	1111816	Area	Mid-span of Trestle 1-Pump #HV-8	9:45 AM	12:10 PM	9.76	9.76
11110	1111817	Area	Mid-span of Trestle 1-Pump #HV-8	12:11 PM	2:30 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11101	1111808	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.012
11102	1111809	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.013
11103	1111810	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
11104	1111811	221	2.06	455.26	11	100	0.005	0.1050	13.376	0.0113	1.655	<0.0187	0.012
11105	1111812	209	2.06	430.54	8	100	0.005	0.0750	9.554	0.0085	1.741	<0.0149	0.013
11106	1111813	208	2.06	428.48	9.5	100	0.005	0.0900	11.465	0.0103	1.690	<0.0174	0.011
11107	1111814	160	9.76	1561.6	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0039	N/A
11108	1111815	154	9.76	1503.04	6.5	100	0.005	0.0600	7.643	0.0020	1.810	<0.0035	N/A
11109	1111816	145	9.76	1415.2	8	100	0.005	0.0750	9.554	0.0026	1.741	<0.0045	N/A
11110	1111817	139	9.76	1356.64	6.5	100	0.005	0.0600	7.643	0.0022	1.810	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 84
PAGE 2 **OF** 2

DATE COLLECTED 1/11/2018
DATE RECEIVED 1/11/2018
DATE ANALYZED 1/11/2018
DATE REPORTED 1/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1111806	0	100	0/100
B2	1111808	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of	Sample Location / Work Performed / Respiratory Protection	Time	Time	Flow	Flow Rate
111111	11111818	Area	Mid-span of Trestle 2-Pump #HV-51	12:14 PM	2:34 PM	9.76	9.76
111112	11111819	Area	North end of Regulated Area-Pump #HV-33	12:16 PM	2:32 PM	9.76	9.76
111113	11111820	Personal	Daniel McConnell-Work on deck/assisting in cutting-Pump #LV-1	12:48 PM	2:22 PM	2.06	2.06
111114	11111821	Personal	Bryan Okada-Working from boat/removing debris-Pump #LV-5	12:50 PM	2:21 PM	2.06	2.06
111115	11111822	Personal	Brent Hardinger-Excavator Operator-Pump #LV-32	12:51 PM	2:25 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total	Average	Sample	fibers	fields	Average	Adjusted	fibers / mm^2	fibers/cc	Variation	95%	8-hour TWA
111111	11111818	140	9.76	1366.4	7	100	0.005	0.0650	8.280	0.0023	1.785	<0.0042	N/A
111112	11111819	136	9.76	1327.36	8.5	100	0.005	0.0800	10.191	0.0030	1.720	<0.0051	N/A
111113	11111820	94	2.06	193.64	7.5	100	0.005	0.0700	8.917	0.0177	1.775	<0.0315	0.012
111114	11111821	91	2.06	187.46	10.5	100	0.005	0.1000	12.739	0.0262	1.660	<0.0434	0.013
111115	11111822	94	2.06	193.64	6.5	100	0.005	0.0600	7.643	0.0152	1.810	<0.0275	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 16, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/12/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/12/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 85
PAGE 1 **OF** 2

DATE COLLECTED 1/12/2018
DATE RECEIVED 1/12/2018
DATE ANALYZED 1/12/2018
DATE REPORTED 1/15/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1121806	1	100	1/100
B2	1121807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
11201	1121808	STEL	Monica Gautier-Removing Trestle 2-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
11202	1121809	STEL	Ever Bonilla-Working on Deck-Pump #LV-5	7:33 AM	8:03 AM	2.06	2.06
11203	1121810	STEL	Eduardo Gonzalez-Support personnel for EQM & PAS-Pump #LV-32	7:35 AM	8:05 AM	2.06	2.06
11204	1121811	Area	Mid-Point of Trestle 2-Pump #HV-8	7:40 AM	12:01 PM	9.76	9.76
11205	1121812	Area	Mid-Point of Trestle 1-Pump #HV-33	7:42 AM	12:04 PM	9.76	9.76
11206	1121813	Area	North corner of Regulated Area-Pump #HV-51	7:44 AM	12:07 PM	9.76	9.76
11207	1121814	Personal	Monica Gautier-Removing Trestle 2-Pump #LV-1	8:01 AM	11:55 AM	2.06	2.06
11208	1121815	Personal	Ever Bonilla-Working on Deck-Pump #LV-5	8:04 AM	11:58 AM	2.06	2.06
11209	1121816	Personal	Eduardo Gonzalez-Support personnel for EQM & PAS-Pump #LV-32	8:06 AM	12:00 PM	2.06	2.06
11210	1121817	Area	Mid-Point of Trestle 2-Pump #HV-8	12:02 PM	2:42 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11201	1121808	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
11202	1121809	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.011
11203	1121810	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.012
11204	1121811	261	9.76	2547.36	9	100	0.01	0.0800	10.191	0.0015	1.705	<0.0026	N/A
11205	1121812	262	9.76	2557.12	8	100	0.01	0.0700	8.917	0.0013	1.741	<0.0023	N/A
11206	1121813	263	9.76	2566.88	11	100	0.01	0.1000	12.739	0.0019	1.655	<0.0032	N/A
11207	1121814	234	2.06	482.04	8.5	100	0.01	0.0750	9.554	0.0076	1.720	<0.0131	0.011
11208	1121815	234	2.06	482.04	7.5	100	0.01	0.0650	8.280	0.0066	1.775	<0.0117	0.011
11209	1121816	234	2.06	482.04	8.5	100	0.01	0.0750	9.554	0.0076	1.720	<0.0131	0.012
11210	1121817	160	9.76	1561.6	10	100	0.01	0.0900	11.465	0.0028	1.670	<0.0047	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 85
PAGE 2 **OF** 2

DATE COLLECTED 1/12/2018
DATE RECEIVED 1/12/2018
DATE ANALYZED 1/12/2018
DATE REPORTED 1/15/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1121806	1	100	1/100
B2	1121807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of	Sample Location / Work Performed / Respiratory Protection	Time	Time	Flow	Flow Rate
11211	1121818	Area	Mid-Point of Trestle 1-Pump #HV-33	12:05 PM	2:44 PM	9.76	9.76
11212	1121819	Area	Mid-Point of Trestle 1-Pump #HV-33	12:16 PM	2:32 PM	9.76	9.76
11213	1121820	Personal	Monica Gautier-Removing Trestle 2-Pump #LV-1	12:30 PM	2:33 PM	2.06	2.06
11214	1121821	Personal	Ever Bonilla-Working on Deck-Pump #LV-5	12:32 PM	2:36 PM	2.06	2.06
11215	1121822	Presonal	Eduardo Gonzalez-Support personnel for EQM & PAS-Pump #LV-32	12:35 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total	Average	Sample	fibers	fields	Average	Adjusted	fibers / mm^2	fibers/cc	Variation	95%	8-hour TWA
11211	1121818	159	9.76	1551.84	10	100	0.01	0.0900	11.465	0.0028	1.670	<0.0048	N/A
11212	1121819	136	9.76	1327.36	7.5	100	0.01	0.0650	8.280	0.0024	1.775	<0.0043	N/A
11213	1121820	123	2.06	253.38	10	100	0.01	0.0900	11.465	0.0174	1.670	<0.0291	0.011
11214	1121821	124	2.06	255.44	9.5	100	0.01	0.0850	10.828	0.0163	1.690	<0.0276	0.011
11215	1121822	122	2.06	251.32	11	100	0.01	0.1000	12.739	0.0195	1.655	<0.0323	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 16, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/15/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/15/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 87
PAGE 1 **OF** 2

DATE COLLECTED 1/15/2018
DATE RECEIVED 1/15/2018
DATE ANALYZED 1/15/2018
DATE REPORTED 1/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1151806	1	100	1/100
B2	1151807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
11501	1151808	Area	Mid-span of Trestle 1-Pump #HV-8	7:25 AM	12:05 PM	9.76	9.76
11502	1151809	Area	Mid-span of Trestle 2-Pump #HV33	7:30 AM	12:07 PM	9.76	9.76
11503	1151810	Area	Northside of Regulated Area-Pump #HV-51	7:34 AM	12:09 PM	9.76	9.76
11504	1151811	STEL	Edwin Villasenor-Working on Deck-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
11505	1151812	STEL	Eduardo Gonzalez-Working on deck-Pump #LV-5	7:43 AM	8:13 AM	2.06	2.06
11506	1151813	STEL	Mark Jeffers-Crane Operator-Pump #LV-#32	7:45 AM	8:15 AM	2.06	2.06
11507	1151814	Personal	Edwin Villasenor-Working on Deck-Pump #LV-1	8:11 AM	12:04 PM	2.06	2.06
11508	1151815	Personal	Eduardo Gonzalez-Working on deck-Pump #LV-5	8:14 AM	12:01 PM	2.06	2.06
11509	1151816	Personal	Mark Jeffers-Crane Operator-Pump #LV-#32	8:16 AM	12:40 PM	2.06	2.06
11510	1151817	Area	Mid-span of Trestle 1-Pump #HV-8	12:06 PM	2:50 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11501	1151808	280	9.76	2732.8	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0022	N/A
11502	1151809	277	9.76	2703.52	8	100	0.005	0.0750	9.554	0.0014	1.741	<0.0024	N/A
11503	1151810	275	9.76	2684	11	100	0.005	0.1050	13.376	0.0019	1.655	<0.0032	N/A
11504	1151811	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.012
11505	1151812	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
11506	1151813	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.013
11507	1151814	233	2.06	479.98	6.5	100	0.005	0.0600	7.643	0.0061	1.810	<0.0111	0.120
11508	1151815	227	2.06	467.62	6.5	100	0.005	0.0600	7.643	0.0063	1.810	<0.0114	0.011
11509	1151816	264	2.06	543.84	9	100	0.005	0.0850	10.828	0.0077	1.705	<0.0131	0.013
11510	1151817	164	9.76	1600.64	6.5	100	0.005	0.0600	7.643	0.0018	1.810	<0.0033	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 88
PAGE 2 **OF** 2

DATE COLLECTED 1/15/2018
DATE RECEIVED 1/15/2018
DATE ANALYZED 1/15/2018
DATE REPORTED 1/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1151806	1	100	1/100
B2	1151807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of	Sample Location / Work Performed / Respiratory Protection	Time	Time	Flow	Flow Rate
11511	1151818	Area	Mid-Span of Trestle 2-Pump #HV-33	12:32 PM	2:43 PM	9.76	9.76
11512	1151819	Area	Northside of Regulated Area-Pump #HV-51	12:36 PM	2:46 PM	9.76	9.76
11513	1151820	Personal	Edwin Villasenor-Working on Deck-Pump #LV-1	12:30 PM	2:33 PM	2.06	2.06
11514	1151821	Personal	Eduardo Gonzalez-Working on deck-Pump #LV-5	12:32 PM	2:36 PM	2.06	2.06
11515	1151822	Personal	Mark Jeffers-Crane Operator-Pump #LV-#32	12:35 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total	Average	Sample	fibers	fields	Average	Adjusted	fibers / mm^2	fibers/cc	Variation	95%	8-hour TWA
11511	1151818	131	9.76	1278.56	6.5	100	0.005	0.0600	7.643	0.0023	1.810	<0.0042	N/A
11512	1151819	130	9.76	1268.8	7	100	0.005	0.0650	8.280	0.0025	1.785	<0.0045	N/A
11513	1151820	123	2.06	253.38	12	100	0.005	0.1150	14.650	0.0223	1.620	<0.0361	0.012
11514	1151821	124	2.06	255.44	10	100	0.005	0.0950	12.102	0.0182	1.670	<0.0305	0.011
11515	1151822	122	2.06	251.32	8.5	100	0.005	0.0800	10.191	0.0156	1.720	<0.0269	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 17, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/16/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/16/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 88
PAGE 1 **OF** 2

DATE COLLECTED 1/16/2018
DATE RECEIVED 1/16/2018
DATE ANALYZED 1/16/2018
DATE REPORTED 1/17/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1161806	1	100	1/100
B2	1161807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate	Flow Rate End
11601	1161808	Area	NW Corner of Regulated Area-Pump #HV-51	7:20 AM	1:00 PM	9.76	9.76
11602	1161809	STEL	Shelby Clark-Flagger-Pump #LV-1	7:25 AM	7:55 AM	2.06	2.06
11603	1161810	Area	End of Trestle 2-Pump #HV-8	7:28 AM	1:08 PM	9.76	9.76
11604	1161811	STEL	Jacob Johnson-Working on removing decking sections-Pump #LV-5	7:30 AM	8:00 AM	2.06	2.06
11605	1161812	Area	Mid-Point of Trestle 1-Pump #HV-33	7:31 AM	1:05 PM	9.76	9.76
11606	1161813	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:35 AM	8:05 AM	2.06	2.06
11607	1161814	Personal	Shelby Clark-Flagger-Pump #LV-1	7:56 AM	12:02 PM	2.06	2.06
11608	1161815	Personal	Jacob Johnson-Working on removing decking sections-Pump #LV-5	8:01 AM	12:00 PM	2.06	2.06
11609	1161816	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:06 AM	12:10 PM	2.06	2.06
11610	1161817	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:45 PM	3:15 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11601	1161808	340	9.76	3318.4	11	100	0.01	0.1000	12.739	0.0015	1.655	<0.0024	N/A
11602	1161809	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.015
11603	1161810	340	9.76	3318.4	7.5	100	0.01	0.0650	8.280	0.0010	1.775	<0.0017	N/A
11604	1161811	30	2.06	61.8	11	100	0.01	0.1000	12.739	0.0794	1.655	<0.1313	0.010
11605	1161812	334	9.76	3259.84	9	100	0.01	0.0800	10.191	0.0012	1.705	<0.0021	N/A
11606	1161813	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.012
11607	1161814	246	2.06	506.76	13	100	0.01	0.1200	15.287	0.0116	1.610	<0.0187	0.015
11608	1161815	239	2.06	492.34	11.5	100	0.01	0.1050	13.376	0.0105	1.635	<0.0171	0.010
11609	1161816	244	2.06	502.64	9.5	100	0.01	0.0850	10.828	0.0083	1.690	<0.0140	0.012
11610	1161817	150	2.06	309	8	100	0.01	0.0700	8.917	0.0111	1.741	<0.0193	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 88
PAGE 2 **OF** 2

DATE COLLECTED 1/16/2018
DATE RECEIVED 1/16/2018
DATE ANALYZED 1/16/2018
DATE REPORTED 1/17/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1161806	1	100	1/100
B2	1161807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Sidney Carter/Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of	Sample Location / Work Performed / Respiratory Protection	Time	Time	Flow	Flow Rate
11611	1161818	Personal	Shelby Clark-Flagger-Pump #LV-1	12:50 PM	3:05 PM	2.06	2.06
11612	1161819	Area	NW Corner of Regulated Area-Pump #HV-51	1:01 PM	3:20 PM	9.76	9.76
11613	1161820	Area	Mid-Point of Trestle 1-Pump #HV-33	1:06 PM	3:13 PM	9.76	9.76
11614	1161821	Area	End of Trestle 2-Pump #HV-8	1:09 PM	3:07 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total	Average	Sample	fibers	fields	Average	Adjusted	fibers / mm^2	fibers/cc	Variation	95%	8-hour TWA
11611	1161818	135	2.06	278.1	11.5	100	0.01	0.1050	13.376	0.0185	1.635	<0.0303	0.015
11612	1161819	139	9.76	1356.64	10.5	100	0.01	0.0950	12.102	0.0034	1.660	<0.0057	N/A
11613	1161820	127	9.76	1239.52	8	100	0.01	0.0700	8.917	0.0028	1.741	<0.0048	N/A
11614	1161821	118	9.76	1151.68	14	100	0.01	0.1250	15.924	0.0053	1.600	<0.0085	N/A
11615	1161822	122	2.06	251.32	12.5	100	0.01	0.1150	14.650	0.0224	1.620	<0.0364	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 18, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/17/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/17/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 89
PAGE 1 **OF** 2

DATE COLLECTED 1/17/2018
DATE RECEIVED 1/17/2018
DATE ANALYZED 1/17/2018
DATE REPORTED 1/18/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1171806	1	100	1/100
B2	1171807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11701	1171808	Area	End of Trestle 2-Pump #HV-33	7:20 AM	12:06 PM	9.76	9.76
11702	1171809	Area	Center of Trestle 1-Pump #HV-8	7:24 AM	12:03 PM	9.76	9.76
11703	1171810	Area	Northside of Regulated Area-Pump #HV-51	7:28 AM	12:10 PM	9.76	9.76
11704	1171811	STEL	Ever Bonilla-Cleaning Beach Head-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
11705	1171812	STEL	Tommy Smith-Support Worker-Pump #LV-32	7:34 AM	8:04 AM	2.06	2.06
11706	1171813	STEL	Monica Gauthier-Working on deck-Pump #LV-30	7:40 AM	8:10 AM	2.06	2.06
11707	1171814	Personal	Ever Bonilla-Cleaning Beach Head-Pump #LV-1	8:01 AM	12:00 PM	2.06	2.06
11708	1171815	Personal	Tommy Smith-Support Worker-Pump #LV-32	8:05 AM	11:53 AM	2.06	2.06
11709	1171816	Personal	Monica Gauthier-Working on deck-Pump #LV-30	8:11 AM	12:37 PM	2.06	2.06
11710	1171817	Area	Center of Trestle 1-Pump #HV-8	12:04 PM	2:44 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11701	1171808	286	9.76	2791.36	7	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
11702	1171809	279	9.76	2723.04	11	100	0.005	0.1000	12.739	0.0018	1.660	<0.0030	N/A
11703	1171810	282	9.76	2752.32	8	100	0.005	0.0750	9.554	0.0013	1.741	<0.0023	N/A
11704	1171811	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
11705	1171812	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.011
11706	1171813	30	2.06	61.8	9	100	0.005	0.0850	10.828	0.0675	1.705	<0.1150	0.013
11707	1171814	239	2.06	492.34	6.5	100	0.005	0.0600	7.643	0.0060	1.810	<0.0108	0.010
11708	1171815	228	2.06	469.68	7.5	100	0.005	0.0700	8.917	0.0073	1.775	<0.0130	0.011
11709	1171816	266	2.06	547.96	8	100	0.005	0.0750	9.554	0.0067	1.741	<0.0117	0.013
11710	1171817	160	9.76	1561.6	9.5	100	0.005	0.0900	11.465	0.0028	1.690	<0.0048	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 89
PAGE 2 **OF** 2

DATE COLLECTED 1/17/2018
DATE RECEIVED 1/17/2018
DATE ANALYZED 1/17/2018
DATE REPORTED 1/18/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1171806	1	100	1/100
B2	1171807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11711	1171818	Area	End of Trestle 2-Pump #HV-33	12:07 PM	2:48 PM	9.76	9.76
11712	1171819	Area	Northside of Regulated Area-Pump #HV-51	12:11 PM	2:52 PM	9.76	9.76
11713	1171820	Personal	Ever Bonilla-Cleaning Beach Head-Pump #LV-1	12:35 PM	2:32 PM	2.06	2.06
11714	1171821	Personal	Tommy Smith-Support Worker-Pump #LV-32	12:36 PM	2:35 PM	2.06	2.06
11715	1171822	Personal	Monica Gauthier-Working on deck-Pump #LV-30	12:37 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11711	1171818	161	9.76	1571.36	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0034	N/A
11712	1171819	161	9.76	1571.36	8	100	0.005	0.0750	9.554	0.0023	1.741	<0.0041	N/A
11713	1171820	117	2.06	241.02	7	100	0.005	0.0650	8.280	0.0132	1.785	<0.0236	0.010
11714	1171821	119	2.06	245.14	6.5	100	0.005	0.0600	7.643	0.0120	1.810	<0.0217	0.011
11715	1171822	120	2.06	247.2	10	100	0.005	0.0950	12.102	0.0188	1.670	<0.0315	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/18/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/18/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 90
PAGE 1 **OF** 2

DATE COLLECTED 1/18/2018
DATE RECEIVED 1/18/2018
DATE ANALYZED 1/18/2018
DATE REPORTED 1/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1181806	1	100	1/100
B2	1181807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11801	1181808	Area	Northside of Regulated Area-Pump #HV-51	7:28 AM	12:08 PM	9.76	9.76
11802	1181809	Area	End of Trestle 2-Pump #HV-33	7:33 AM	12:04 PM	9.76	9.76
11803	1181810	Area	Mid-Span of Trestle 1-Pump #HV-8	7:35 AM	12:02 PM	9.76	9.76
11804	1181811	STEL	Mark Jeffers-Crane Operator-Pump #HV-32	7:40 AM	8:10 AM	2.06	2.06
11805	1181812	STEL	Gary Brown-Moving debris/skimming debris in boat-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
11806	1181813	STEL	Brent Hardinger-Excavator Operator-Pump #LV-30	8:00 AM	8:30 AM	2.06	2.06
11807	1181814	Personal	Mark Jeffers-Crane Operator-Pump #HV-32	8:11 AM	11:58 AM	2.06	2.06
11808	1181815	Personal	Gary Brown-Moving debris/skimming debris in boat-Pump #LV-1	8:16 AM	12:00 PM	2.06	2.06
11809	1181816	Personal	Brent Hardinger-Excavator Operator-Pump #LV-30	8:31 AM	11:55 AM	2.06	2.06
11810	1181817	Area	Mid-Span of Trestle 1-Pump #HV-8	12:03 PM	2:41 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11801	1181808	280	9.76	2732.8	9	100	0.01	0.0800	10.191	0.0014	1.705	<0.0024	N/A
11802	1181809	271	9.76	2644.96	10.5	100	0.01	0.0950	12.102	0.0018	1.660	<0.0029	N/A
11803	1181810	267	9.76	2605.92	11	100	0.01	0.1000	12.739	0.0019	1.655	<0.0031	N/A
11804	1181811	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.012
11805	1181812	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.011
11806	1181813	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.012
11807	1181814	227	2.06	467.62	11	100	0.01	0.1000	12.739	0.0105	1.655	<0.0174	0.012
11808	1181815	224	2.06	461.44	9.5	100	0.01	0.0850	10.828	0.0090	1.690	<0.0153	0.011
11809	1181816	204	2.06	420.24	11	100	0.01	0.1000	12.739	0.0117	1.655	<0.0193	0.012
11810	1181817	158	9.76	1542.08	8	100	0.01	0.0700	8.917	0.0022	1.741	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 90
PAGE 2 **OF** 2

DATE COLLECTED 1/18/2018
DATE RECEIVED 1/18/2018
DATE ANALYZED 1/18/2018
DATE REPORTED 1/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1181806	1	100	1/100
B2	1181807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter/Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11811	1181818	Area	End of Trestle 2-Pump #HV-33	12:05 PM	2:43 PM	9.76	9.76
11812	1181819	Area	Northside of Regulated Area-Pump #HV-51	12:11 PM	2:52 PM	9.76	9.76
11813	1181820	Personal	Brent Hardinger-Excavator Operator-Pump #LV-30	12:35 PM	2:33 PM	2.06	2.06
11814	1181821	Personal	Gary Brown-Moving debris/skimming debris in boat-Pump #LV-1	12:36 PM	2:55 PM	2.06	2.06
11815	1181822	Personal	Mark Jeffers-Crane Operator-Pump #HV-32	12:40 PM	2:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11811	1181818	158	9.76	1542.08	7.5	100	0.01	0.0650	8.280	0.0021	1.775	<0.0037	N/A
11812	1181819	161	9.76	1571.36	7	100	0.01	0.0600	7.643	0.0019	1.785	<0.0033	N/A
11813	1181820	118	2.06	243.08	8	100	0.01	0.0700	8.917	0.0141	1.741	<0.0246	0.012
11814	1181821	139	2.06	286.34	8	100	0.01	0.0700	8.917	0.0120	1.741	<0.0209	0.011
11815	1181822	117	2.06	241.02	8	100	0.01	0.0700	8.917	0.0142	1.741	<0.0248	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 22, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/19/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/19/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 91
PAGE 1 **OF** 2

DATE COLLECTED 1/19/2018
DATE RECEIVED 1/19/2018
DATE ANALYZED 1/19/2018
DATE REPORTED 1/22/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1191806	0.5	100	0.5/100
B2	1191807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnsn

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11901	1191808	STEL	Ever Bonilla-Removing decking & debris-Pump #LV-1	7:20 AM	7:50 AM	2.06	2.06
11902	1191809	STEL	Kent Parker-Removing pilings-Pump #LV-32	7:22 AM	7:52 AM	2.06	2.06
11903	1191810	STEL	Brent hardinger-Equipment operator-Pump #LV-30	7:25 AM	7:55 AM	2.06	2.06
11904	1191811	Area	Mid--Point of Trestle 1-Pump #HV-8	7:30 AM	12:40 PM	9.76	9.76
11905	1191812	Area	End of Trestle 2-Pump #HV-33	7:32 AM	12:43 PM	9.76	9.76
11906	1191813	Area	Northside of Regulated Area-Pump #HV-51	7:35 AM	12:46 PM	9.76	9.76
11907	1191814	Personal	Ever Bonilla-Removing decking & debris-Pump #LV-1	7:51 AM	1:00 PM	2.06	2.06
11908	1191815	Personal	Kent Parker-Removing pilings-Pump #LV-32	7:53 AM	1:05 PM	2.06	2.06
11909	1191816	Personal	Brent hardinger-Equipment operator-Pump #LV-30	7:56 AM	1:03 PM	2.06	2.06
11910	1191817	Area	Mid--Point of Trestle 1-Pump #HV-8	12:41 PM	2:42 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11901	1191808	30	2.06	61.8	11.5	100	0.0075	0.1075	13.694	0.0853	1.635	<0.1395	0.012
11902	1191809	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.012
11903	1191810	30	2.06	61.8	10	100	0.0075	0.0925	11.783	0.0734	1.670	<0.1226	0.012
11904	1191811	310	9.76	3025.6	8.5	100	0.0075	0.0775	9.873	0.0013	1.720	<0.0022	N/A
11905	1191812	311	9.76	3035.36	10.5	100	0.0075	0.0975	12.420	0.0016	1.660	<0.0026	N/A
11906	1191813	311	9.76	3035.36	7	100	0.0075	0.0625	7.962	0.0010	1.785	<0.0018	N/A
11907	1191814	309	2.06	636.54	8	100	0.0075	0.0725	9.236	0.0056	1.741	<0.0097	0.012
11908	1191815	312	2.06	642.72	8	100	0.0075	0.0725	9.236	0.0055	1.741	<0.0096	0.012
11909	1191816	307	2.06	632.42	8	100	0.0075	0.0725	9.236	0.0056	1.741	<0.0098	0.012
11910	1191817	121	9.76	1180.96	9.5	100	0.0075	0.0875	11.146	0.0036	1.690	<0.0061	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 91
PAGE 2 **OF** 2

DATE COLLECTED 1/19/2018
DATE RECEIVED 1/19/2018
DATE ANALYZED 1/19/2018
DATE REPORTED 1/22/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1191806	0.5	100	0.5/100
B2	1191807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
11911	1191818	Area	End of Trestle 2-Pump #HV-33	12:43 PM	2:45 PM	9.76	9.76
11912	1191819	Area	Northside of Regulated Area-Pump #HV-51	12:47 PM	2:50 PM	9.76	9.76
11913	1191820	Personal	Ever Bonilla-Removing decking & debris-Pump #LV-1	1:35 PM	2:31 PM	2.06	2.06
11914	1191821	Personal	Kent Parker-Removing pilings-Pump #LV-32	1:36 PM	2:33 PM	2.06	2.06
11915	1191822	Personal	Brent hardinger-Equipment operator-Pump #LV-30	1:37 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
11911	1191818	122	9.76	1190.72	7.5	100	0.0075	0.0675	8.599	0.0028	1.775	<0.0049	N/A
11912	1191819	123	9.76	1200.48	10	100	0.0075	0.0925	11.783	0.0038	1.670	<0.0063	NA
11913	1191820	56	2.06	115.36	7	100	0.0075	0.0625	7.962	0.0266	1.785	<0.0474	0.012
11914	1191821	57	2.06	117.42	10.5	100	0.0075	0.0975	12.420	0.0407	1.660	<0.0676	0.012
11915	1191822	63	2.06	129.78	7.5	100	0.0075	0.0675	8.599	0.0255	1.775	<0.0453	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 22, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/20/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/20/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 92
PAGE 1 **OF** 1

DATE COLLECTED 1/20/2018
DATE RECEIVED 1/20/2018
DATE ANALYZED 1/20/2018
DATE REPORTED 1/22/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1201806	0.5	100	0.5/100
B2	1201807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnsn

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12001	1201808	Area	End of Trestle 1-Pump #HV-33	7:30 AM	12:00 PM	9.76	9.76
12002	1201809	Area	End of Trestle 2-Pump #HV-8	7:32 AM	12:05 PM	9.76	9.76
12003	1201810	STEL	Edwin Villasenor-Deck cutting-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
12004	1201811	STEL	Eduardo Gonzalez-Forklif & waterhose operator-Pump #LV-30	7:43 AM	8:13 AM	2.06	2.06
12005	1201812	Personal	Edwin Villasenor-Deck cutting-Pump #LV-1	7:32 AM	12:43 PM	2.06	2.06
12006	1201813	Personal	Eduardo Gonzalez-Forklif & waterhose operator-Pump #LV-30	7:35 AM	12:46 PM	2.06	2.06
12007	1201814	Area	End of Trestle 1-Pump #HV-33	12:01 PM	2:37 PM	9.76	9.76
12008	1201815	Area	End of Trestle 2-Pump #HV-8	12:06 PM	2:35 PM	9.76	9.76
12009	1201816	Personal	Edwin Villasenor-Deck cutting-Pump #LV-1	7:56 AM	1:03 PM	2.06	2.06
12010	1201817	Personal	Eduardo Gonzalez-Forklif & waterhose operator-Pump #LV-30	12:41 PM	2:42 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12001	1201808	270	9.76	2635.2	10	100	0.005	0.0950	12.102	0.0018	1.670	<0.0030	N/A
12002	1201809	273	9.76	2664.48	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
12003	1201810	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
12004	1201811	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
12005	1201812	311	2.06	640.66	8	100	0.005	0.0750	9.554	0.0057	1.741	<0.0100	0.011
12006	1201813	311	2.06	640.66	7	100	0.005	0.0650	8.280	0.0050	1.785	<0.0089	0.010
12007	1201814	156	9.76	1522.56	8	100	0.005	0.0750	9.554	0.0024	1.741	<0.0042	N/A
12008	1201815	149	9.76	1454.24	7	100	0.005	0.0600	7.643	0.0020	1.810	<0.0037	N/A
12009	1201816	307	2.06	632.42	9.5	100	0.005	0.0900	11.465	0.0070	1.690	<0.0118	0.011
12010	1201817	121	2.06	249.26	6.5	100	0.005	0.0600	7.643	0.0118	1.810	<0.0214	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 23, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/22/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/22/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE Environmental INC.

Clean your world.

Jan 24, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/23/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/23/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 93
PAGE 1 **OF** 2

DATE COLLECTED 1/23/2018
DATE RECEIVED 1/23/2018
DATE ANALYZED 1/23/2018
DATE REPORTED 1/24/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1231806	0.5	100	0.5/100
B2	1231807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12301	1231808	Area	End of Trestle 2-Pump #HV-8	7:20 AM	12:07 PM	9.76	9.76
12302	1231809	Area	Mid-Point of Trestle 1-Pump #HV-33	7:22 AM	12:10 PM	9.76	9.76
12303	1231810	STEL	Brent Hardinger-Equipment Operator-Pump #LV-32	7:26 AM	7:56 AM	2.06	2.06
12304	1231811	STEL	Daniel McConnell-Cutting on Deck at End of Trestle 2-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
12305	1231812	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:32 AM	8:02 AM	2.06	2.06
12306	1231813	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	7:57 AM	11:56 AM	2.06	2.06
12307	1231814	Personal	Daniel McConnell-Cutting on Deck at End of Trestle 2-Pump #LV-1	8:01 AM	12:00 PM	2.06	2.06
12308	1231815	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:03 AM	12:05 PM	2.06	2.06
12309	1231816	Area	End of Trestle 2-Pump #HV-8	12:08 PM	2:45 PM	9.76	9.76
12310	1231817	Area	Mid-Point of Trestle 1-Pump #HV-33	12:11 PM	2:48 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12301	1231808	287	9.76	2801.12	7	100	0.005	0.0650	8.280	0.0011	1.785	<0.0020	N/A
12302	1231809	288	9.76	2810.88	8.5	100	0.005	0.0800	10.191	0.0014	1.720	<0.0024	N/A
12303	1231810	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
12304	1231811	30	2.06	61.8	7.5	100	0.005	0.0700	8.917	0.0556	1.775	<0.0986	0.012
12305	1231812	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.013
12306	1231813	239	2.06	492.34	10	100	0.005	0.0950	12.102	0.0095	1.670	<0.0158	0.011
12307	1231814	239	2.06	492.34	8	100	0.005	0.0750	9.554	0.0075	1.741	<0.0130	0.012
12308	1231815	242	2.06	498.52	9	100	0.005	0.0850	10.828	0.0084	1.705	<0.0143	0.013
12309	1231816	157	9.76	1532.32	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0040	N/A
12310	1231817	157	9.76	1532.32	9	100	0.005	0.0850	10.828	0.0027	1.705	<0.0046	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 93
PAGE 2 **OF** 2

DATE COLLECTED 1/23/2018
DATE RECEIVED 1/23/2018
DATE ANALYZED 1/23/2018
DATE REPORTED 1/24/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1231806	0.5	100	0.5/100
B2	1231807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12311	1231818	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	12:45 PM	2:32 PM	2.06	2.06
12312	1231819	Personal	Daniel McConnell-Cutting on Deck at End of Trestle 2-Pump #LV-1	12:47 PM	2:36 PM	2.06	2.06
12313	1231820	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:50 PM	2:40 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12311	1231818	107	2.06	220.42	6.5	100	0.005	0.0600	7.643	0.0134	1.810	<0.0242	0.011
12312	1231819	109	2.06	224.54	11	100	0.005	0.1050	13.376	0.0229	1.655	<0.0380	0.012
12313	1231820	110	2.06	226.6	12	100	0.005	0.1150	14.650	0.0249	1.620	<0.0403	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 25, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/24/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/24/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 94
PAGE 1 **OF** 2

DATE COLLECTED 1/24/2018
DATE RECEIVED 1/24/2018
DATE ANALYZED 1/24/2018
DATE REPORTED 1/25/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1241806	0.5	100	0.5/100
B2	1241807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12401	1241808	Area	Mid-Span of Trestle 1-Pump #HV-8	7:22 AM	12:03 PM	9.76	9.76
12402	1241809	Area	Mid-Span of Trestle 2-Pump #HV-33	7:25 AM	12:06 PM	9.76	9.76
12403	1241810	Area	End of Trestle 2-Pump #HV-51	7:30 AM	12:08 PM	9.76	9.76
12404	1241811	STEL	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-5	7:37 AM	8:07 AM	2.06	2.06
12405	1241812	STEL	Eduardo Gonzalez-Laborer-Pump #LV-1	7:40 AM	8:10 AM	2.06	2.06
12406	1241813	STEL	Ryan Okada-Working on deck-Pump #LV-30	7:45 AM	8:15 AM	2.06	2.06
12407	1241814	Personal	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-5	8:08 AM	12:00 PM	2.06	2.06
12408	1241815	Personal	Eduardo Gonzalez-Laborer-Pump #LV-1	8:11 AM	12:41 PM	2.06	2.06
12409	1241816	Personal	Ryan Okada-Working on deck-Pump #LV-30	8:16 AM	11:50 AM	2.06	2.06
12410	1241817	Area	Mid-Span of Trestle 1-Pump #HV-8	12:04 PM	2:50 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12401	1241808	281	9.76	2742.56	8	100	0.0075	0.0725	9.236	0.0013	1.741	<0.0023	N/A
12402	1241809	281	9.76	2742.56	7	100	0.0075	0.0625	7.962	0.0011	1.785	<0.0020	N/A
12403	1241810	278	9.76	2713.28	8.5	100	0.0075	0.0775	9.873	0.0014	1.720	<0.0024	N/A
12404	1241811	30	2.06	61.8	8	100	0.0075	0.0725	9.236	0.0575	1.741	<0.1001	0.012
12405	1241812	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.015
12406	1241813	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.012
12407	1241814	232	2.06	477.92	7	100	0.0075	0.0625	7.962	0.0064	1.785	<0.0114	0.012
12408	1241815	270	2.06	556.2	12	100	0.0075	0.1075	13.694	0.0095	1.635	<0.0155	0.015
12409	1241816	214	2.06	440.84	9	100	0.0075	0.0825	10.510	0.0092	1.705	<0.0156	0.012
12410	1241817	166	9.76	1620.16	7.5	100	0.0075	0.0675	8.599	0.0020	1.775	<0.0036	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 94
PAGE 2 **OF** 2

DATE COLLECTED 1/24/2018
DATE RECEIVED 1/24/2018
DATE ANALYZED 1/24/2018
DATE REPORTED 1/25/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1241806	0.5	100	0.5/100
B2	1241807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12411	1241818	Area	Mid-Span of Trestle 2-Pump #HV-33	12:07 PM	2:55 PM	9.76	9.76
12412	1241819	Area	End of Trestle 2-Pump #HV-51	12:09 PM	2:57 PM	9.76	9.76
12413	1241820	Personal	Eduardo Gonzalez-Laborer-Pump #LV-1	12:41 PM	2:36 PM	2.06	2.06
12414	1241821	Personal	Ryan Okada-Working on deck-Pump #LV-30	12:42 PM	2:35 PM	2.06	2.06
12415	1241822	Personal	Ever Bonilla-Cutting & removing sections of deck-Pump #LV-5	12:45 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12411	1241818	168	9.76	1639.68	9.5	100	0.0075	0.0875	11.146	0.0026	1.690	<0.0044	N/A
12412	1241819	168	9.76	1639.68	9	100	0.0075	0.0825	10.510	0.0025	1.705	<0.0042	N/A
12413	1241820	115	2.06	236.9	13	100	0.0075	0.1225	15.605	0.0254	1.610	<0.0408	0.015
12414	1241821	113	2.06	232.78	10	100	0.0075	0.0925	11.783	0.0195	1.670	<0.0325	0.012
12415	1241822	105	2.06	216.3	10.5	100	0.0075	0.0975	12.420	0.0221	1.660	<0.0367	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE Environmental INC.

Clean your world.

Jan 26, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/25/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/25/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 95
PAGE 1 **OF** 2

DATE COLLECTED 1/25/2018
DATE RECEIVED 1/25/2018
DATE ANALYZED 1/25/2018
DATE REPORTED 1/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1251806	1	100	1/100
B2	1251807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12501	1251808	STEL	Daniel McConnell-Lining & sealing dumpsters-Pump #LV-5	7:38 AM	8:08 AM	2.06	2.06
12502	1251809	STEL	Mark Jeffers-Crane Operator-Pump #LV-30	7:43 AM	8:13 AM	2.06	2.06
12503	1251810	STEL	Brent Hardinger-Equipment Operator-Pump #LV-32	7:50 AM	8:20 AM	2.06	2.06
12504	1251811	Area	End of Tresle 2-Pump #HV-33	7:55 AM	12:00 PM	9.76	9.76
12505	1251812	Area	End of Trestle 1-Pump #HV-51	7:59 AM	12:04 PM	9.76	9.76
12506	1251813	Personal	Daniel McConnell-Lining & sealing dumpsters-Pump #LV-5	8:09 AM	11:48 AM	2.06	2.06
12507	1251814	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	8:14 AM	11:50 AM	2.06	2.06
12508	1251815	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	8:21 AM	11:45 AM	2.06	2.06
12509	1251816	Area	End of Trestle 2-Pump #HV-33	12:01 PM	2:53 PM	9.76	9.76
12510	1251817	Area	End of Trestle 1-Pump #HV-51	12:05 PM	2:56 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12501	1251808	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.013
12502	1251809	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.010
12503	1251810	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.013
12504	1251811	245	9.76	2391.2	9	100	0.01	0.0800	10.191	0.0016	1.705	<0.0028	N/A
12505	1251812	245	9.76	2391.2	10	100	0.01	0.0900	11.465	0.0018	1.670	<0.0031	N/A
12506	1251813	219	2.06	451.14	8.5	100	0.01	0.0750	9.554	0.0082	1.720	<0.0140	0.013
12507	1251814	216	2.06	444.96	8	100	0.01	0.0700	8.917	0.0077	1.741	<0.0134	0.010
12508	1251815	204	2.06	420.24	12.5	100	0.01	0.1150	14.650	0.0134	1.620	<0.0217	0.013
12509	1251816	172	9.76	1678.72	8.5	100	0.01	0.0750	9.554	0.0022	1.720	<0.0038	N/A
12510	1251817	171	9.76	1668.96	13	100	0.01	0.1200	15.287	0.0035	1.610	<0.0057	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 95
PAGE 2 **OF** 2

DATE COLLECTED 1/25/2018
DATE RECEIVED 1/25/2018
DATE ANALYZED 1/25/2018
DATE REPORTED 1/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1251806	1	100	1/100
B2	1251807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12511	1251818	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	12:45 PM	2:40 PM	2.06	2.06
12512	1251819	Personal	Daniel McConnell-Lining & sealing dumpsters-Pump #LV-5	12:48 PM	2:42 PM	2.06	2.06
12513	1251820	Personal	Mark Jeffers-Crane Operator-Pump #LV-30	12:50 PM	2:45 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12511	1251818	115	2.06	236.9	8	100	0.01	0.0700	8.917	0.0145	1.741	<0.0252	0.013
12512	1251819	114	2.06	234.84	11	100	0.01	0.1000	12.739	0.0209	1.655	<0.0346	0.013
12513	1251820	115	2.06	236.9	7.5	100	0.01	0.0650	8.280	0.0135	1.775	<0.0239	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE Environmental INC.

Clean your world.

Jan 29, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/26/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/26/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 96
PAGE 1 **OF** 2

DATE COLLECTED 1/26/2018
DATE RECEIVED 1/26/2018
DATE ANALYZED 1/26/2018
DATE REPORTED 1/29/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1261806	1	100	1/100
B2	1261807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12601	1261808	STEL	Eduardo Gonzalez-Firehose operator/laborer-Pump #LV-30	7:20 AM	7:50 AM	2.06	2.06
12602	1261809	STEL	Kent Parker-Working on deck-Pump #LV-32	7:22 AM	7:52 AM	2.06	2.06
12603	1261810	STEL	Ever Bonilla-Removing deck sections-Pump #LV-36	7:25 AM	7:55 AM	2.06	2.06
12604	1261811	Area	End of Trestle 2-Pump #HV-51	7:30 AM	12:00 PM	9.76	9.76
12605	1261812	Area	End of Trestle 1-Pump #HV-33	7:34 AM	7:05 AM	9.76	9.76
12606	1261813	Personal	Eduardo Gonzalez-Firehose operator/laborer-Pump #LV-30	7:51 AM	11:50 AM	2.06	2.06
12607	1261814	Personal	Kent Parker-Working on deck-Pump #LV-32	7:53 AM	11:53 AM	2.06	2.06
12608	1261815	Personal	Ever Bonilla-Removing deck sections-Pump #LV-36	7:53 AM	11:58 AM	2.06	2.06
12609	1261816	Area	End of Trestle 2-Pump #HV-51	12:01 PM	2:50 PM	9.76	9.76
12610	1261817	Area	End of Trestle 1-Pump #HV-33	12:06 PM	2:53 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
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12602	1261809	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.012
12603	1261810	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.011
12604	1261811	270	9.76	2635.2	8.5	100	0.0075	0.0775	9.873	0.0014	1.720	<0.0025	N/A
12605	1261812	1411	9.76	13771.36	8	100	0.0075	0.0725	9.236	0.0003	1.741	<0.0004	N/A
12606	1261813	239	2.06	492.34	8	100	0.0075	0.0725	9.236	0.0072	1.741	<0.0126	0.012
12607	1261814	240	2.06	494.4	10.5	100	0.0075	0.0975	12.420	0.0097	1.660	<0.0161	0.012
12608	1261815	245	2.06	504.7	7	100	0.0075	0.0625	7.962	0.0061	1.785	<0.0108	0.010
12609	1261816	169	9.76	1649.44	7	100	0.0075	0.0625	7.962	0.0019	1.785	<0.0033	N/A
12610	1261817	167	9.76	1629.92	10.5	100	0.0075	0.0975	12.420	0.0029	1.660	<0.0049	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 96
PAGE 2 **OF** 2

DATE COLLECTED 1/26/2018
DATE RECEIVED 1/26/2018
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DATE REPORTED 1/29/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1261806	1	100	1/100
B2	1261807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12611	1261818	Personal	Eduardo Gonzalez-Firehose operator/laborer-Pump #LV-30	12:30 PM	2:40 PM	2.06	2.06
12612	1261819	Personal	Kent Parker-Working on deck-Pump #LV-32	12:32 PM	2:41 PM	2.06	2.06
12613	1261820	Personal	Ever Bonilla-Removing deck sections-Pump #LV-36	12:35 PM	2:44 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12611	1261818	130	2.06	267.8	8.5	100	0.0075	0.0775	9.873	0.0142	1.720	<0.0244	0.012
12612	1261819	129	2.06	265.74	8	100	0.0075	0.0725	9.236	0.0134	1.741	<0.0233	0.012
12613	1261820	129	2.06	265.74	7	100	0.0075	0.0625	7.962	0.0115	1.785	<0.0206	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 29, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/27/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/27/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 97
PAGE 1 **OF** 1

DATE COLLECTED 1/27/2018
DATE RECEIVED 1/27/2018
DATE ANALYZED 1/27/2018
DATE REPORTED 1/29/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1271806	1	100	1/100
B2	1271807	1	100	1/100

SAMPLES COLLECTED BY: Pete Coleman

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12701	1271808	STEL	Brent Hardinger-Equipment Operator-Pump #LV-38	7:15 AM	7:45 AM	2.06	2.06
12702	1271809	STEL	Eduardo Gonzalez-Water truck/firehose operator-Pump #LV-36	7:34 AM	8:04 AM	2.06	2.06
12703	1271810	Personal	Brent Hardinger-Equipment Operator-Pump #LV-38	7:46 AM	12:50 PM	2.06	2.06
12704	1271811	Personal	Eduardo Gonzalez-Water truck/firehose operator-Pump #LV-36	8:05 AM	12:53 PM	2.06	2.06
12705	1271812	Area	End of Trestle 1-Pump #HV-51	7:51 AM	10:43 AM	9.76	9.76
12706	1271813	Area	End of Trestle 2-Pump #HV-33	8:12 AM	10:48 AM	9.76	9.76
12707	1271814	Area	End of Trestle 1-Pump #HV-51	10:44 AM	2:26 PM	9.76	9.76
12708	1271815	Area	End of Trestle 2-Pump #HV-33	10:49 AM	2:29 PM	9.76	9.76
12709	1271816	Personal	Brent Hardinger-Equipment Operator-Pump #LV-38	12:51 PM	2:22 PM	2.06	2.06
12710	1271817	Personal	Eduardo Gonzalez-Water truck/firehose operator-Pump #LV-36	12:53 PM	2:24 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12701	1271808	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
12702	1271809	30	2.06	61.8	14	100	0.01	0.1300	16.561	0.1032	1.590	<0.1640	0.016
12703	1271810	304	2.06	626.24	9	100	0.01	0.0800	10.191	0.0063	1.705	<0.0107	0.011
12704	1271811	288	2.06	593.28	11	100	0.01	0.1000	12.739	0.0083	1.655	<0.0137	0.016
12705	1271812	172	9.76	1678.72	11.5	100	0.01	0.1050	13.376	0.0031	1.635	<0.0050	N/A
12706	1271813	156	9.76	1522.56	7.5	100	0.01	0.0650	8.280	0.0021	1.775	<0.0037	N/A
12707	1271814	222	9.76	2166.72	13	100	0.01	0.1200	15.287	0.0027	1.610	<0.0044	N/A
12708	1271815	220	9.76	2147.2	9	100	0.01	0.0800	10.191	0.0018	1.705	<0.0031	N/A
12709	1271816	91	2.06	187.46	8.5	100	0.01	0.0750	9.554	0.0196	1.720	<0.0337	0.011
12710	1271817	91	2.06	187.46	9.5	100	0.01	0.0850	10.828	0.0222	1.690	<0.0376	0.016

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

Jan 30, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/29/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/29/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 98
PAGE 1 **OF** 2

DATE COLLECTED 1/29/2018
DATE RECEIVED 1/29/2018
DATE ANALYZED 1/29/2018
DATE REPORTED 1/30/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1291806	1	100	1/100
B2	1291807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12901	1291808	Area	Mid-Span of Trestle 1-Pump #HV-53	7:20 AM	12:00 PM	9.76	9.76
12902	1291809	Area	End of Trestle 2-Pump #HV51	7:25 AM	12:05 PM	9.76	9.76
12903	1291810	STEL	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	7:35 AM	8:05 AM	2.06	2.06
12904	1291811	STEL	Brent Hardinger-Equipment Operator-Pump #LV-32	7:38 AM	8:08 AM	2.06	2.06
12905	1291812	STEL	Justin Scott-Working on Trestle-Pump #LV-30	7:41 AM	8:11 AM	2.06	2.06
12906	1291813	Personal	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	8:06 AM	11:50 AM	2.06	2.06
12907	1291814	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	8:09 AM	11:58 AM	2.06	2.06
12908	1291815	Personal	Justin Scott-Working on Trestle-Pump #LV-30	8:12 AM	11:55 AM	2.06	2.06
12909	1291816	Area	Mid-Span of Trestle 1-Pump #HV-53	12:01 PM	2:45 PM	9.76	9.76
12910	1291817	Area	End of Trestle 2-Pump #HV51	12:06 PM	2:50 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12901	1291808	280	9.76	2732.8	8.5	100	0.0075	0.0775	9.873	0.0014	1.720	<0.0024	N/A
12902	1291809	280	9.76	2732.8	8	100	0.0075	0.0725	9.236	0.0013	1.741	<0.0023	N/A
12903	1291810	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.012
12904	1291811	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.011
12905	1291812	30	2.06	61.8	7.0	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.010
12906	1291813	224	2.06	461.44	7.5	100	0.0075	0.0675	8.599	0.0072	1.775	<0.0127	0.012
12907	1291814	229	2.06	471.74	9	100	0.0075	0.0775	9.873	0.0081	1.720	<0.0139	0.011
12908	1291815	223	2.06	459.38	8	100	0.0075	0.0725	9.236	0.0077	1.741	<0.0135	0.010
12909	1291816	164	9.76	1600.64	7	100	0.0075	0.0625	7.962	0.0019	1.785	<0.0034	N/A
12910	1291817	164	9.76	1600.64	9.5	100	0.0075	0.0875	11.146	0.0027	1.690	<0.0045	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 98
PAGE 2 **OF** 2

DATE COLLECTED 1/29/2018
DATE RECEIVED 1/29/2018
DATE ANALYZED 1/29/2018
DATE REPORTED 1/30/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1291806	1	100	1/100
B2	1291807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
12911	1291818	Personal	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	12:45 PM	2:35 PM	2.06	2.06
12912	1291819	Personal	Brent Hardinger-Equipment Operator-Pump #LV-32	12:48 PM	2:38 PM	2.06	2.06
12913	1291820	Personal	Justin Scott-Working on Trestle-Pump #LV-30	12:52 PM	2:43 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
12911	1291818	110	2.06	226.6	11	100	0.0075	0.1025	13.057	0.0222	1.655	<0.0367	0.012
12912	1291819	110	2.06	226.6	7	100	0.0075	0.0625	7.962	0.0135	1.785	<0.0241	0.011
12913	1291820	111	2.06	228.66	7.5	100	0.0075	0.0675	8.599	0.0145	1.775	<0.0257	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

Jan 31, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/30/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/30/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE Environmental INC.

Clean your world.

February 1, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/31/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 01/31/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 100
PAGE 1 **OF** 2

DATE COLLECTED 1/31/2018
DATE RECEIVED 1/31/2018
DATE ANALYZED 1/31/2018
DATE REPORTED 2/1/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1311806	1	100	1/100
B2	1311807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
13101	1311808	Area	End of Trestle 1-Pump #HV-52	7:22 AM	12:03 PM	9.76	9.76
13102	1311809	Area	End of Trestle 2-Pump #HV-33	7:26 PM	12:06 PM	9.76	9.76
13103	1311810	STEL	Lismar Matos Fuentes-Cutting & removing deck sections-Pump #LV-5	7:35 AM	8:05 AM	2.06	2.06
13104	1311811	STEL	Tommy Smith-Equipment Operator-Pump #LV-36	7:40 AM	8:10 AM	2.06	2.06
13105	1311812	STEL	Monica Gauthier-Removing pilings-Pump #LV-32	7:42 AM	8:12 AM	2.06	2.06
13106	1311813	Area	Northside of Regulated Area-Pump #HV-22	7:50 AM	12:10 PM	9.76	9.76
13107	1311814	Personal	Lismar Matos Fuentes-Cutting & removing deck sections-Pump #LV-5	8:06 AM	12:47 PM	2.06	2.06
13108	1311815	Personal	Tommy Smith-Equipment Operator-Pump #LV-36	8:11 AM	11:51 AM	2.06	2.06
13109	1311816	Personal	Monica Gauthier-Removing pilings-Pump #LV-32	8:13 AM	11:59 AM	2.06	2.06
13110	1311817	Area	End of Trestle 1-Pump #HV-52	12:04 PM	2:45 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
13101	1311808	281	9.76	2742.56	10	100	0.01	0.0900	11.465	0.0016	1.670	<0.0027	N/A
13102	1311809	1000	9.76	9760	9.5	100	0.01	0.0850	10.828	0.0004	1.690	<0.0007	N/A
13103	1311810	30	2.06	61.8	11	100	0.01	0.1000	12.739	0.0794	1.655	<0.1313	0.014
13104	1311811	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.012
13105	1311812	30	2.06	61.8	10.5	100	0.01	0.0950	12.102	0.0754	1.660	<0.1252	0.012
13106	1311813	260	9.76	2537.6	7.5	100	0.01	0.0650	8.280	0.0013	1.775	<0.0022	N/A
13107	1311814	281	2.06	578.86	7.5	100	0.01	0.0650	8.280	0.0055	1.775	<0.0098	0.014
13108	1311815	220	2.06	453.2	10	100	0.01	0.0900	11.465	0.0097	1.670	<0.0163	0.012
13109	1311816	226	2.06	465.56	9	100	0.01	0.0800	10.191	0.0084	1.705	<0.0144	0.012
13110	1311817	161	9.76	1571.36	8	100	0.01	0.0700	8.917	0.0022	1.741	<0.0038	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 100
PAGE 2 **OF** 2

DATE COLLECTED 1/31/2018
DATE RECEIVED 1/31/2018
DATE ANALYZED 1/31/2018
DATE REPORTED 2/1/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	1311806	1	100	1/100
B2	1311807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
13111	1311818	Area	End of Trestle 2-Pump #HV-33	12:07 PM	2:50 PM	9.76	9.76
13112	1311819	Area	Northside of Regulated Area-Pump #HV-22	12:11 PM	2:53 PM	9.76	9.76
13113	1311820	Personal	Tommy Smith-Equipment Operator-Pump #LV-36	12:45 PM	2:35 PM	2.06	2.06
13114	1311821	Personal	Lismar Matos Fuentes-Cutting & removing deck sections-Pump #LV-5	12:47 PM	2:39 PM	2.06	2.06
13115	1311822	Personal	Monica Gauthier-Removing pilings-Pump #LV-32	12:51 PM	2:43 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
13111	1311818	163	9.76	1590.88	13	100	0.01	0.1200	15.287	0.0037	1.610	<0.0060	N/A
13112	1311819	162	9.76	1581.12	11.5	100	0.01	0.1050	13.376	0.0033	1.635	<0.0053	N/A
13113	1311820	110	2.06	226.6	9	100	0.01	0.0800	10.191	0.0173	1.705	<0.0295	0.012
13114	1311821	112	2.06	230.72	12	100	0.01	0.1100	14.013	0.0234	1.620	<0.0379	0.014
13115	1311822	112	2.06	230.72	8	100	0.01	0.0700	8.917	0.0149	1.741	<0.0259	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 2, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/01/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/01/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 101
PAGE 1 **OF** 2

DATE COLLECTED 2/1/2018
DATE RECEIVED 2/1/2018
DATE ANALYZED 2/1/2018
DATE REPORTED 2/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2011806	0	100	0/100
B2	2011807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20101	2011808	Area	End of Trestle 1-Pump #HV-52	7:22 AM	12:04 PM	9.76	9.76
20102	2011809	Area	Northside of Regulated Area-Pump #HV-33	7:30 AM	12:10 PM	9.76	9.76
20103	2011810	STEL	Ever Bonilla-Cutting & removing deck sections-Pump #LV-5	7:35 AM	8:05 AM	2.06	2.06
20104	2011811	STEL	Mark Jeffers-Crane Operator-Pump #LV-32	7:40 AM	8:10 AM	2.06	2.06
20105	2011812	STEL	Brent Hardinger-Equipment Operator-Pump #LV-36	7:45 AM	8:15 AM	2.06	2.06
20106	2011813	Personal	Ever Bonilla-Cutting & removing deck sections-Pump #LV-5	8:06 AM	12:00 PM	2.06	2.06
20107	2011814	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	8:11 AM	11:52 AM	2.06	2.06
20108	2011815	Personal	Brent Hardinger-Equipment Operator-Pump #LV-36	8:16 AM	12:34 PM	2.06	2.06
20109	2011816	Area	End of Trestle 2-Pump #HV-22	8:30 AM	12:07 PM	9.76	9.76
20110	2011817	Area	End of Trestle 1-Pump #HV-52	12:05 PM	2:45 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20101	2011808	282	9.76	2752.32	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
20102	2011809	280	9.76	2732.8	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
20103	2011810	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.013
20104	2011811	30	2.06	61.8	12	100	0.005	0.1150	14.650	0.0913	1.620	<0.1478	0.012
20105	2011812	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.010
20106	2011813	234	2.06	482.04	6.5	100	0.005	0.0600	7.643	0.0061	1.810	<0.0110	0.013
20107	2011814	221	2.06	455.26	8	100	0.005	0.0750	9.554	0.0081	1.741	<0.0141	0.012
20108	2011815	258	2.06	531.48	8	100	0.005	0.0750	9.554	0.0069	1.741	<0.0120	0.010
20109	2011816	217	9.76	2117.92	10	100	0.005	0.0950	12.102	0.0022	1.670	<0.0037	N/A
20110	2011817	160	9.76	1561.6	6.5	100	0.005	0.0600	7.643	0.0019	1.810	<0.0034	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 101
PAGE 2 **OF** 2

DATE COLLECTED 2/1/2018
DATE RECEIVED 2/1/2018
DATE ANALYZED 2/1/2018
DATE REPORTED 2/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2011806	0	100	0/100
B2	2011807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20111	2011818	Area	End of Trestle 2-Pump #HV-22	12:08 PM	2:48 PM	9.76	9.76
20112	2011819	Area	Northside of Regulated Area-Pump #HV-33	12:11 PM	2:52 PM	9.76	9.76
20113	2011820	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	12:31 PM	2:35 PM	2.06	2.06
20114	2011821	Personal	Brent Hardinger-Equipment Operator-Pump #LV-36	12:34 PM	2:38 PM	2.06	2.06
20115	2011822	Personal	Ever Bonilla-Cutting & removing deck sections-Pump #LV-5	12:37 PM	2:43 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20111	2011818	160	9.76	1561.6	8	100	0.005	0.0750	9.554	0.0024	1.741	<0.0041	N/A
20112	2011819	161	9.76	1571.36	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0039	N/A
20113	2011820	124	2.06	255.44	6.5	100	0.005	0.0600	7.643	0.0115	1.810	<0.0209	0.012
20114	2011821	124	2.06	255.44	6.5	100	0.005	0.0600	7.643	0.0115	1.810	<0.0209	0.010
20115	2011822	126	2.06	259.56	12	100	0.005	0.1150	14.650	0.0217	1.620	<0.0352	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 6, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/02/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/02/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 102
PAGE 1 **OF** 2

DATE COLLECTED 2/2/2018
DATE RECEIVED 2/2/2018
DATE ANALYZED 2/2/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2021806	1	100	1/100
B2	2021807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20201	2021808	STEL	Monica Gauthier-Working on deck-Pump #LV-36	7:25 AM	7:55 AM	2.06	2.06
20202	2021809	STEL	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	7:28 AM	7:58 AM	2.06	2.06
20203	2021810	STEL	Eduardoz Gonzlaez-Laborer/Water Truck Operator-Pump #LV-32	7:31 AM	8:01 AM	2.06	2.06
20204	2021811	Area	Northside of Regulated Area-Pump #HV-52	7:40 AM	12:05 PM	9.76	9.76
20205	2021812	Area	End of Trestle 1/Boat Ramp-Pump #HV-33	7:42 AM	12:30 PM	9.76	9.76
20206	2021813	Area	End of Trestle 2-Pump #HV-22	8:06 AM	12:00 PM	9.76	9.76
20207	2021814	Personal	Monica Gauthier-Working on deck-Pump #LV-36	7:56 AM	12:00 PM	2.06	2.06
20208	2021815	Personal	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	7:59 AM	12:03 PM	2.06	2.06
20209	2021816	Personal	Eduardoz Gonzlaez-Laborer/Water Truck Operator-Pump #LV-32	8:02 AM	12:10 PM	2.06	2.06
20210	2021817	Area	Northside of Regulated Area-Pump #HV-52	12:06 PM	2:41 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20201	2021808	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.009
20202	2021809	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.011
20203	2021810	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.008
20204	2021811	265	9.76	2586.4	9	100	0.01	0.0800	10.191	0.0015	1.705	<0.0026	N/A
20205	2021812	288	9.76	2810.88	7.5	100	0.01	0.0650	8.280	0.0011	1.775	<0.0020	N/A
20206	2021813	234	9.76	2283.84	8.5	100	0.01	0.0750	9.554	0.0016	1.720	<0.0028	N/A
20207	2021814	244	2.06	502.64	7	100	0.01	0.0600	7.643	0.0059	1.785	<0.0105	0.009
20208	2021815	244	2.06	502.64	8.5	100	0.01	0.0750	9.554	0.0073	1.720	<0.0126	0.011
20209	2021816	248	2.06	510.88	8	100	0.01	0.0700	8.917	0.0067	1.741	<0.0117	0.008
20210	2021817	155	9.76	1512.8	9	100	0.01	0.0800	10.191	0.0026	1.705	<0.0044	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 102
PAGE 2 **OF** 2

DATE COLLECTED 2/2/2018
DATE RECEIVED 2/2/2018
DATE ANALYZED 2/2/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2021806	1	100	1/100
B2	2021807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20211	2021818	Area	End of Trestle 2-Pump #HV-22	12:12 PM	2:44 PM	9.76	9.76
20212	2021819	Area	End of Trestle 1/Boat Ramp-Pump #HV-33	12:31 PM	2:46 PM	9.76	9.76
20213	2021820	Personal	Monica Gauthier-Working on deck-Pump #LV-36	12:40 PM	2:35 PM	2.06	2.06
20214	2021821	Personal	Victor Hernandez-Cutting & removing deck sections-Pump #LV-5	12:43 PM	2:38 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20211	2021818	152	9.76	1483.52	9	100	0.01	0.0800	10.191	0.0026	1.705	<0.0045	N/A
20212	2021819	135	9.76	1317.6	8	100	0.01	0.0700	8.917	0.0026	1.741	<0.0045	N/A
20213	2021820	115	2.06	236.9	6.5	100	0.01	0.0550	7.006	0.0114	1.810	<0.0206	0.009
20214	2021821	115	2.06	236.9	7.5	100	0.01	0.0650	8.280	0.0135	1.775	<0.0239	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 6, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/03/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/03/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 102
PAGE 1 **OF** 2

DATE COLLECTED 2/3/2018
DATE RECEIVED 2/3/2018
DATE ANALYZED 2/3/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2031806	1	100	1/100
B2	2031807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20301	2031808	STEL	Misty Klampe-Cutting & removing deck sections-Pump #LV-32	7:24 AM	7:54 AM	2.06	2.06
20302	2031809	STEL	Tommy Smith-Equipment Operator/Foreman-Pump #LV-36	7:26 AM	7:56 AM	2.06	2.06
20303	2031810	Area	Northside of Regulated Area-Pump #HV-22	7:30 AM	12:00 PM	9.76	9.76
20304	2031811	Area	End of Trestle 2-Pump #HV-52	7:32 AM	12:05 PM	9.76	9.76
20305	2031812	Area	Boat Ramp-Pump #HV-33	7:35 AM	12:10 PM	9.76	9.76
20306	2031813	Personal	Misty Klampe-Cutting & removing deck sections-Pump #LV-32	7:55 AM	11:55 AM	2.06	2.06
20307	2031814	Personal	Tommy Smith-Equipment Operator/Foreman-Pump #LV-36	7:57 AM	12:45 PM	2.06	2.06
20308	2031815	Area	Northside of Regulated Area-Pump #HV-22	12:01 PM	2:40 PM	9.76	9.76
20309	2031816	Area	End of Trestle 2-Pump #HV-52	12:06 PM	2:43 PM	9.76	9.76
20310	2031817	Area	Boat Ramp-Pump #HV-33	12:11 PM	2:47 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20301	2031808	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.012
20302	2031809	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.011
20303	2031810	270	9.76	2635.2	9.5	100	0.0075	0.0875	11.146	0.0016	1.690	<0.0028	N/A
20304	2031811	273	9.76	2664.48	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
20305	2031812	275	9.76	2684	7.5	100	0.0075	0.0675	8.599	0.0012	1.775	<0.0022	N/A
20306	2031813	240	2.06	494.4	10.5	100	0.0075	0.0975	12.420	0.0097	1.660	<0.0161	0.012
20307	2031814	288	2.06	593.28	8	100	0.0075	0.0725	9.236	0.0060	1.741	<0.0104	0.011
20308	2031815	159	9.76	1551.84	7	100	0.0075	0.0625	7.962	0.0020	1.785	<0.0035	N/A
20309	2031816	157	9.76	1532.32	8.5	100	0.0075	0.0775	9.873	0.0025	1.720	<0.0043	N/A
20310	2031817	156	9.76	1522.56	7.5	100	0.0075	0.0675	8.599	0.0022	1.775	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 102
PAGE 2 **OF** 2

DATE COLLECTED 2/3/2018
DATE RECEIVED 2/3/2018
DATE ANALYZED 2/3/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2031806	1	100	1/100
B2	2031807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20311	2021818	Personal	Tommy Smith-Equipment Operator/Foreman-Pump #LV-36	12:45 PM	2:30 PM	2.06	2.06
20312	2021819	Personal	Misty Klampe-Cutting & removing deck sections-Pump #LV-32	12:47 PM	2:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20311	2021818	105	2.06	216.3	9.5	100	0.0075	0.0875	11.146	0.0198	1.690	<0.0335	0.011
20312	2021819	106	2.06	218.36	7.5	100	0.0075	0.0675	8.599	0.0152	1.775	<0.0269	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 7, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/05/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/05/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 103
PAGE 1 **OF** 2

DATE COLLECTED 2/5/2018
DATE RECEIVED 2/5/2018
DATE ANALYZED 2/5/2018
DATE REPORTED 2/6/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2051806	0.5	100	0.5/100
B2	2051807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20501	2051808	Area	Central Loading Area-Pump #HV-22	7:20 AM	12:03 PM	9.76	9.76
20502	2051809	Area	Mid-Point of Northside of Regulated Area-Pump #HV-33	7:23 AM	12:07 PM	9.76	9.76
20503	2051810	Area	Southeast Corner of Burn Site-Pump #HV-52	7:30 AM	12:00 PM	9.76	9.76
20504	2051811	STEL	Mark Jeffers-Crane Operator-Pump #LV-8	7:37 AM	8:07 AM	2.06	2.06
20505	2051812	STEL	Brent Hardinger-Excavator Operator-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
20506	2051813	STEL	Jacob Johnson-Cutting & removing sections of deck-Pump #LV-32	7:50 AM	8:20 AM	2.06	2.06
20507	2051814	Personal	Mark Jeffers-Crane Operator-Pump #LV-8	8:08 AM	11:50 AM	2.06	2.06
20508	2051815	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	8:16 AM	11:56 AM	2.06	2.06
20509	2051816	Personal	Jacob Johnson-Cutting & removing sections of deck-Pump #LV-32	8:21 AM	11:52 AM	2.06	2.06
20510	2051817	Area	Southeast Corner of Burn Site-Pump #HV-52	12:01 PM	3:10 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20501	2051808	283	9.76	2762.08	9.5	100	0.0075	0.0875	11.146	0.0016	1.690	<0.0026	N/A
20502	2051809	284	9.76	2771.84	8	100	0.0075	0.0725	9.236	0.0013	1.741	<0.0022	N/A
20503	2051810	270	9.76	2635.2	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
20504	2051811	30	2.06	61.8	8.5	100	0.0075	0.0775	9.873	0.0615	1.720	<0.1058	0.011
20505	2051812	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.010
20506	2051813	30	2.06	61.8	11.5	100	0.0075	0.1075	13.694	0.0853	1.635	<0.1395	0.013
20507	2051814	222	2.06	457.32	8	100	0.0075	0.0725	9.236	0.0078	1.741	<0.0135	0.011
20508	2051815	220	2.06	453.2	7.5	100	0.0075	0.0675	8.599	0.0073	1.775	<0.0130	0.010
20509	2051816	211	2.06	434.66	7.5	100	0.0075	0.0675	8.599	0.0076	1.775	<0.0135	0.013
20510	2051817	189	9.76	1844.64	8	100	0.0075	0.0725	9.236	0.0019	1.741	<0.0034	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 103
PAGE 2 **OF** 2

DATE COLLECTED 2/5/2018
DATE RECEIVED 2/5/2018
DATE ANALYZED 2/5/2018
DATE REPORTED 2/6/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2051806	0.5	100	0.5/100
B2	2051807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20511	2051818	Area	Central Loading Area-Pump #HV-22	12:04 PM	2:30 PM	9.76	9.76
20512	2051819	Area	Mid-Point of Northside of Regulated Area-Pump #HV-33	12:47 PM	2:33 PM	9.76	9.76
20513	2051820	Personal	Mark Jeffers-Crane Operator-Pump #LV-8	12:30 PM	3:03 PM	2.06	2.06
20514	2051821	Personal	Jacob Johnson-Cutting & removing sections of deck-Pump #LV-32	12:33 PM	3:06 PM	2.06	2.06
20515	2051822	Personal	Brent Hardinger-Excavator Operator-Pump #LV-1	12:46 PM	3:09 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20511	2051818	146	9.76	1424.96	7	100	0.0075	0.0625	7.962	0.0022	1.785	<0.0038	N/A
20512	2051819	106	9.76	1034.56	9.5	100	0.0075	0.0875	11.146	0.0041	1.690	<0.0070	N/A
20513	2051820	153	2.06	315.18	7	100	0.0075	0.0625	7.962	0.0097	1.785	<0.0174	0.011
20514	2051821	153	2.06	315.18	8.5	100	0.0075	0.0775	9.873	0.0121	1.720	<0.0207	0.010
20515	2051822	143	2.06	294.58	7	100	0.0075	0.0625	7.962	0.0104	1.785	<0.0186	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/06/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/06/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 104
PAGE 1 **OF** 2

DATE COLLECTED 2/6/2018
DATE RECEIVED 2/6/2018
DATE ANALYZED 2/6/2018
DATE REPORTED 2/7/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2061808	1	100	1/100
B2	2061809	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20601	2061810	STEL	Bob Bidilio-Lining dumpsters with poly-Pump #LV-1	7:22 AM	7:52 AM	2.06	2.06
20602	2061811	STEL	Tommy Smith-Forklift Operator-Pump #LV-32	7:25 AM	7:55 AM	2.06	2.06
20603	2061812	STEL	Kent Parker-Crane Support-Pump #LV-38	7:29 AM	7:59 AM	2.06	2.06
20604	2061813	Area	Middle of Northside of Regulated Area-Pump #HV-52	7:32 AM	11:50 AM	9.76	9.76
20605	2061814	Area	Center Area-Pump #HV-22	7:35 AM	12:04 PM	9.76	9.76
20606	2061815	Area	South Loading Area-Pump #HV-33	7:37 AM	12:08 PM	9.76	9.76
20607	2061816	Personal	Bob Bidilio-Lining dumpsters with poly-Pump #LV-1	7:53 AM	12:00 PM	2.06	2.06
20608	2061817	Personal	Tommy Smith-Forklift Operator-Pump #LV-32	7:56 AM	12:03 PM	2.06	2.06
20609	2061818	Personal	Kent Parker-Crane Support-Pump #LV-38	8:00 AM	2:50 PM	2.06	2.06
20610	2061819	Area	Middle of Northside of Regulated Area-Pump #HV-52	11:51 AM	3:00 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20601	2061810	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.014
20602	2061811	30	2.06	61.8	10.5	100	0.01	0.0950	12.102	0.0754	1.660	<0.1252	0.016
20603	2061812	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.010
20604	2061813	258	9.76	2518.08	11	100	0.01	0.1000	12.739	0.0019	1.655	<0.0032	N/A
20605	2061814	269	9.76	2625.44	10	100	0.01	0.0900	11.465	0.0017	1.670	<0.0028	N/A
20606	2061815	271	9.76	2644.96	9	100	0.01	0.0800	10.191	0.0015	1.705	<0.0025	N/A
20607	2061816	247	2.06	508.82	11	100	0.01	0.1000	12.739	0.0096	1.655	<0.0160	0.014
20608	2061817	247	2.06	508.82	13	100	0.01	0.1200	15.287	0.0116	1.610	<0.0186	0.016
20609	2061818	410	2.06	844.6	13	100	0.01	0.1200	15.287	0.0070	1.610	<0.0112	0.010
20610	2061819	189	9.76	1844.64	9.5	100	0.01	0.0850	10.828	0.0023	1.690	<0.0038	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 104
PAGE 2 **OF** 2

DATE COLLECTED 2/6/2018
DATE RECEIVED 2/6/2018
DATE ANALYZED 2/6/2018
DATE REPORTED 2/7/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2061808	1	100	1/100
B2	2061809	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20611	2061820	Personal	Bob Bidilio-Lining dumpsters with poly-Pump #LV-1	12:01 PM	2:45 PM	2.06	2.06
20612	2061821	Personal	Tommy Smith-Forklift Operator-Pump #LV-32	12:03 PM	2:42 PM	2.06	2.06
20613	2061822	Area	Center Area-Pump #HV-22	12:05 PM	3:05 PM	9.76	9.76
20614	2061823	Area	South Loading Area-Pump #HV-33	12:09 PM	2:58 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20611	2061820	164	2.06	337.84	11	100	0.01	0.1000	12.739	0.0145	1.655	<0.0240	0.014
20612	2061821	159	2.06	327.54	11	100	0.01	0.1000	12.739	0.0150	1.655	<0.0248	0.016
20613	2061822	180	9.76	1756.8	13	100	0.01	0.1200	15.287	0.0034	1.610	<0.0054	N/A
20614	2061823	169	9.76	1649.44	11	100	0.01	0.1000	12.739	0.0030	1.655	<0.0049	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/07/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/07/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 105
PAGE 1 **OF** 2

DATE COLLECTED 2/7/2018
DATE RECEIVED 2/7/2018
DATE ANALYZED 2/7/2018
DATE REPORTED 2/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2071806	0.5	100	0.5/100
B2	2071807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20701	2071808	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:17 AM	7:47 AM	2.06	2.06
20702	2071809	Area	Northside by Regulated Area-Pump #HV-33	7:25 AM	12:10 PM	9.76	9.76
20703	2071810	Area	Center by Loading Area-Pump #HV-22	7:30 AM	12:07 PM	9.76	9.76
20704	2071811	Area	Southside of Loading Area-Pump #HV-52	7:36 AM	12:04 PM	9.76	9.76
20705	2071812	STEL	Misty Klampe-Lining & sealing dumpsters-Pump #LV-1	7:45 AM	8:16 AM	2.06	2.06
20706	2071813	STEL	Mark Jeffers-Crane Operator-Pump #LV-32	7:50 AM	8:20 AM	2.06	2.06
20707	2071814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	7:48 AM	11:50 AM	2.06	2.06
20708	2071815	Personal	Misty Klampe-Lining & sealing dumpsters-Pump #LV-1	8:17 AM	11:57 AM	2.06	2.06
20709	2071816	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	8:21 AM	11:53 AM	2.06	2.06
20710	2071817	Area	Southside of Loading Area-Pump #HV-52	12:05 PM	2:34 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20701	2071808	30	2.06	61.8	10.5	100	0.005	0.1000	12.739	0.0794	1.660	<0.1317	0.013
20702	2071809	285	9.76	2781.6	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
20703	2071810	277	9.76	2703.52	10.5	100	0.005	0.1000	12.739	0.0018	1.660	<0.0030	N/A
20704	2071811	268	9.76	2615.68	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0023	N/A
20705	2071812	31	2.06	63.86	12.5	100	0.005	0.1200	15.287	0.0922	1.620	<0.1493	0.013
20706	2071813	30	2.06	61.8	9.5	100	0.005	0.0900	11.465	0.0714	1.690	<0.1207	0.011
20707	2071814	242	2.06	498.52	9	100	0.005	0.0850	10.828	0.0084	1.705	<0.0143	0.013
20708	2071815	220	2.06	453.2	6.5	100	0.005	0.0600	7.643	0.0065	1.810	<0.0118	0.013
20709	2071816	212	2.06	436.72	7	100	0.005	0.0650	8.280	0.0073	1.785	<0.0130	0.011
20710	2071817	149	9.76	1454.24	7	100	0.005	0.0650	8.280	0.0022	1.785	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 105
PAGE 2 **OF** 2

DATE COLLECTED 2/7/2018
DATE RECEIVED 2/7/2018
DATE ANALYZED 2/7/2018
DATE REPORTED 2/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2071806	0.5	100	0.5/100
B2	2071807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20711	2071818	Area	Center by Loading Area-Pump #HV-22	12:08 PM	2:37 PM	9.76	9.76
20712	2071819	Area	Southside of Loading Area-Pump #HV-52	12:11 PM	2:40 PM	9.76	9.76
20713	2071820	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:31 PM	2:25 PM	2.06	2.06
20714	2071821	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	12:34 PM	2:29 PM	2.06	2.06
20715	2071822	Personal	Misty Klampe-Lining & sealing dumpsters-Pump #LV-1	12:37 PM	2:31 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20711	2071818	149	9.76	1454.24	8	100	0.005	0.0750	9.554	0.0025	1.741	<0.0044	N/A
20712	2071819	149	9.76	1454.24	11.5	100	0.005	0.1100	14.013	0.0037	1.635	<0.0061	N/A
20713	2071820	114	2.06	234.84	7.5	100	0.005	0.0700	8.917	0.0146	1.775	<0.0259	0.013
20714	2071821	115	2.06	236.9	8.5	100	0.005	0.0800	10.191	0.0166	1.720	<0.0285	0.013
20715	2071822	114	2.06	234.84	7.5	100	0.005	0.0700	8.917	0.0146	1.775	<0.0259	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 9, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/08/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/08/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 106
PAGE 1 **OF** 2

DATE COLLECTED 2/8/2018
DATE RECEIVED 2/8/2018
DATE ANALYZED 2/8/2018
DATE REPORTED 2/9/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2081806	1	100	1/100
B2	2081807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20801	2081808	Area	Northside of Regulated Area-Pump #HV-33	7:20 AM	12:11 PM	9.76	9.76
20802	2081809	Area	Central Loading Area-Pump #HV-22	7:24 AM	12:08 PM	9.76	9.76
20803	2081810	Area	Southside of Loading Area-Pump #HV-52	7:26 AM	12:05 PM	9.76	9.76
20804	2081811	STEL	Kent Parker-Assisting Crane-Pump #LV-38	7:35 AM	8:05 AM	2.06	2.06
20805	2081812	STEL	Eduardo Gonzalez-Laborer/Water Truck Driver-Pump #LV-32	7:40 AM	8:10 AM	2.06	2.06
20806	2081813	STEL	Daniel McConnell-Deck Removal/Poly Lining Dumpsters-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
20807	2081814	Personal	Kent Parker-Assisting Crane-Pump #LV-38	8:06 AM	11:56 AM	2.06	2.06
20808	2081815	Personal	Eduardo Gonzalez-Laborer/Water Truck Driver-Pump #LV-32	8:11 AM	11:52 AM	2.06	2.06
20809	2081816	Personal	Daniel McConnell-Deck Removal/Poly Lining Dumpsters-Pump #LV-1	8:16 AM	12:00 PM	2.06	2.06
20810	2081817	Area	Southside of Loading Area-Pump #HV-52	12:06 PM	2:43 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20801	2081808	291	9.76	2840.16	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0019	N/A
20802	2081809	284	9.76	2771.84	8.5	100	0.005	0.0800	10.191	0.0014	1.720	<0.0024	N/A
20803	2081810	279	9.76	2723.04	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
20804	2081811	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.009
20805	2081812	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.011
20806	2081813	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.011
20807	2081814	230	2.06	473.8	7	100	0.005	0.0650	8.280	0.0067	1.785	<0.0120	0.009
20808	2081815	221	2.06	455.26	10	100	0.005	0.0950	12.102	0.0102	1.670	<0.0171	0.011
20809	2081816	224	2.06	461.44	7	100	0.005	0.0650	8.280	0.0069	1.785	<0.0123	0.011
20810	2081817	157	9.76	1532.32	9	100	0.005	0.0850	10.828	0.0027	1.705	<0.0046	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 106
PAGE 2 **OF** 2

DATE COLLECTED 2/8/2018
DATE RECEIVED 2/8/2018
DATE ANALYZED 2/8/2018
DATE REPORTED 2/9/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2081806	1	100	1/100
B2	2081807	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20811	2081818	Area	Central Loading Area-Pump #HV-22	12:09 PM	2:45 PM	9.76	9.76
20812	2081819	Area	Southside of Loading Area-Pump #HV-52	12:12 PM	2:47 PM	9.76	9.76
20813	2081820	Personal	Eduardo Gonzalez-Laborer/Water Truck Driver-Pump #LV-32	12:30 PM	2:36 PM	2.06	2.06
20814	2081821	Personal	Kent Parker-Assisting Crane-Pump #LV-38	12:31 PM	2:38 PM	2.06	2.06
20815	2081822	Personal	Daniel McConnell-Deck Removal/Poly Lining Dumpsters-Pump #LV-1	12:32 PM	2:41 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20811	2081818	156	9.76	1522.56	8	100	0.005	0.0750	9.554	0.0024	1.741	<0.0042	N/A
20812	2081819	155	9.76	1512.8	7	100	0.005	0.0650	8.280	0.0021	1.785	<0.0038	N/A
20813	2081820	126	2.06	259.56	6.5	100	0.005	0.0600	7.643	0.0113	1.810	<0.0205	0.011
20814	2081821	127	2.06	261.62	6.5	100	0.005	0.0600	7.643	0.0112	1.810	<0.0204	0.009
20815	2081822	129	2.06	265.74	9.0	100	0.005	0.0850	10.828	0.0157	1.705	<0.0267	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/09/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/09/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 107
PAGE 1 **OF** 2

DATE COLLECTED 2/9/2018
DATE RECEIVED 2/9/2018
DATE ANALYZED 2/9/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2091806	1	100	1/100
B2	2091807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20901	2091808	STEL	Tommy Smith-Forklift Operator-Pump #LV-30	7:27 AM	7:57 AM	2.06	2.06
20902	2091809	STEL	Daniel McConnell-Beach cleanup-Pump #LV-1	7:30 AM	8:00 AM	2.06	2.06
20903	2091810	Area	Southside of Regulated Area-Pump #HV-33	7:32 AM	12:03 PM	9.76	9.76
20904	2091811	STEL	Kent Parker-Crane Support-Pump #LV-32	7:33 AM	8:03 AM	2.06	2.06
20905	2091812	Area	Center Area-Pump #HV-22	7:36 AM	12:07 PM	9.76	9.76
20906	2091813	Area	Northside of Regulated Area-Pump #HV-52	7:39 AM	12:10 PM	9.76	9.76
20907	2091814	Personal	Tommy Smith-Forklift Operator-Pump #LV-30	7:58 AM	12:37 PM	2.06	2.06
20908	2091815	Personal	Daniel McConnell-Beach cleanup-Pump #LV-1	8:01 AM	11:53 AM	2.06	2.06
20909	2091816	Personal	Kent Parker-Crane Support-Pump #LV-32	8:04 AM	11:59 AM	2.06	2.06
20910	2091817	Area	Southside of Regulated Area-Pump #HV-33	12:04 PM	2:43 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20901	2091808	30	2.06	61.8	10	100	0.01	0.0900	11.465	0.0714	1.670	<0.1193	0.013
20902	2091809	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.011
20903	2091810	271	9.76	2644.96	8.5	100	0.01	0.0750	9.554	0.0014	1.720	<0.0024	N/A
20904	2091811	30	2.06	61.8	8.5	100	0.01	0.0750	9.554	0.0595	1.720	<0.1024	0.013
20905	2091812	271	9.76	2644.96	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
20906	2091813	271	9.76	2644.96	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
20907	2091814	279	2.06	574.74	9	100	0.01	0.0800	10.191	0.0068	1.705	<0.0116	0.013
20908	2091815	232	2.06	477.92	8	100	0.01	0.0700	8.917	0.0072	1.741	<0.0125	0.011
20909	2091816	235	2.06	484.1	12	100	0.01	0.1100	14.013	0.0111	1.620	<0.0181	0.013
20910	2091817	159	9.76	1551.84	9	100	0.01	0.0800	10.191	0.0025	1.705	<0.0043	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 107
PAGE 2 **OF** 2

DATE COLLECTED 2/9/2018
DATE RECEIVED 2/9/2018
DATE ANALYZED 2/9/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2091806	1	100	1/100
B2	2091807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
20911	2091818	Area	Center Area-Pump #HV-22	12:08 PM	2:46 PM	9.76	9.76
20912	2091819	Area	Northside of Regulated Area-Pump #HV-52	12:11 PM	2:50 PM	9.76	9.76
20913	2091820	Personal	Daniel McConnell-Beach cleanup-Pump #LV-1	12:31 PM	2:51 PM	2.06	2.06
20914	2091821	Persnonal	Tommy Smith-Forklift Operator-Pump #LV-30	12:37 PM	2:36 PM	2.06	2.06
20915	2091822	Personal	Kent Parker-Crane Support-Pump #LV-32	12:39 PM	2:39 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
20911	2091818	158	9.76	1542.08	8	100	0.01	0.0650	8.280	0.0021	1.775	<0.0037	N/A
20912	2091819	159	9.76	1551.84	8	100	0.01	0.0700	8.917	0.0022	1.741	<0.0039	N/A
20913	2091820	140	2.06	288.4	7.5	100	0.01	0.0650	8.280	0.0111	1.775	<0.0196	0.011
20914	2091821	119	2.06	245.14	11	100	0.01	0.1000	12.739	0.0200	1.655	<0.0331	0.013
20915	2091822	120	2.06	247.2	9.5	100	0.01	0.0850	10.828	0.0169	1.690	<0.0285	0.013

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/10/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/10/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 108
PAGE 1 **OF** 2

DATE COLLECTED 2/10/2018
DATE RECEIVED 2/10/2018
DATE ANALYZED 2/10/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2101806	0.5	100	0.5/100
B2	2101807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21001	2101808	STEL	Ever Bonilla-Water Truck & Hose Operator-Pump #LV-1	7:16 AM	7:46 AM	2.06	2.06
21002	2101809	STEL	Brent Hardinger-Excavator Operator-Pump #LV-36	7:18 AM	7:48 AM	2.06	2.06
21003	2101810	Area	Southside of Regulated Area-Pump #HV-33	7:20 AM	12:00 PM	9.76	9.76
21004	2101811	Area	Center Area-Pump #HV-22	7:24 AM	12:04 PM	9.76	9.76
21005	2101812	Area	Northside of Regulated Area-Pump #HV-52	7:26 AM	12:06 PM	9.76	9.76
21006	2101813	Personal	Ever Bonilla-Water Truck & Hose Operator-Pump #LV-1	7:47 AM	11:50 AM	2.06	2.06
21007	2101814	Personall	Brent Hardinger-Excavator Operator-Pump #LV-36	7:49 AM	11:52 AM	2.06	2.06
21008	2101815	Personal	Brent Hardinger-Excavator Operator-Pump #LV-36	12:36 AM	2:34 PM	2.06	2.06
21009	2101816	Personal	Ever Bonilla-Water Truck & Hose Operator-Pump #LV-1	12:52 PM	2:32 PM	2.06	2.06
21010	2101817	Area	Southside of Regulated Area-Pump #HV-33	12:01 PM	2:40 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21001	2101808	30	2.06	61.8	11.5	100	0.005	0.1100	14.013	0.0873	1.635	<0.1427	0.015
21002	2101809	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
21003	2101810	280	9.76	2732.8	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0022	N/A
21004	2101811	280	9.76	2732.8	8	100	0.005	0.0750	9.554	0.0013	1.741	<0.0023	N/A
21005	2101812	280	9.76	2732.8	11	100	0.005	0.1050	13.376	0.0019	1.655	<0.0031	N'A
21006	2101813	243	2.06	500.58	13	100	0.005	0.1250	15.924	0.0122	1.610	<0.0197	0.015
21007	2101814	243	2.06	500.58	7.5	100	0.005	0.0700	8.917	0.0069	1.775	<0.0122	0.010
21008	2101815	838	2.06	1726.28	7	100	0.005	0.0600	7.643	0.0017	1.810	<0.0031	0.010
21009	2101816	100	2.06	206	8	100	0.005	0.0750	9.554	0.0179	1.741	<0.0311	0.015
21010	2101817	159	9.76	1551.84	10.5	100	0.005	0.1000	12.739	0.0032	1.660	<0.0052	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 108
PAGE 2 **OF** 2

DATE COLLECTED 2/10/2018
DATE RECEIVED 2/10/2018
DATE ANALYZED 2/10/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2101806	0.5	100	0.5/100
B2	2101807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21011	2101818	Area	Center Area-Pump #HV-22	12:05 PM	2:43 PM	9.76	9.76
21012	2101819	Area	Northside of Regulated Area-Pump #HV-52	12:07 PM	2:45 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21011	2101818	158	9.76	1542.08	13	100	0.005	0.1250	15.924	0.0040	1.610	<0.0064	N/A
21012	2101819	158	9.76	1542.08	11	100	0.005	0.1050	13.376	0.0033	1.655	<0.0055	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 13, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/12/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/12/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 109
PAGE 1 **OF** 2

DATE COLLECTED 2/12/2018
DATE RECEIVED 2/12/2018
DATE ANALYZED 2/12/2018
DATE REPORTED 2/13/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2121806	1	100	1/100
B2	2121807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Denis Dooley / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21201	2121808	Area	Northeast Corner of Worksite/Center Area-Pump #HV-33	7:33 AM	12:00 PM	9.76	9.76
21202	2121809	Area	Southeast Corner of Worksite-Pump #HV-22	7:35 AM	12:10 PM	9.76	9.76
21203	2121810	STEL	Mark Jeffers-Crane Operator-Pump #LV-36	8:04 AM	8:34 AM	2.06	2.06
21204	2121811	STEL	Daniel McConnell-Cutting & Removing Deck Sections-Pump #LV-1	8:24 AM	8:54 AM	2.06	2.06
21205	2121812	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	8:35 AM	11:51 AM	2.06	2.06
21206	2121813	Personal	Daniel McConnell-Cutting & Removing Deck Sections-Pump #LV-1	8:55 AM	12:02 PM	2.06	2.06
21207	2121814	Area	North Perimeter Fence-Pump #HV-52	8:57 AM	12:04 AM	9.76	9.76
21208	2121815	Area	Northeast Corner of Worksite/Center Area-Pump #HV-33	12:01 PM	2:41 PM	9.76	9.76
21209	2121816	Area	North Perimeter Fence-Pump #HV-52	12:05 PM	2:43 PM	9.76	9.76
21210	2121817	Area	Southeast Corner of Worksite-Pump #HV-22	12:11 PM	2:46 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21201	2121808	267	9.76	2605.92	8.5	100	0.0075	0.0775	9.873	0.0015	1.720	<0.0025	N/A
21202	2121809	275	9.76	2684	9	100	0.0075	0.0825	10.510	0.0015	1.705	<0.0026	N/A
21203	2121810	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.012
21204	2121811	30	2.06	61.8	7	100	0.0075	0.0625	7.962	0.0496	1.785	<0.0885	0.012
21205	2121812	196	2.06	403.76	11	100	0.0075	0.0975	12.420	0.0118	1.660	<0.0197	0.012
21206	2121813	187	2.06	385.22	9	100	0.0075	0.0825	10.510	0.0105	1.705	<0.0179	0.012
21207	2121814	907	9.76	8852.32	7.5	100	0.0075	0.0675	8.599	0.0004	1.775	<0.0007	N/A
21208	2121815	160	9.76	1561.6	7	100	0.0075	0.0575	7.325	0.0018	1.810	<0.0033	N/A
21209	2121816	158	9.76	1542.08	10.5	100	0.0075	0.0975	12.420	0.0031	1.660	<0.0051	N/A
21210	2121817	155	9.76	1512.8	7.5	100	0.0075	0.0675	8.599	0.0022	1.775	<0.0039	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 109
PAGE 2 **OF** 2

DATE COLLECTED 2/12/2018
DATE RECEIVED 2/12/2018
DATE ANALYZED 2/12/2018
DATE REPORTED 2/13/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2121806	1	100	1/100
B2	2121807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Denis Dooley / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21211	2121818	Personal	Mark Jeffers-Crane Operator-Pump #LV-36	12:31 PM	2:53 PM	2.06	2.06
21212	2121819	Personal	Daniel McConnell-Cutting & Removing Deck Sections-Pump #LV-1	12:35 PM	2:36 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21211	2121818	142	2.06	292.52	7.5	100	0.0075	0.0675	8.599	0.0113	1.775	<0.0201	0.012
21212	2121819	121	2.06	249.26	10.5	100	0.0075	0.0975	12.420	0.0192	1.660	<0.0318	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 15, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/13/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/13/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 110
PAGE 1 **OF** 2

DATE COLLECTED 2/13/2018
DATE RECEIVED 2/13/2018
DATE ANALYZED 2/13/2018
DATE REPORTED 2/14/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2131806	1	100	1/100
B2	2131807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21301	2131808	Area	Southeast side of Regulated Area-Pump #HV-22	7:22 AM	11:58 AM	9.76	9.76
21302	2131809	Area	Center Area of Regulated Area-Pump #HV-33	7:25 AM	12:04 PM	9.76	9.76
21303	2131810	Area	Northside of Regulated Area-Pump #HV-52	7:27 AM	12:07 PM	9.76	9.76
21304	2131811	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:30 AM	8:00 AM	2.06	2.06
21305	2131812	STEL	Misty Klampe-Cutting/removing deck/poly lining dumpsters-Pump #LV-36	7:35 AM	8:05 AM	2.06	2.06
21306	2131813	STEL	Mark Jeffers-Crane Operator-Pump #LV-32	7:41 AM	8:11 AM	2.06	2.06
21307	2131814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	8:01 AM	11:53 AM	2.06	2.06
21308	2131815	Personal	Misty Klampe-Cutting/removing deck/poly lining dumpsters-Pump #LV-36	8:06 AM	11:56 AM	2.06	2.06
21309	2131816	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	8:12 AM	12:00 PM	2.06	2.06
21310	2131817	Area	Southeast side of Regulated Area-Pump #HV-22	11:59 AM	2:43 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21301	2131808	276	9.76	2693.76	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
21302	2131809	279	9.76	2723.04	8.5	100	0.01	0.0750	9.554	0.0014	1.720	<0.0023	N/A
21303	2131810	280	9.76	2732.8	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0021	N/A
21304	2131811	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
21305	2131812	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.013
21306	2131813	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.011
21307	2131814	232	2.06	477.92	8	100	0.01	0.0700	8.917	0.0072	1.741	<0.0125	0.011
21308	2131815	230	2.06	473.8	8	100	0.01	0.0700	8.917	0.0072	1.741	<0.0126	0.013
21309	2131816	228	2.06	469.68	9	100	0.01	0.0800	10.191	0.0084	1.705	<0.0142	0.011
21310	2131817	164	9.76	1600.64	9	100	0.01	0.0800	10.191	0.0025	1.705	<0.0042	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 110
PAGE 2 **OF** 2

DATE COLLECTED 2/13/2018
DATE RECEIVED 2/13/2018
DATE ANALYZED 2/13/2018
DATE REPORTED 2/14/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2131806	1	100	1/100
B2	2131807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21311	2131818	Area	Center Area of Regulated Area-Pump #HV-33	12:05 PM	2:46 PM	9.76	9.76
21312	2131819	Area	Northside of Regulated Area-Pump #HV-52	12:08 PM	2:48 PM	9.76	9.76
21313	2131820	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:31 PM	2:30 PM	2.06	2.06
21314	2131821	Personal	Misty Klampe-Cutting/removing deck/poly lining dumpsters-Pump #LV-36	12:32 PM	2:34 PM	2.06	2.06
21315	2131822	Personal	Mark Jeffers-Crane Operator-Pump #LV-32	12:39 PM	2:38 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21311	2131818	161	9.76	1571.36	9.5	100	0.01	0.0850	10.828	0.0027	1.690	<0.0045	N/A
21312	2131819	160	9.76	1561.6	8	100	0.01	0.0700	8.917	0.0022	1.741	<0.0038	N/A
21313	2131820	119	2.06	245.14	10	100	0.01	0.0900	11.465	0.0180	1.670	<0.0301	0.011
21314	2131821	122	2.06	251.32	13	100	0.01	0.1200	15.287	0.0234	1.610	<0.0377	0.013
21315	2131822	119	2.06	245.14	9.5	100	0.01	0.0850	10.828	0.0170	1.690	<0.0287	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/14/2018
DATE RECEIVED 2/15/2018
DATE ANALYZED 2/15/2018
DATE REPORTED 2/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020063	2151801	0.5	100	0.5/100
18020064	2151802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020060	2151803	Area	AS24	9:09 AM	1:29 PM	9.975	9.4098
18020061	2151804	Area	AS26	9:01 AM	1:40 PM	10.046	9.7625
18020062	2151805	Area	AS15	9:23 AM	1:48 PM	10.074	9.9309

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020060	2151803	260	9.6924	2520.02	7	100	0.0025	0.068	8.599	0.0013	1.785	<0.0023	N/A
18020061	2151804	279	9.9043	2763.3	6.5	100	0.0025	0.063	7.962	0.0011	1.810	<0.0020	N/A
18020062	2151805	265	10.0025	2650.66	6	100	0.0025	0.058	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/15/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/15/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 112
PAGE 1 **OF** 1

DATE COLLECTED 2/15/2018
DATE RECEIVED 2/15/2018
DATE ANALYZED 2/15/2018
DATE REPORTED 2/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2151806	1	100	1/100
B2	2151807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Denis Dooley / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21501	2151808	Area	North Perimeter Fence-Pump #HV-52	7:28 AM	12:00 PM	9.76	9.76
21502	2151809	Area	Northeast Corner of Worksite-Pump #HV-33	7:36 AM	12:04 PM	9.76	9.76
21503	2151810	Area	Southeast Corner of Workste-Pump #HV-22	7:50 AM	12:10 PM	9.76	9.76
21504	2151811	STEL	Ever Bonilla-Cutting & removing deck sections/cleaning site-Pump #LV-1	8:00 AM	8:30 AM	2.06	2.06
21505	2151812	Personal	Ever Bonilla-Cutting & removing deck sections/cleaning site-Pump #LV-1	8:31 AM	11:53 AM	2.06	2.06
21506	2151813	Area	North Perimeter Fence-Pump #HV-52	12:01 PM	2:03 PM	9.76	9.76
21507	2151814	Area	Northeast Corner of Worksite-Pump #HV-33	12:05 PM	2:06 PM	9.76	9.76
21508	2151815	Area	Southeast Corner of Workste-Pump #HV-22	12:11 PM	2:10 PM	9.76	9.76
21509	2151816	Personal	Ever Bonilla-Cutting & removing deck sections/cleaning site-Pump #LV-1	12:35 PM	2:00 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21501	2151808	272	9.76	2654.72	9.0	100	0.0075	0.0825	10.510	0.0015	1.705	<0.0026	N/A
21502	2151809	268	9.76	2615.68	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0022	N/A
21503	2151810	260	9.76	2537.6	9.5	100	0.0075	0.0875	11.146	0.0017	1.690	<0.0029	N/A
21504	2151811	30	2.06	61.8	10.5	100	0.0075	0.0975	12.420	0.0774	1.660	<0.1284	0.012
21505	2151812	202	2.06	416.12	7	100	0.0075	0.0625	7.962	0.0074	1.785	<0.0131	0.012
21506	2151813	122	9.76	1190.72	7	100	0.0075	0.0625	7.962	0.0026	1.785	<0.0046	N/A
21507	2151814	121	9.76	1180.96	9.5	100	0.0075	0.0875	11.146	0.0036	1.690	<0.0061	N/A
21508	2151815	119	9.76	1161.44	8	100	0.0075	0.0725	9.236	0.0031	1.741	<0.0053	N/A
21509	2151816	85	2.06	175.1	8.5	100	0.0075	0.0775	9.873	0.0217	1.720	<0.0373	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/16/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/16/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 113
PAGE 1 **OF** 2

DATE COLLECTED 2/16/2018
DATE RECEIVED 2/16/2018
DATE ANALYZED 2/16/2018
DATE REPORTED 2/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2161806	0.5	100	0.5/100
B2	2161807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21601	2161808	STEL	Jacob Johnson-Cutting/removing deck pieces-Pump #LV-1	7:17 AM	7:47 AM	2.06	2.06
21602	2161809	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:20 AM	7:50 AM	2.06	2.06
21603	2161810	Area	Southside of Regulated Area-Pump #HV-22	7:23 AM	12:01 PM	9.76	9.76
21604	2161811	Area	Center Loading Area-Pump #HV-33	7:26 AM	12:05 PM	9.76	9.76
21605	2161812	Area	Northside of Regulated Area-Pump #HV-52	7:28 AM	12:09 PM	9.76	9.76
21606	2161813	Personal	Jacob Johnson-Cutting/removing deck pieces-Pump #LV-1	7:48 AM	11:50 AM	2.06	2.06
21607	2161814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	7:51 AM	12:37 PM	2.06	2.06
21608	2161815	Area	Southside of Regulated Area-Pump #HV-22	12:02 PM	2:41 PM	9.76	9.76
21609	2161816	Area	Center Loading Area-Pump #HV-33	12:06 PM	2:44 PM	9.76	9.76
21610	2161817	Area	Northside of Regulated Area-Pump #HV-52	12:10 PM	2:46 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21601	2161808	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.011
21602	2161809	30	2.06	61.8	7	100	0.005	0.0650	8.280	0.0516	1.785	<0.0921	0.010
21603	2161810	278	9.76	2713.28	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
21604	2161811	279	9.76	2723.04	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
21605	2161812	281	9.76	2742.56	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
21606	2161813	242	2.06	498.52	8	100	0.005	0.0750	9.554	0.0074	1.741	<0.0128	0.011
21607	2161814	286	2.06	589.16	6.5	100	0.005	0.0600	7.643	0.0050	1.810	<0.0090	0.010
21608	2161815	159	9.76	1551.84	7.5	100	0.005	0.0700	8.917	0.0022	1.775	<0.0039	N/A
21609	2161816	158	9.76	1542.08	9	100	0.005	0.0850	10.828	0.0027	1.705	<0.0046	N/A
21610	2161817	156	9.76	1522.56	7.5	100	0.005	0.0700	8.917	0.0023	1.775	<0.0040	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 113
PAGE 2 **OF** 2

DATE COLLECTED 2/16/2016
DATE RECEIVED 2/16/2018
DATE ANALYZED 02/16/201
DATE REPORTED 2/19/2019

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2161806	0.5	100	0.5/100
B2	2161807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21611	2161818	Personal	Jacob Johnson-Cutting/removing deck pieces-Pump #LV-1	12:35 PM	2:35 PM	2.06	2.06
21612	2161819	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:37 PM	2:38 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21611	2161818	120	2.06	247.2	10	100	0.005	0.0950	12.102	0.0188	1.670	<0.0315	0.011
21612	2161819	121	2.06	249.26	8.5	100	0.005	0.0800	10.191	0.0157	1.720	<0.0271	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/17/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/17/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 114
PAGE 1 **OF** 2

DATE COLLECTED 2/17/2018
DATE RECEIVED 2/17/2018
DATE ANALYZED 2/17/2018
DATE REPORTED 2/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2171806	1	100	1/100
B2	2171807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21701	2171808	STEL	Daniel McConnell-Lining Dumpsters-Pump #LV-1	7:23 AM	7:53 AM	2.06	2.06
21702	2171809	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:25 AM	7:55 AM	2.06	2.06
21703	2171810	Area	Southside of Regulated Area-Pump #HV-22	7:32 AM	12:01 PM	9.76	9.76
21704	2171811	Area	Center Area-Pump #HV-33	7:37 AM	12:04 PM	9.76	9.76
21705	2171812	Area	Northside of Regulated Area-Pump #HV-52	7:39 AM	12:06 PM	9.76	9.76
21706	2171813	Personal	Daniel McConnell-Lining Dumpsters-Pump #LV-1	7:54 AM	11:53 AM	2.06	2.06
21707	2171814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	7:56 AM	11:56 AM	2.06	2.06
21708	2171815	Area	Southside of Regulated Area-Pump #HV-22	12:02 PM	1:40 PM	9.76	9.76
21709	2171816	Area	Center Area-Pump #HV-33	12:05 PM	1:44 PM	9.76	9.76
21710	2171817	Area	Northside of Regulated Area-Pump #HV-52	12:07 PM	1:47 PM	9.76	9.76

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21701	2171808	30	2.06	61.8	9.5	100	0.01	0.0850	10.828	0.0675	1.690	<0.1140	0.011
21702	2171809	30	2.06	61.8	10.5	100	0.01	0.0950	12.102	0.0754	1.660	<0.1252	0.011
21703	2171810	269	9.76	2625.44	7	100	0.01	0.0600	7.643	0.0011	1.785	<0.0020	N/A
21704	2171811	267	9.76	2605.92	10	100	0.01	0.0900	11.465	0.0017	1.670	<0.0028	N/A
21705	2171812	267	9.76	2605.92	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0022	N/A
21706	2171813	239	2.06	492.34	7.5	100	0.01	0.0650	8.280	0.0065	1.775	<0.0115	0.011
21707	2171814	240	2.06	494.4	8	100	0.01	0.0700	8.917	0.0069	1.741	<0.0121	0.011
21708	2171815	98	9.76	956.48	8	100	0.01	0.0700	8.917	0.0036	1.741	<0.0062	N/A
21709	2171816	99	9.76	966.24	8	100	0.01	0.0650	8.280	0.0033	1.775	<0.0059	N/A
21710	2171817	100	9.76	976	9	100	0.01	0.0800	10.191	0.0040	1.705	<0.0069	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 114
PAGE 2 **OF** 2

DATE COLLECTED 2/17/2018
DATE RECEIVED 2/17/2018
DATE ANALYZED 2/17/2018
DATE REPORTED 2/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2171806	1	100	1/100
B2	2171807	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21711	2171818	Personal	Daniel McConnell-Lining Dumpsters-Pump #LV-1	12:35 PM	1:35 PM	2.06	2.06
21712	2171819	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:37 PM	1:37 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21711	2171818	60	2.06	123.6	8	100	0.01	0.0700	8.917	0.0278	1.741	<0.0483	0.011
21712	2171819	60	2.06	123.6	7.5	100	0.01	0.0650	8.280	0.0258	1.775	<0.0458	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

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February 20, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/19/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/19/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 115
PAGE 1 **OF** 1

DATE COLLECTED 2/19/2018
DATE RECEIVED 2/19/2018
DATE ANALYZED 2/19/2018
DATE REPORTED 2/20/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2191806	0.5	100	0.5/100
B2	2191807	0.5	100	0.5/100

SAMPLES COLLECTED BY: Denis Dooley / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
21901	2191808	Area	Northeast corner of Worksite-Pump #HV-52	7:28 AM	12:01 PM	9.76	9.76
21902	2191809	STEL	Brent Hardinger-Excavator Operator-Pump #LV-31	7:30 AM	8:00 AM	2.06	2.06
21903	2191810	STEL	Jacob Johnson-Removing decking/lining dumpsters-Pump #LV-1	7:36 AM	8:06 AM	2.06	2.06
21904	2191811	Personal	Brent Hardinger-Excavator Operator-Pump #LV-31	7:37 AM	12:04 PM	2.06	2.06
21905	2191812	Personal	Jacob Johnson-Removing decking/lining dumpsters-Pump #LV-1	7:39 AM	12:06 PM	2.06	2.06
21906	2191813	Area	Northeast corner of Worksite-Pump #HV-52	12:02 PM	2:36 PM	9.76	9.76
21907	2191814	Personal	Brent Hardinger-Excavator Operator-Pump #LV-31	12:31 PM	2:33 PM	2.06	2.06
21908	2191815	Personal	Jacob Johnson-Removing decking/lining dumpsters-Pump #LV-1	12:32 PM	2:35 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
21901	2191808	273	9.76	2664.48	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
21902	2191809	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.010
21903	2191810	30	2.06	61.8	9	100	0.005	0.0850	10.828	0.0675	1.705	<0.1150	0.011
21904	2191811	267	2.06	550.02	6.5	100	0.005	0.0600	7.643	0.0054	1.810	<0.0097	0.010
21905	2191812	267	2.06	550.02	7	100	0.005	0.0650	8.280	0.0058	1.785	<0.0103	0.011
21906	2191813	154	9.76	1503.04	7	100	0.005	0.0650	8.280	0.0021	1.785	<0.0038	N/A
21907	2191814	122	2.06	251.32	7	100	0.005	0.0650	8.280	0.0127	1.785	<0.0226	0.010
21908	2191815	123	2.06	253.38	8	100	0.005	0.0750	9.554	0.0145	1.741	<0.0253	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

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February 25, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02//2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/20/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 116
PAGE 1 **OF** 1

DATE COLLECTED 2/20/2018
DATE RECEIVED 2/20/2018
DATE ANALYZED 2/20/2018
DATE REPORTED 2/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2201806	1	100	1/100
B2	2201807	1	100	1/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22001	2201806	STEL	Tommy Smith-Equipment Operator-Pump #LV-38	7:47 AM	8:17 AM	2.06	2.06
22002	2201807	STEL	Ever Bonilla-Lining and loading dumpsters by hand-Pump #LV-1	7:50 AM	8:20 AM	2.06	2.06
22003	2201808	Area	Center Loading Area-Pump #HV-52	7:52 AM	10:45 AM	9.76	9.76
22004	2201809	Personal	Tommy Smith-Equipment Operator-Pump #LV-38	8:18 AM	10:41 AM	2.06	2.06
22005	2201810	Personal	Ever Bonilla-Lining and loading dumpsters by hand-Pump #LV-1	8:21 AM	10:48 AM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22001	2201806	30	2.06	61.8	7.5	100	0.01	0.0650	8.280	0.0516	1.775	<0.0916	0.007
22002	2201807	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.007
22003	2201808	173	9.76	1688.48	8	100	0.01	0.0700	8.917	0.0020	1.775	<0.0036	N/A
22004	2201809	143	2.06	294.58	8	100	0.01	0.0700	8.917	0.0117	1.741	<0.0203	0.007
22005	2201810	147	2.06	302.82	8	100	0.01	0.0700	8.917	0.0113	1.741	<0.0197	0.007

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

February 25, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/22/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/22/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 117
PAGE 1 **OF** 1

DATE COLLECTED 2/22/2018
DATE RECEIVED 2/22/2018
DATE ANALYZED 2/22/2018
DATE REPORTED 2/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2221811	0.5	100	0.5/100
B2	2221812	0.5	100	0.5/100

SAMPLES COLLECTED BY: Denis Dooley / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22201	2221813	Area	Center Loading Area-Pump #HV-52	7:30 AM	11:58 AM	9.76	9.76
22202	2221814	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:40 AM	8:10 AM	2.06	2.06
22203	2221815	STEL	Jacob Johnson-Deck removal/poly lining dumpsters-Pump #LV-1	7:45 AM	8:15 AM	2.06	2.06
22204	2221816	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	8:11 AM	11:53 AM	2.06	2.06
22205	2221817	Personal	Jacob Johnson-Deck removal/poly lining dumpsters-Pump #LV-1	8:16 AM	11:56 AM	2.06	2.06
22206	2221818	Area	Center Loading Area-Pump #HV-52	11:59 AM	2:27 PM	9.76	9.76
22207	2221819	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:31 PM	2:31 PM	2.06	2.06
22208	2221820	Personal	Jacob Johnson-Deck removal/poly lining dumpsters-Pump #LV-1	12:34 PM	2:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22201	2221813	268	9.76	2615.68	9	100	0.005	0.0850	10.828	0.0016	1.705	<0.0027	N/A
22202	2221814	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
22203	2221815	30	2.06	61.8	9	100	0.005	0.0850	10.828	0.0675	1.705	<0.1150	0.010
22204	2221816	222	2.06	457.32	8	100	0.005	0.0750	9.554	0.0080	1.741	<0.0140	0.010
22205	2221817	220	2.06	453.2	6.5	100	0.005	0.0600	7.643	0.0065	1.810	<0.0118	0.010
22206	2221818	148	9.76	1444.48	7	100	0.005	0.0650	8.280	0.0022	1.785	<0.0039	N/A
22207	2221819	120	2.06	247.2	7	100	0.005	0.0650	8.280	0.0129	1.785	<0.0230	0.010
22208	2221820	119	2.06	245.14	6.5	100	0.005	0.0600	7.643	0.0120	1.810	<0.0217	0.010

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

February 27, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/23/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/23/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 118
PAGE 1 **OF** 1

DATE COLLECTED 2/23/2018
DATE RECEIVED 2/23/2018
DATE ANALYZED 2/23/2018
DATE REPORTED 2/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2231801	1	100	1/100
B2	2231802	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22301	2231803	STEL	Daniel McConnell-Cleaning beach & poly lining dumpsters-Pump #LV-1	7:20 AM	7:50 AM	2.06	2.06
22302	2231804	STEL	Brent Hardinger-Excavator operator-Pump #LV-38	7:22 AM	7:52 AM	2.06	2.06
22303	2231805	Area	Center Loading Area-Pump #HV-52	7:30 AM	12:00 PM	9.76	9.76
22304	2231806	Personal	Daniel McConnell-Cleaning beach & poly lining dumpsters-Pump #LV-1	7:51 AM	11:50 AM	2.06	2.06
22305	2231807	Personal	Brent Hardinger-Excavator operator-Pump #LV-38	7:52 AM	11:52 AM	2.06	2.06
22306	2231808	Personal	Daniel McConnell-Cleaning beach & poly lining dumpsters-Pump #LV-1	12:31 PM	2:25 PM	2.06	2.06
22307	2231809	Personal	Brent Hardinger-Excavator operator-Pump #LV-38	12:33 PM	2:27 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22301	2231803	30	2.06	61.8	9	100	0.01	0.0800	10.191	0.0635	1.705	<0.1082	0.011
22302	2231804	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.011
22303	2231805	270	9.76	2635.2	8	100	0.01	0.0700	8.917	0.0013	1.741	<0.0023	N/A
22304	2231806	239	2.06	492.34	7.5	100	0.01	0.0650	8.280	0.0065	1.775	<0.0115	0.011
22305	2231807	240	2.06	494.4	10	100	0.01	0.0900	11.465	0.0089	1.670	<0.0149	0.011
22306	2231808	114	2.06	234.84	8.5	100	0.01	0.0750	9.554	0.0157	1.720	<0.0269	0.011
22307	2231809	114	2.06	234.84	7.5	100	0.01	0.0650	8.280	0.0136	1.775	<0.0241	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

February 27, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/24/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/24/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 119
PAGE 1 **OF** 1

DATE COLLECTED 2/24/2018
DATE RECEIVED 2/24/2018
DATE ANALYZED 2/24/2018
DATE REPORTED 2/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2241801	1	100	1/100
B2	2241802	0.5	100	0.5/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22401	2241803	STEL	Brent Hardinger-Excavator Operator-Pump #LV-38	7:30 AM	8:00 AM	2.06	2.06
22402	2241804	STEL	Dave Nelson-PAS Oversight-Pump #LV-1	7:34 AM	8:04 AM	2.06	2.06
22403	2241805	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	8:01 AM	11:55 AM	2.06	2.06
22404	2241806	Personal	Dave Nelson-PAS Oversight-Pump #LV-1	8:05 AM	11:56 AM	2.06	2.06
22405	2241807	Personal	Brent Hardinger-Excavator Operator-Pump #LV-38	12:35 PM	1:10 PM	2.06	2.06
22406	2241808	Personal	Dave Nelson-PAS Oversight-Pump #LV-1	12:36 PM	1:12 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22401	2241803	30	2.06	61.8	7.5	100	0.0075	0.0675	8.599	0.0536	1.775	<0.0951	0.010
22402	2241804	30	2.06	61.8	9.5	100	0.0075	0.0875	11.146	0.0694	1.690	<0.1174	0.011
22403	2241805	234	2.06	482.04	8.5	100	0.0075	0.0775	9.873	0.0079	1.720	<0.0136	0.010
22404	2241806	231	2.06	475.86	7	100	0.0075	0.0625	7.962	0.0064	1.785	<0.0115	0.011
22405	2241807	35	2.06	72.1	7	100	0.0075	0.0625	7.962	0.0425	1.785	<0.0759	0.010
22406	2241808	36	2.06	74.16	7.5	100	0.0075	0.0675	8.599	0.0446	1.775	<0.0792	0.011

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

February 27, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/26/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/26/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE Environmental INC.

Clean your world.

February 27, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/26/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

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Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/26/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 120
PAGE 1 **OF** 1

DATE COLLECTED 2/26/2018
DATE RECEIVED 2/26/2018
DATE ANALYZED 2/26/2018
DATE REPORTED 2/27/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2261801	0.5	100	0.5/100
B2	2261802	0.5	100	0.5/100

SAMPLES COLLECTED BY: Sidney Carter / Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22601	2261803	STEL	Ever Bonilla-Cleaning beach/poly-lining dumpsters-Pump #LV-1	8:05 AM	8:35 AM	2.06	2.06
22602	2261804	STEL	Brent Hardiner-Excavator Operator-Pump #LV-38	8:10 AM	8:40 AM	2.06	2.06
22603	2261805	Personal	Ever Bonilla-Cleaning beach/poly-lining dumpsters-Pump #LV-1	8:36 AM	11:50 AM	2.06	2.06
22604	2261806	Personal	Brent Hardiner-Excavator Operator-Pump #LV-38	8:41 AM	11:52 AM	2.06	2.06
22605	2261807	Area	End of Loading Area-Pump #HV-52	8:50 AM	11:00 AM	9.76	9.76
22606	2261808	Personal	Ever Bonilla-Cleaning beach/poly-lining dumpsters-Pump #LV-1	12:40 PM	2:30 PM	2.06	2.06
22607	2261809	Pesonal	Brent Hardiner-Excavator Operator-Pump #LV-38	12:42 PM	2:34 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22601	2261803	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.010
22602	2261804	30	2.06	61.8	6.5	100	0.005	0.0600	7.643	0.0476	1.810	<0.0862	0.007
22603	2261805	194	2.06	399.64	7	100	0.005	0.0650	8.280	0.0080	1.785	<0.0142	0.010
22604	2261806	191	2.06	393.46	7	100	0.005	0.0650	8.280	0.0081	1.785	<0.0145	N/A
22605	2261807	130	9.76	1268.8	7	100	0.005	0.0650	8.280	0.0025	1.785	<0.0045	0.007
22606	2261808	110	2.06	226.6	7.5	100	0.005	0.0700	8.917	0.0152	1.775	<0.0269	0.010
22607	2261809	112	2.06	230.72	6.5	100	0.005	0.0600	7.643	0.0128	1.810	<0.0231	0.007

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

February 28, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/27/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/27/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE Environmental INC.

Clean your world.

February 28, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/27/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/27/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Environmental Quality Management
PROJECT River Street Water Front, Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 121
PAGE 1 **OF** 1

DATE COLLECTED 2/27/2018
DATE RECEIVED 2/27/2018
DATE ANALYZED 2/27/2018
DATE REPORTED 2/28/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	2271801	1	100	1/100
B2	2271802	1	100	1/100

SAMPLES COLLECTED BY: Jibri Johnson

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
22701	2271803	STEL	Brent Hardinger-Excavator Operator-Pump #LV-36	9:15 AM	9:45 AM	2.06	2.06
22702	2271804	STEL	Jacob Johnson-Cleaning beach/poly lining dumpsters-Pump #LV-30	9:18 AM	9:48 AM	2.06	2.06
22703	2271805	Area	Front of Excavator-Pump #LV-32	9:20 AM	2:37 PM	0.45	0.45
22704	2271806	Personal	Brent Hardinger-Excavator Operator-Pump #LV-36	9:46 AM	12:21 PM	2.06	2.06
22705	2271807	Personal	Jacob Johnson-Cleaning beach/poly lining dumpsters-Pump #LV-30	9:49 AM	12:23 PM	2.06	2.06
22706	2271808	Personal	Brent Hardinger-Excavator Operator-Pump #LV-36	12:40 PM	2:36 PM	2.06	2.06
22707	2271809	Personal	Jacob Johnson-Cleaning beach/poly lining dumpsters-Pump #LV-30	12:41 PM	2:33 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
22701	2271803	30	2.06	61.8	8	100	0.01	0.0700	8.917	0.0556	1.741	<0.0967	0.010
22702	2271804	30	2.06	61.8	11	100	0.01	0.1000	12.739	0.0794	1.655	<0.1313	0.012
22703	2271805	317	0.45	142.65	7	100	0.01	0.0600	7.643	0.0206	1.785	<0.0368	N/A
22704	2271806	155	2.06	319.3	7.5	100	0.01	0.0650	8.280	0.0100	1.775	<0.0177	0.010
22705	2271807	154	2.06	317.24	9.5	100	0.01	0.0850	10.828	0.0131	1.690	<0.0222	0.012
22706	2271808	116	2.06	238.96	8	100	0.01	0.0700	8.917	0.0144	1.741	<0.0250	0.010
22707	2271809	112	2.06	230.72	7.5	100	0.01	0.0650	8.280	0.0138	1.775	<0.0245	0.012

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

March 1, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 02/28/2018 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 02/28/2018 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

APPENDIX J
START Air Data

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 9/29/2017 START- Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 9/29/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day, was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225A
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 9/29/2017
DATE RECEIVED 9/30/2017
DATE ANALYZED 9/30/2017
DATE REPORTED 10/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17090032	9301715	0	100	0/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
170900033	9301716	Air	AS15	8:01 AM	4:30 PM	10.0595	10.0595
170900034	9301717	Air	AS24	7:43 AM	4:16 PM	9.9325	9.9325
170900035	9301718	Air	AS26	7:49 AM	4:23 PM	9.9035	9.9035

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
170900033	9301716	509	10.0595	5120.29	7	100	0	0.0700	8.917	0.0007	1.785	<0.0012	N/A
170900034	9301717	513	9.9325	5095.37	6.5	100	0	0.0650	8.280	0.0006	1.810	<0.0011	N/A
170900035	9301718	514	9.9035	5090.40	8	100	0	0.0800	10.191	0.0008	1.741	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 9/30/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-58
Lab: Advanced Environmental
Lab Phone: 503-522-1359
Lab Address: P.O. Box 1020

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	170900033	AS15	Asbestos PCM	Air	MCE Cassette	9/29/2017	5120.29	Liters	509	10.0595	L/min
	170900034	AS24	Asbestos PCM	Air	MCE Cassette	9/29/2017	5095.37	Liters	513	9.9325	L/min
	170900035	AS20	Asbestos PCM	Air	MCE Cassette	9/29/2017	5060.4	Liters	514	9.8035	L/min
	17090032	Blank	Asbestos PCM	Blank	MCE Cassette	9/29/2017		Liters			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and tlocke@ene.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] ENE	9/30/17	Sidney Casker AEI	9/30/17 1200	Good/Sealed

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 9/30/2017 START- Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 9/30/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 9/30/2017
DATE RECEIVED 9/30/2017
DATE ANALYZED 9/30/2017
DATE REPORTED 9/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17090039	9301711	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17090036	9301712	Air	AS26	7:46 AM	4:47 PM	9.757	9.757
17090037	9301713	Air	AS24	7:55 AM	3:55 PM	9.8792	9.8792
17090038	9301714	Air	AS15	8:08 AM	4:33 PM	9.9502	9.9502

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17090036	9301712	541	9.757	5278.537	7.5	100	0.005	0.0700	8.917	0.0007	1.775	<0.0012	N/A
17090037	9301713	480	9.8792	4742.016	15	100	0.005	0.1450	18.471	0.0015	1.575	<0.0024	N/A
17090038	9301714	505	9.9502	5024.851	8	100	0.005	0.0750	9.554	0.0007	1.741	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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USEPA
DateShipped: 9/30/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-60
Lab: Advanced Environmental
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17090036	AS26	Asbestos PCM	Air	MCE Cassette	9/30/2017	5278.54	Liters	541	9.757	L/min
	17090037	AS24	Asbestos PCM	Air	MCE Cassette	9/30/2017	4742.02	Liters	480	9.8792	L/min
	17090038	AS15	Asbestos PCM	Air	MCE Cassette	9/30/2017		Liters			L/min
	17090039	Blank	Asbestos PCM	Air	MCE Cassette	9/30/2017		Liters			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rhoke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	ST AET	9/30/17			
		10/2/17			

USEPA
DateShipped: 9/30/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-60
Lab: Advanced Environmental
Lab Phone: 503-532-1359
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17090036	AS26	Asbestos PCM	Air	MCE Cassette	9/30/2017	5278.64	Liters	541	9.757	L/min
	17090037	AS24	Asbestos PCM	Air	MCE Cassette	9/30/2017	4743.03	Liters	480	9.8792	L/min
	17090038	AS16	Asbestos PCM	Air	MCE Cassette	9/30/2017		Liters			L/min
	17090039	Blank	Asbestos PCM	Air	MCE Cassette	9/30/2017		Liters			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, alynch@ene.com and rlocke@ene.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	9/30/17			
		10/2/17			

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/02/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/02/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/2/2017
DATE RECEIVED 10/2/2017
DATE ANALYZED 10/2/2017
DATE REPORTED 10/3/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100004	10021715	0	100	0/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100001	10021716	Air	AS24	8:49 AM	3:46 PM	9.9312	9.9312
17100002	10021717	Air	AS26	9:06 AM	3:55 PM	9.8698	9.8698
17100003	10021718	Air	AS15	9:22 AM	4:22 PM	9.8821	9.8821

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100001	10021716	417	9.9312	4141.31	11	100	0	0.1100	14.013	0.0013	1.655	<0.0022	N/A
17100002	10021717	409	9.8698	4036.75	8.5	100	0	0.0850	10.828	0.0010	1.720	<0.0018	N/A
17100003	10021718	420	9.8821	4150.48	6.5	100	0	0.0650	8.280	0.0008	1.810	<0.0014	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/2/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-61
Lab: Advanced Environmental
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17100001	AS24	Asbestos PCM	Air	MCE Cassette	10/2/2017	4141.31	Liters	417	9.9312	L/min
	17100002	AS26	Asbestos PCM	Air	MCE Cassette	10/2/2017	4036.75	Liters	409	9.8698	L/min
	17100003	AS15	Asbestos PCM	Air	MCE Cassette	10/2/2017	4150.48	Liters	420	9.8821	L/min
	17100004	Blank	Asbestos PCM	Air	MCE Cassette	10/2/2017		Liters			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, slynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
drop-off Samples	ENE SHARE	10/2/17 19:00			
		10/3/17			

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/03/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/03/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/3/2017
DATE RECEIVED 10/3/2017
DATE ANALYZED 10/3/2017
DATE REPORTED 10/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100008	10031713	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100005	10031714	Air	AS24	8:16 AM	11:45 AM	10.0581	10.0581
17100006	10031715	Air	AS26	8:23 AM	3:51 PM	10.0815	10.0815
17100007	10031716	Air	AS15	8:34 AM	3:39 PM	10.2365	10.2365

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100005	10031714	209	10.0581	2102.143	8	100	0.01	0.0700	8.917	0.0016	1.741	<0.0028	N/A
17100006	10031715	448	10.0815	4516.512	9.5	100	0.01	0.0850	10.828	0.0009	1.690	<0.0016	N/A
17100007	10031716	425	10.2365	4350.513	6.5	100	0.01	0.0550	7.006	0.0006	1.810	<0.0011	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/3/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-62
Lab: Advanced Environmental
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17100005	AS24	Asbestos PCM	Air	MCE Cassette	10/3/2017	4314.92	Liters	429	10.0581	L/min
	17100006	AS26	Asbestos PCM	Air	MCE Cassette	10/3/2017	4314.88	Liters	428	10.0815	L/min
	17100007	AS15	Asbestos PCM	Air	MCE Cassette	10/3/2017	4350.51	Liters	425	10.2365	L/min
	17100008	Blank	Asbestos PCM	Air	MCE Cassette	10/3/2017		Liters			L/min

Special Instructions: Please process air samples within 24-48 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
drop-off samples	E & E/START	10/3/17 17:00			

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/04/2017 START- Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/04/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/4/2017
DATE RECEIVED 10/4/2017
DATE ANALYZED 10/4/2017
DATE REPORTED 10/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100013	10041711	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100009	10041712	Air	AS24a	8:46 AM	11:45 AM	10.2185	10.218
17100010	10041713	Air	AS26	8:57 AM	3:44 PM	10.0727	10.0727
17100011	10041714	Air	AS15	9:11 AM	3:56 PM	10.148	10.148
17100012	10041715	Air	AS24b	11:48 AM	3:39 PM	10.0159	10.0159

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100009	10041712	179	10.21825	1829.067	8	100	0.005	0.0750	9.554	0.0020	1.741	<0.0035	N/A
17100010	10041713	407	10.0727	4099.589	14	100	0.005	0.1350	17.197	0.0016	1.590	<0.0026	N/A
17100011	10041714	405	10.148	4109.94	16	100	0.005	0.1550	19.745	0.0018	1.550	<0.0029	N/A
17100012	10041715	231	10.0159	2313.673	7.5	100	0.005	0.0700	8.917	0.0015	1.775	<0.0026	NA

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/4/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-63
Lab: Advanced Environmental
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17100009	AS24a	Asbestos PCM	Air	MCE Cassette	10/4/2017	1829.11	Liters	179	10.2185	L/min
	17100010	AS26	Asbestos PCM	Air	MCE Cassette	10/4/2017	4099.59	Liters	407	10.0727	L/min
	17100011	AS15	Asbestos PCM	Air	MCE Cassette	10/4/2017	4109.94	Liters	405	10.148	L/min
	17100012	Blank	Asbestos PCM	Air	MCE Cassette	10/4/2017		Liters			L/min
	17100013	AS24b	Asbestos PCM	Air	MCE Cassette	10/4/2017	2313.67	Liters	231	10.0159	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
drop off Samples	EFE START	10/4/17 17:00			

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/05/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/05/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
One blank submitted with this set of samples. Per NIOSH 7400 method, minimum of 2 Blanks or 10% whichever is greater are to be submitted with each sample set.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/5/2017
DATE RECEIVED 10/5/2017
DATE ANALYZED 10/5/2017
DATE REPORTED 10/9/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100018	10051709	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100014	10051710	Air	AS24a	8:08 AM	12:30 PM	10.0595	10.595
17100015	10051711	Air	AS26	8:33 AM	3:58 PM	10.1065	10.1065
17100016	10051712	Air	AS15	8:54 AM	4:04 PM	10.2255	10.2255
17100017	10051713	Air	AS24b	12:32 PM	3:59 PM	10.0895	10.895

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100014	10051710	262	10.32725	2705.74	9.5	100	0.0075	0.0875	11.146	0.0016	1.690	<0.0027	N/A
17100015	10051711	445	10.1065	4497.393	10	100	0.0075	0.0925	11.783	0.0010	1.670	<0.0017	N/A
17100016	10051712	430	10.2255	4396.965	10.5	100	0.0075	0.0975	12.420	0.0011	1.660	<0.0018	N/A
17100017	10051713	207	10.49225	2171.896	13	100	0.0075	0.1225	15.605	0.0028	1.610	<0.0045	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/5/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-64
Lab: Advanced Environmental
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17100014	AS24a	Asbestos PCM	Air	MCE Cassette	10/5/2017	2635.59	Liters	262	10.0595	L/min
	17100015	AS26	Asbestos PCM	Air	MCE Cassette	10/5/2017	4497.39	Liters	445	10.1065	L/min
	17100016	AS15	Asbestos PCM	Air	MCE Cassette	10/5/2017	4396.97	Liters	430	10.2255	L/min
	17100017	AS24b	Asbestos PCM	Air	MCE Cassette	10/5/2017	1886.74	Liters	187	10.0895	L/min
	17100018	Blank	Asbestos PCM	Air	MCE Cassette	10/5/2017		Liters			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] E&E START	10/5/17 17:00			

ADVANTAGE Environmental INC.

Clean your world.

October 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/06/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below PELs and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/6/2017
DATE RECEIVED 10/6/2017
DATE ANALYZED 10/6/2017
DATE REPORTED 10/9/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100023	10061716	1	100	1/100
17100024	10061717	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100019	10061718	Air	AS24a	8:11 AM	12:09 PM	10.0435	10.0435
17100020	10061719	Air	AS26	8:23 AM	3:31 PM	10.2245	10.2245
17100021	10061720	Air	AS15	8:33 AM	3:38 PM	10.2135	10.2135
17100022	10061721	Air	AS24b	12:13 PM	3:20 PM	10.149	10.149

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100019	10061718	238	10.0435	2390.35	9.5	100	0.0075	0.0875	11.146	0.0018	1.690	<0.0030	N/A
17100020	10061719	428	10.2245	4376.09	10	100	0.0075	0.0925	11.783	0.0010	1.670	<0.0017	N/A
17100021	10061720	425	10.2135	4340.74	10.5	100	0.0075	0.0975	12.420	0.0011	1.660	<0.0018	N/A
17100022	10061721	187	10.149	1897.86	13	100	0.0075	0.1225	15.605	0.0032	1.610	<0.0051	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/6/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-65
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
	17100019	AS24a	Asbestos PCM	Air	MCE Cassette	10/6/2017	2390.35	Liters	238	10.0435	L/min
	17100020	AS26	Asbestos PCM	Air	MCE Cassette	10/6/2017	4376.09	Liters	428	10.2245	L/min
	17100021	AS15	Asbestos PCM	Air	MCE Cassette	10/6/2017	4340.74	Liters	425	10.2135	L/min
	17100022	AS24b	Asbestos PCM	Air	MCE Cassette	10/6/2017	1897.86	Liters	187	10.149	L/min
	17100023	Blank1	Asbestos PCM	Air	MCE Cassette	10/6/2017		Liters			L/min
	17100024	Blank2	Asbestos PCM	Air	MCE Cassette	10/6/2017		Liters			L/min

Start / Stop Times

17100019 : 08:11 - 12:09
17100020 : 08:23 - 15:31
17100021 : 08:33 - 15:38
17100022 : 12:13 - 15:20

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] E&E START	10/6/17 17:00			

ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/07/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/7/2017
DATE RECEIVED 10/10/2017
DATE ANALYZED 10/10/2017
DATE REPORTED 10/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100029	10101711	1	100	1/100
17100030	10101712	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100025	10101713	Air	AS24a	8:07 AM	12:12 PM	10.028	10.098
17100026	10101714	Air	AS26	8:23 AM	3:07 PM	10.044	10.242
17100027	10101715	Air	AS15	8:38 AM	3:11 PM	10.018	10.146
17100028	10101716	Air	AS24b	12:14 PM	3:00 PM	10.089	10.236

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100025	10101713	245	10.063	2465.44	8	100	0.01	0.0700	8.917	**0.0014**	1.741	<0.0024	N/A
17100026	10101714	404	10.143	4097.77	11	100	0.01	0.1000	12.739	**0.0012**	1.655	<0.0020	N/A
17100027	10101715	393	10.082	3962.23	9.5	100	0.01	0.0850	10.828	**0.0011**	1.690	<0.0018	N/A
17100028	10101716	166	10.1625	1686.98	10	100	0.01	0.0900	11.465	**0.0026**	1.670	<0.0044	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/7/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-66
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100025	AS24a	Asbestos PCM	Air	MCE Cassette	10/7/2017	10.028	10.098	2465.44	Liters	8:07:00 AM	12:12:00 PM	245	10.063	L/min
	17100026	AS26	Asbestos PCM	Air	MCE Cassette	10/7/2017	10.044	10.242	4097.77	Liters	8:23:00 AM	3:07:00 PM	404	10.143	L/min
	17100027	AS15	Asbestos PCM	Air	MCE Cassette	10/7/2017	10.018	10.146	3962.23	Liters	8:38:00 AM	3:11:00 PM	393	10.082	L/min
	17100028	AS24b	Asbestos PCM	Air	MCE Cassette	10/7/2017	10.089	10.236	1686.98	Liters	12:14:00 PM	3:00:00 PM	166	10.1625	L/min
	17100029	Blank1	Asbestos PCM	Air	MCE Cassette	10/7/2017				Liters					L/min
	17100030	Blank2	Asbestos PCM	Air	MCE Cassette	10/7/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] ETE START	10/7/17 17:00			

ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/10/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/10/2017
DATE RECEIVED 10/11/2017
DATE ANALYZED 10/11/2017
DATE REPORTED 10/12/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100034	10111701	0	100	0/100
17100035	10111702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100031	10111703	Air	AS24	7:39 AM	3:56 PM	10.104	10.163
17100032	10111704	Air	AS26	7:45 AM	3:50 PM	9.927	10.226
17100033	10111705	Air	AS15	7:53 AM	4:09 PM	9.945	10.1

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100031	10111703	497	10.1335	5036.35	9	100	0.0025	0.0875	11.146	0.0009	1.705	<0.0015	N/A
17100032	10111704	485	10.0765	4887.103	11.5	100	0.0025	0.1125	14.331	0.0011	1.635	<0.0018	N/A
17100033	10111705	496	10.0225	4971.16	9.5	100	0.0025	0.0925	11.783	0.0009	1.690	<0.0015	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/10/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone:

No: PDX-67
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100035	Blank 2	Asbestos PCM	Air	MCE Cassette	10/10/2017				Liters					L/min
	17100031	AS24	Asbestos PCM	Air	MCE Cassette	10/10/2017	10.104	10.163	5036.35	Liters	7:39:00 AM	3:56:00 PM	497	10.1335	L/min
	17100032	AS26	Asbestos PCM	Air	MCE Cassette	10/10/2017	9.927	10.226	4887.1	Liters	7:45:00 AM	3:50:00 PM	485	10.0765	L/min
	17100033	AS15	Asbestos PCM	Air	MCE Cassette	10/10/2017	9.945	10.1	4971.16	Liters	7:53:00 AM	4:09:00 PM	496	10.0225	L/min
	17100034	Blank 1	Asbestos PCM	Air	MCE Cassette	10/10/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	10:13 10/11/17		10/11/17 8AM	Good

ADVANTAGE Environmental INC.

Clean your world.

October 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/11/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/11/2017
DATE RECEIVED 10/12/2017
DATE ANALYZED 10/12/2017
DATE REPORTED 10/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100036	10121701	1	100	1/100
17100038	10121702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100037	10121703	Air	AS24	7:30 AM	4:00 PM	10.13	10.348
17100039	10121704	Air	AS15	7:44 AM	4:08 PM	10.038	10.288
17100040	10121705	Air	AS26	7:37 AM	3:56 PM	9.988	10.268

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100037	10121703	510	10.239	5221.89	11	100	0.0075	0.1025	13.057	0.0010	1.655	<0.0016	N/A
17100039	10121704	504	10.163	5122.152	9.5	100	0.0075	0.0875	11.146	0.0008	1.690	<0.0014	N/A
17100040	10121705	499	10.128	5053.872	15	100	0.0075	0.1425	18.153	0.0014	1.575	<0.0022	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/12/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-68
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100036	Blank 1	Asbestos PCM	Air	MCE Cassette	10/11/2017				Liters					L/min
	17100037	AS24	Asbestos PCM	Air	MCE Cassette	10/11/2017	10.13	10.348	5221.89	Liters	7:30:00 AM	4:00:00 PM	510	10.239	L/min
	17100038	Blank 2	Asbestos PCM	Air	MCE Cassette	10/11/2017									L/min
	17100039	AS15	Asbestos PCM	Air	MCE Cassette	10/11/2017	10.038	10.288	5122.15	Liters	7:44:00 AM	4:08:00 PM	504	10.163	L/min
	17100040	AS26	Asbestos PCM	Air	MCE Cassette	10/11/2017	9.988	10.268	5053.87	Liters	7:37:00 AM	3:56:00 PM	499	10.128	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	16:37 10/11/17			
				10/12/17 2:12pm	

ADVANTAGE Environmental INC.

Clean your world.

October 16, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/12/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/12/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Sample #17100043, not analyzed per START rep request

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/12/2017
DATE RECEIVED 10/13/2017
DATE ANALYZED 10/13/2017
DATE REPORTED 10/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100044	10131701	0.5	100	0.5/100
17100045	10131702	0	100	0/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100041	10131703	Air	AS24	7:47 AM	3:55 PM	10.073	9.978
17100042	10131704	Air	AS26	7:58 AM	3:58 PM	10.065	10.065
17100043	10131705	Air	AS15- Per Start Rep-This Sample Not Analyzed	8:07 AM	4:06 PM	9.917	10.17

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100041	10131703	488	10.0255	4892.444	7.5	100	0.0025	0.0725	9.236	0.0007	1.775	<0.0013	N/A
17100042	10131704	480	10.065	4831.2	8	100	0.0025	0.0775	9.873	0.0008	1.741	<0.0014	N/A
17100043	10131705	479	10.0435	4810.837	Sample	Not	Analyzed	N/A	N/A	N/A	N/A	N/A	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/13/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-69
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100041	AS24	Asbestos PCM	Air	MCE Cassette	10/12/2017	10.073	9.978	4892.44	Liters	7:47:00 AM	3:55:00 PM	488	10.0255	L/min
	17100042	AS26	Asbestos PCM	Air	MCE Cassette	10/12/2017	10.065	10.065	4831.2	Liters	7:58:00 AM	3:58:00 PM	480	10.065	L/min
	17100043	AS15	Asbestos PCM	Air	MCE Cassette	10/12/2017	9.917	10.17	4810.84	Liters	8:07:00 AM	4:06:00 PM	479	10.0435	L/min
	17100044	Blank 1	Asbestos PCM	Air	MCE Cassette	10/12/2017				Liters					L/min
	17100045	Blank 2	Asbestos PCM	Air	MCE Cassette	10/12/2017				Liters					L/min

Do not analyze

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ analysis	E3E STAFF	10/12/17 1610		10/13/17 7:30	6200 C
				10/13/17	

ADVANTAGE Environmental INC.

Clean your world.

October 16, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/13/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/13/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/13/2017
DATE RECEIVED 10/16/2017
DATE ANALYZED 10/16/2017
DATE REPORTED 10/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100049	10161701	0.5	100	0.5/100
17100050	10161702	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100046	10161703	Air	AS24	7:42 AM	3:32 PM	10.062	10.309
17100047	10161704	Air	AS26	7:53 AM	3:39 PM	9.953	10.296
17100048	10161705	Air	AS15	8:04 AM	3:46 PM	10.06	10.575

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100046	10161703	470	10.1855	4787.19	9.5	100	0.0075	0.0875	11.146	0.0009	1.690	<0.0015	N/A
17100047	10161704	466	10.1245	4718.02	7.5	100	0.0075	0.0675	8.599	0.0007	1.775	<0.0012	N/A
17100048	10161705	462	10.3175	4766.69	6.5	100	0.0075	0.0575	7.325	0.0006	1.810	<0.0011	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/16/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-70
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100046	AS24	Asbestos PCM	Air	MCE Cassette	10/13/2017	10.062	10.309	4787.19	Liters	7:42:00 AM	3:32:00 PM	470	10.1855	L/min
	17100047	AS26	Asbestos PCM	Air	MCE Cassette	10/13/2017	9.953	10.296	4718.02	Liters	7:53:00 AM	3:39:00 PM	466	10.1245	L/min
	17100048	AS15	Asbestos PCM	Air	MCE Cassette	10/13/2017	10.06	10.575	4766.69	Liters	8:04:00 AM	3:46:00 PM	462	10.3175	L/min
	17100049	Blank 1	Asbestos PCM	Air	MCE Cassette	10/13/2017				Liters					L/min
	17100050	Blank 2	Asbestos PCM	Air	MCE Cassette	10/13/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	BZ EJE/START	10-13-17 /1620	ADC	10/16/17	

ADVANTAGE Environmental INC.

Clean your world.

October 18, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/16/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area sample were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/16/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Unable to analyze sample 17100053, from Location AS15A-The filter media inside the cassette is damaged/broken.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/16/2017
DATE RECEIVED 10/17/2017
DATE ANALYZED 10/17/2017
DATE REPORTED 10/18/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100054	10171701	0.5	100	0.5/100
17100055	10171702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100057	10171703	Air	AS15b	12:31 PM	4:51 PM	9.35	9.354
17100056	10171704	Air	AS24b	12:07 PM	5:00 PM	9.978	9.966
17100053	10171705	Air	AS15a-Cassette filter damaged-not analyzed	8:03 AM	12:26 PM	10.118	10.663
17100052	10171706	Air	AS26	7:47 AM	5:04 PM	10.067	10.428
17100051	10171707	Air	AS24a	7:34 AM	12:00 PM	10.051	10.196

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100057	10171703	260	9.352	2431.52	11.5	100	0.005	0.1100	14.013	0.0022	1.635	<0.0036	N/A
17100056	10171704	293	9.972	2921.80	6	100	0.005	0.0550	7.006	0.0009	1.839	<0.0017	N/A
17100053	10171705	Sample	Not	Analyzed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17100052	10171706	557	10.2475	5707.86	9	100	0.005	0.0850	10.828	0.0007	1.705	<0.0012	N/A
17100051	10171707	266	10.1235	2692.85	10	100	0.005	0.0950	12.102	0.0017	1.670	<0.0029	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-71
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100057	AS15b	Asbestos PCM	Air	MCE Cassette	10/16/2017	9.35	9.354	2431.52	Liters	12:31:00 PM	4:51:00 PM	260	9.352	L/min
	17100056	AS24b	Asbestos PCM	Air	MCE Cassette	10/16/2017	9.978	9.966	2921.8	Liters	12:07:00 PM	5:00:00 PM	293	9.972	L/min
	17100055	Blank 2	Asbestos PCM	Air	MCE Cassette	10/16/2017									
	17100054	Blank 1	Asbestos PCM	Air	MCE Cassette	10/16/2017									
	17100053	AS15a	Asbestos PCM	Air	MCE Cassette	10/16/2017	10.118	10.663	2732.7	Liters	8:03:00 AM	12:26:00 PM	263	10.3905	L/min
	17100052	AS26	Asbestos PCM	Air	MCE Cassette	10/16/2017	10.067	10.428	5707.86	Liters	7:47:00 AM	5:04:00 PM	557	10.2475	L/min
	17100051	AS24a	Asbestos PCM	Air	MCE Cassette	10/16/2017	10.051	10.196	2692.85	Liters	7:34:00 AM	12:00:00 PM	266	10.1235	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples		10/16/17		10/17/20 10/17/17	COC

ADVANTAGE Environmental INC.

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October 19, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/17/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/17/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/17/2017
DATE RECEIVED 10/18/2017
DATE ANALYZED 10/18/2017
DATE REPORTED 10/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100061	10181704	1	100	1/100
17100062	10181705	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100058	10181706	Area	AS15	7:35 AM	3:25 PM	9.959	10.146
17100059	10181707	Area	AS26	8:01 AM	3:35 PM	10.021	10.264
17100060	10181708	Area	AS24	8:23 AM	3:44 PM	10.054	10.163

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100058	10181706	470	10.0525	4724.68	15	100	0.01	0.1400	17.834	0.0015	1.575	<0.0023	N/A
17100059	10181707	454	10.1425	4604.70	9	100	0.01	0.0800	10.191	0.0009	1.705	<0.0015	N/A
17100060	10181708	441	10.1085	4457.85	10.5	100	0.01	0.0950	12.102	0.0010	1.705	<0.0017	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/17/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-72
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100058	AS15	Asbestos PCM	Air	MCE Cassette	10/17/2017	9.959	10.146	4724.68	Liters	7:35:00 AM	3:25:00 PM	470	10.0525	L/min
	17100059	AS26	Asbestos PCM	Air	MCE Cassette	10/17/2017	10.021	10.264	4604.7	Liters	8:01:00 AM	3:35:00 PM	454	10.1425	L/min
	17100060	AS24	Asbestos PCM	Air	MCE Cassette	10/17/2017	10.054	10.163	4457.85	Liters	8:23:00 AM	3:44:00 PM	441	10.1085	L/min
	17100061	Blank 1	Asbestos PCM	Air	MCE Cassette	10/17/2017									
	17100062	Blank 2	Asbestos PCM	Air	MCE Cassette	10/17/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples		10/17/17		10/18 700	Good
		10/18/17			

ADVANTAGE Environmental INC.

Clean your world.

October 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/18/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/18/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/18/2017
DATE RECEIVED 10/19/2017
DATE ANALYZED 10/19/2017
DATE REPORTED 10/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100066	10191701	0.5	100	0.5/100
17100067	10191702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100063	10191703	Air	AS15	7:55 AM	4:07 PM	10.028	10.142
17100064	10191704	Air	AS24	8:30 AM	3:25 PM	9.959	10.213
17100065	10191705	Air	AS26	8:09 AM	3:55 PM	10.089	10.251

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100063	10191703	492	10.085	4961.82	9.5	100	0.005	0.0900	11.465	0.0009	1.690	<0.0015	N/A
17100064	10191704	415	10.086	4185.69	11	100	0.005	0.1050	13.376	0.0012	1.655	<0.0020	N/A
17100065	10191705	466	10.17	4739.22	10.5	100	0.005	0.1000	12.739	0.0012	1.655	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped:

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: (206) 920-1739

No: PDX-73

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100063	AS15	Asbestos PCM	Air	MCE Cassette	10/18/2017	10.028	10.142	4961.82	Liters	7:55:00 AM	4:07:00 PM	492	10.085	L/min
	17100064	AS24	Asbestos PCM	Air	MCE Cassette	10/18/2017	9.959	10.213	4185.69	Liters	8:30:00 AM	3:25:00 PM	415	10.086	L/min
	17100065	AS26	Asbestos PCM	Air	MCE Cassette	10/18/2017	10.089	10.251	4739.22	Liters	8:09:00 AM	3:55:00 PM	466	10.17	L/min
	17100066	Blank 1	Asbestos PCM	Air	MCE Cassette	10/18/2017									
	17100067	Blank 2	Asbestos PCM	Air	MCE Cassette	10/18/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	C+L, E+B	10/19/17		10/19/17 7Am 10/19/17	Good

ADVANTAGE Environmental INC.

Clean your world.

October 23, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/19/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/19/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/19/2017
DATE RECEIVED 10/20/2017
DATE ANALYZED 10/20/2017
DATE REPORTED 10/23/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100071	10201701	0.5	100	0.5/100
17100072	10201702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100068	10201703	Area	AS15	7:50 AM	3:28 PM	9.969	10.154
17100069	10201704	Area	AS24	9:50 AM	3:44 PM	10.111	10.587
17100070	10201705	Area	AS26	8:03 AM	3:37 PM	10.059	10.257

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100068	10201703	458	10.0615	4608.17	6	100	0.005	0.0550	7.006	0.0006	1.839	<0.0011	N/A
17100069	10201704	354	10.349	3663.55	7.5	100	0.005	0.0700	8.917	0.0009	1.775	<0.0017	N/A
17100070	10201705	454	10.158	4611.73	6	100	0.005	0.0550	7.006	0.0007	1.775	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920–1739

No: PDX-75
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100073	AS15	Asbestos PCM	Air	MCE Cassette	10/20/2017	10.056	10.304	4692.98	Liters	7:42:00 AM	3:23:00 PM	461	10.18	L/min
	17100074	AS24	Asbestos PCM	Air	MCE Cassette	10/20/2017	10.073	10.307	4626.26	Liters	8:07:00 AM	3:41:00 PM	454	10.19	L/min
	17100075	AS26	Asbestos PCM	Air	MCE Cassette	10/20/2017	9.996	10.272	4661.64	Liters	7:53:00 AM	3:33:00 PM	460	10.134	L/min
	17100076	Blank 1	Asbestos PCM	Blank	MCE Cassette	10/20/2017									
	17100077	Blank 2	Asbestos PCM	Air	MCE Cassette	10/20/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature], ENE	10/21/17	[signature]	10/21/17 7AM	Good
				10/21/17	

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920–1739

No: PDX-75
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100073	AS15	Asbestos PCM	Air	MCE Cassette	10/20/2017	10.056	10.304	4692.98	Liters	7:42:00 AM	3:23:00 PM	461	10.18	L/min
	17100074	AS24	Asbestos PCM	Air	MCE Cassette	10/20/2017	10.073	10.307	4626.26	Liters	8:07:00 AM	3:41:00 PM	454	10.19	L/min
	17100075	AS26	Asbestos PCM	Air	MCE Cassette	10/20/2017	9.996	10.272	4661.64	Liters	7:53:00 AM	3:33:00 PM	460	10.134	L/min
	17100076	Blank 1	Asbestos PCM	Blank	MCE Cassette	10/20/2017									
	17100077	Blank 2	Asbestos PCM	Air	MCE Cassette	10/20/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature], E+E	10/21/17	[signature]	10/21/17 7AM	Good
			[signature]	10/21/17	

ADVANTAGE Environmental INC.

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October 24, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/21/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/21/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/21/2017
DATE RECEIVED 10/23/2017
DATE ANALYZED 10/23/2017
DATE REPORTED 10/24/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100081	10231701	0.5	100	0.5/100
17100082	10231702	0.5	100	0.5/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100078	10231703	Area	AS15	7:47 AM	2:08 PM	10.066	10.241
17100079	10231704	Area	AS24	8:14 AM	2:24 PM	9.914	10.07
17100080	10231705	Area	AS26	8:00 AM	2:16 PM	9.969	10.144

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100078	10231703	381	10.1535	3868.48	7.5	100	0.005	0.0700	8.917	0.0009	1.775	<0.0016	N/A
17100079	10231704	370	9.992	3697.04	6.5	100	0.005	0.0600	7.643	0.0008	1.810	<0.0014	N/A
17100080	10231705	376	10.0565	3781.24	6.5	100	0.005	0.0600	7.643	0.0008	1.810	<0.0014	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-76
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100078	AS15	Asbestos PCM	Air	MCE Cassette	10/21/2017	10.066	10.241	3868.48	Liters	7:47:00 AM	2:08:00 PM	381	10.1535	L/min
	17100079	AS24	Asbestos PCM	Air	MCE Cassette	10/21/2017	9.914	10.07	3697.04	Liters	8:14:00 AM	2:24:00 PM	370	9.992	L/min
	17100080	AS26	Asbestos PCM	Air	MCE Cassette	10/21/2017	9.969	10.144	3781.24	Liters	8:00:00 AM	2:16:00 PM	376	10.0565	L/min
	17100081	Blank 1	Asbestos PCM	Blank	MCE Cassette	10/21/2017									
	17100082	Blank 2	Asbestos PCM	Blank	MCE Cassette	10/21/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	[signature] DAE	10/23/17	[signature]	10/23/17	

ADVANTAGE Environmental INC.

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October 25, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/23/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/23/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/23/2017
DATE RECEIVED 10/24/2017
DATE ANALYZED 10/24/2017
DATE REPORTED 10/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100086	10241701	1	100	1/100
17100087	10241702	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100083	10241703	Area	AS15	7:30 AM	3:35 PM	10.051	10.233
17100084	10241704	Area	AS24	7:47 AM	3:43 PM	9.929	10.209
17100085	10247105	Area	AS26	8:00 AM	3:49 PM	10.038	10.298

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100083	10241703	485	10.142	4918.87	9.5	100	0.01	0.0850	10.828	0.0008	1.690	<0.0014	N/A
17100084	10241704	476	10.069	4792.84	8.5	100	0.01	0.0750	9.554	0.0008	1.720	<0.0013	N/A
17100085	10247105	469	10.168	4768.79	11.5	100	0.01	0.1050	13.376	0.0011	1.635	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/24/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-77
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100083	AS24	Asbestos PCM	Air	MCE Cassette	10/23/2017	10.051	10.233	4918.87	Liters	7:30:00 AM	3:35:00 PM	485	10.142	L/min
	17100084	AS26	Asbestos PCM	Air	MCE Cassette	10/23/2017	9.929	10.209	4792.84	Liters	7:47:00 AM	3:43:00 PM	476	10.069	L/min
	17100085	AS15	Asbestos PCM	Air	MCE Cassette	10/23/2017	10.038	10.298	4768.79	Liters	8:00:00 AM	3:49:00 PM	469	10.168	L/min
	17100086	Blank 1	Asbestos PCM	Blank	MCE Cassette	10/23/2017									
	17100087	Blank 2	Asbestos PCM	Blank	MCE Cassette	10/23/2017									

Special Instructions:

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	ETE/START	10/23/17 1617		10/24/17	

ADVANTAGE Environmental INC.

Clean your world.

October 26, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/24/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/24/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Samples 1700088 & 1710089 were over loaded, and analysis could not be completed.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/24/2017
DATE RECEIVED 10/25/2017
DATE ANALYZED 10/25/2017
DATE REPORTED 10/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
1710091	10251701	1	100	1/100
1710092	10251702	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100093	10251703	Area	AS24b	11:16 AM	3:24 PM	10.069	10.209
17100094	10251704	Area	AS26b	11:27 AM	3:32 PM	10.043	10.189
17100088	10251705	Area	AS24a- Unable to complete analyze-sample over loaded	7:43 AM	11:13 AM	10.045	10.187
1710089	10251706	Area	AS15a Unable to complete analyze-sample over loaded	7:53 AM	11:26 AM	9.9774	10.011
1710090	10251707	Area	AS24a	8:14 AM	11:35 AM	9.942	10.111

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100093	10251703	248	10.139	2514.47	12.5	100	0.01	0.1150	14.650	0.0022	1.620	<0.0036	N/A
17100094	10251704	245	10.116	2478.42	11.5	100	0.01	0.1050	13.376	0.0021	1.635	<0.0034	N/A
17100088	10251705	210	10.116	2124.36	Sample	Over	Loaded	N/A	N/A	N/A	N/A	N/A	N/A
1710089	10251706	213	9.9942	2128.76	Sample	Over	Loaded	N/A	N/A	N/A	N/A	N/A	N/A
1710090	10251707	201	10.0265	2015.33	10.5	100	0.01	0.0950	12.102	0.0023	1.660	<0.0038	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/25/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-78
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100093	AS24b	Asbestos PCM	Air	MCE Cassette	10/24/2017	10.069	10.209	2514.47	Liters	11:16:00 AM	3:24:00 PM	248	10.139	L/min
	17100094	AS26b	Asbestos PCM	Air	MCE Cassette	10/24/2017	10.043	10.189	2478.42	Liters	11:27:00 AM	3:32:00 PM	245	10.116	L/min
	17100088	AS24a	Asbestos PCM	Air	MCE Cassette	10/24/2017	10.045	10.187	2124.36	Liters	7:43:00 AM	11:13:00 AM	210	10.116	L/min
	1710089	AS26a	Asbestos PCM	Air	MCE Cassette	10/24/2017	9.9774	10.011	2128.76	Liters	7:53:00 AM	11:26:00 AM	213	9.9942	L/min
	1710090	AS15a	Asbestos PCM	Air	MCE Cassette	10/24/2017	9.942	10.111	2015.33	Liters	8:14:00 AM	11:35:00 AM	201	10.0265	L/min
	1710091	Blank 1	Asbestos PCM	Air	MCE Cassette	10/24/2017									
	1710092	Blank 2	Asbestos PCM	Air	MCE Cassette	10/24/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples		16:13 10/24/17			
				10/25/17	

ADVANTAGE Environmental INC.

Clean your world.

October 27, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/25/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/25/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Samples 1710093 & 1710094 were over loaded, and analysis could not be completed.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/25/2017
DATE RECEIVED 10/26/2017
DATE ANALYZED 10/26/2017
DATE REPORTED 10/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
1710096	10261701	0.5	100	0.5/100
1710097	10261702	1	100	1/100

SAMPLES COLLECTED BY: Brittany Train

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
1710093	10261703	Area	AS24 Unable to complete analysis-sample over loaded	7:57 AM	3:42 PM	10.005	10.213
1710094	10261704	Area	AS26 Unable to complete analysis-sample over loaded	8:06 AM	3:47 PM	9.959	10.144
1710095	10261705	Area	AS15	10:00 AM	3:56 PM	9.978	10.287

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
1710093	10261703	465	10.109	4700.69	Sample	Over	Loaded	N/A	N/A	N/A	N/A	N/A	N/A
1710094	10261704	461	10.0515	4633.74	Sample	Over	Loaded	N/A	N/A	N/A	N/A	N/A	N/A
1710095	10261705	356	10.1325	3607.17	8.5	100	0.0075	0.9925	126.433	0.0135	1.720	<0.0232	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/26/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-79
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	1710093	AS24	Asbestos PCM	Air	MCE Cassette	10/25/2017	10.005	10.213	4700.69	Liters	7:57:00 AM	3:42:00 PM	465	10.109	L/min
	1710094	AS26	Asbestos PCM	Air	MCE Cassette	10/25/2017	9.959	10.144	4633.74	Liters	8:06:00 AM	3:47:00 PM	461	10.0515	L/min
	1710095	AS15	Asbestos PCM	Air	MCE Cassette	10/25/2017	9.978	10.287	3607.17	Liters	10:00:00 AM	3:56:00 PM	356	10.1325	L/min
	1710096	Blank 1	Asbestos PCM	Air	MCE Cassette	10/25/2017									
	1710097	Blank 2	Asbestos PCM	Air	MCE Cassette	10/25/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	E+E START	10/25/17 1618			
				10/26/17	

ADVANTAGE Environmental INC.

Clean your world.

October 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/26/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Anomalies
Chain of custody - missing the following data:
10/26/2017 Sample 17100098-no start time, no stop time, no start LPM, no stop LPM
10/26/2017 Sample 17100099-no start time, no stop time, no start LPM, no stop LPM
10/26/2017 Sample 17100100 no start time, no stop time, no start LPM, no stop LPM

Mixed dates on chain of custody- Blank samples 17100101 & 17100102-dated 10/25

Air Data Results
Due to incomplete chain of custody, laboratory report could not be fully completed.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/26/2017
DATE RECEIVED 10/26/2017
DATE ANALYZED 10/27/2017
DATE REPORTED 10/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100101	10271701	0.5	100	0.5/100
17100102	10271702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100098	1027103	Area	AS24	N/A	N/A	N/A	N/A
17100099	1027104	Area	AS26	N/A	N/A	N/A	N/A
17100100	1027105	Area	AS15	N/A	N/A	N/A	N/A

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100098	1027103	N/A	N/A	N/A	16.5	100	0.0075	0.1575	20.064	N/A	N/A	N/A	N/A
17100099	1027104	N/A	N/A	N/A	8.5	100	0.0075	0.0775	9.873	N/A	N/A	N/A	N/A
17100100	1027105	N/A	N/A	N/A	9	100	0.0075	0.0825	10.510	N/A	N/A	N/A	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

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USEPA
DateShipped: 10/27/2017

CHAIN OF CUSTODY RECORD
R10 PDX Combined/OR
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-80
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
	17100098	AS24	Asbestos PCM	Air	10/26/2017	1			
	17100099	AS26	Asbestos PCM	Air	10/26/2017	1			
	17100100	AS15	Asbestos PCM	Air	10/26/2017	1			
	17100101	Blank 1	Asbestos PCM	Air	10/25/2017	1	MCE Cassette	None	N
	17100102	Blank 1	Asbestos PCM	Air	10/25/2017	1	MCE Cassette	None	N

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/analysis	ETE START	10-26-17/1620			
				10/27/17	

ADVANTAGE Environmental INC.

Clean your world.

October 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/27/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Anomalies
Chain of custody - missing the following data:
10/27/2017 Sample 17100105-no start time, no stop time, no start LPM, no stop LPM
10/27/2017 Sample 17100106-no start time, no stop time, no start LPM, no stop LPM
10/27/2017 Sample 17100107 no start time, no stop time, no start LPM, no stop LPM
10/27/2017 Sample 17100108-no start time, no stop time, no start LPM, no stop LPM
10/27/2017 Sample 17100109-no start time, no stop time, no start LPM, no stop LPM
10/27/2017 Sample 17100110 no start time, no stop time, no start LPM, no stop LPM

Air Data Results
Due to incomplete chain of custody, laboratory report could not be fully completed.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/27/2017
DATE RECEIVED 10/28/2017
DATE ANALYZED 10/28/2017
DATE REPORTED 10/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100111	10281701	0.5	100	0.5/100
17100112	10281702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100105	10281703	Area	AS24a	N/A	N/A	N/A	N/A
17100106	10281704	Area	AS26a	N/A	N/A	N/A	N/A
17100107	10281705	Area	AS15a	N/A	N/A	N/A	N/A
17100108	10281706	Area	AS24b	N/A	N/A	N/A	N/A
17100109	10281707	Area	AS26b	N/A	N/A	N/A	N/A
17100110	10281708	Area	AS15b	N/A	N/A	N/A	N/A

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100105	10281703	N/A	N/A	N/A	10	100	0.005	0.095	12.102	N/A	N/A	N/A	N/A
17100106	10281704	N/A	N/A	N/A	8.5	100	0.005	0.080	10.191	N/A	N/A	N/A	N/A
17100107	10281705	N/A	N/A	N/A	6.5	100	0.005	0.060	7.643	N/A	N/A	N/A	N/A
17100108	10281706	N/A	N/A	N/A	11	100	0.005	0.105	13.376	N/A	N/A	N/A	N/A
17100109	10281707	N/A	N/A	N/A	8	100	0.005	0.075	9.554	N/A	N/A	N/A	N/A
17100110	10281708	N/A	N/A	N/A	7	100	0.005	0.065	8.280	N/A	N/A	N/A	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/28/2017

CHAIN OF CUSTODY RECORD
R10 PDX Combined/OR
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-81
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
	17100105	AS24a	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100106	AS26a	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100107	AS15a	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100108	AS24b	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100109	AS26b	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100110	AS15b	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100111	Blank 1	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N
	17100112	Blank 2	Asbestos PCM	Air	10/27/2017	1	MCE Cassette	None	N

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analyses	EHE, START	10/27/17 1620		10/28/17 08:35	

ADVANTAGE Environmental INC.

Clean your world.

October 31, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/28/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/28/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/28/2017
DATE RECEIVED 10/30/2017
DATE ANALYZED 10/30/2017
DATE REPORTED 10/31/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100116	10301704	0.5	100	0.5/100
17100117	10301705	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100113	10301706	Area	AS24	7:51 AM	12:06 PM	10	10.003
17100114	10301707	Area	AS26	8:01 AM	12:00 PM	10.123	10.169
17100115	10301708	Area	AS15	8:20 AM	11:49 AM	10.125	10.186

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100113	10301706	255	10.0015	2550.38	9.5	100	0.0075	0.0875	11.146	0.0017	1.690	<0.0028	N/A
17100114	10301707	239	10.146	2424.89	8.5	100	0.0075	0.0775	9.873	0.0016	1.720	<0.0027	N/A
17100115	10301708	209	10.1555	2122.50	7.5	100	0.0075	0.0675	8.599	0.0016	1.775	<0.0028	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

November 1, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/30/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/30/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/30/2017
DATE RECEIVED 10/31/2017
DATE ANALYZED 10/31/2017
DATE REPORTED 11/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100122	10311708	0.5	100	0.5/100
17100123	10311709	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100120	10311710	Area	AS24b	11:49 AM	3:07 PM	10.02	9.8786
17100121	10311711	Area	AS26b	11:52 AM	3:16 PM	10.018	10.182
17100118	10311712	Area	AS24a	7:30 AM	11:42 AM	10.003	10.219
17100119	10311713	Area	AS26a	7:42 AM	11:49 AM	10.091	10.608

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100120	10311710	198	9.9493	1969.96	7	100	0.005	0.0650	8.280	0.0016	1.785	<0.0029	N/A
17100121	10311711	204	10.1	2060.40	8.5	100	0.005	0.0800	10.191	0.0019	1.720	<0.0033	N/A
17100118	10311712	252	10.111	2547.97	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0022	N/A
17100119	10311713	247	10.3495	2556.33	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0024	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/30/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-83
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100120	AS24b	Asbestos PCM	Air	MCE Cassette	10/30/2017	10.02	9.8786	1969.96	Liters	11:49:00 AM	3:07:00 PM	198	9.9493	L/min
	17100121	AS26b	Asbestos PCM	Air	MCE Cassette	10/30/2017	10.018	10.182	2060.4	Liters	11:52:00 AM	3:16:00 PM	204	10.1	L/min
	17100118	AS24a	Asbestos PCM	Air	MCE Cassette	10/23/2017	10.003	10.219	2547.97	Liters	7:30:00 AM	11:42:00 AM	252	10.111	L/min
	17100119	AS26a	Asbestos PCM	Air	MCE Cassette	10/30/2017	10.091	10.608	2556.33	Liters	7:42:00 AM	11:49:00 AM	247	10.3495	L/min
	17100122	Blank 1		Air	MCE Cassette	10/30/2017									
	17100123	Blank 2		Air	MCE Cassette	10/30/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	(START)	10/30/17 1552		10/31/17	

ADVANTAGE Environmental INC.

Clean your world.

November 2, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 10/31/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 10/31/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Sample 17100125, collected from location AS26a was damaged (filter media-torn) and could not be analyzed.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 10/31/2017
DATE RECEIVED 11/1/2017
DATE ANALYZED 11/1/2017
DATE REPORTED 11/2/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17100129	11011701	0.5	100	0.5/100
17100130	11011702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17100124	11011703	Area	AS24a	7:48 AM	12:00 PM	10.104	10.011
17100125	11011704	Area	AS26a - Filter media inside cassette damaged	7:59 AM	12:07 PM	10.012	10.048
17100126	11011705	Area	AS15a	8:28 AM	12:17 PM	10.031	10.136
17100127	1101706	Area	AS24b	12:04 PM	3:12 PM	10.041	10.106
17100128	10241707	Area	AS26b	12:10 PM	3:19 PM	10.035	10.137

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17100124	11011703	252	10.0575	2534.49	6.5	100	0.0025	0.0625	7.962	0.0012	1.810	<0.0022	N/A
17100125	11011704	248	10.03	2487.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17100126	11011705	229	10.0835	2309.12	6	100	0.0025	0.0575	7.325	0.0012	1.839	<0.0022	N/A
17100127	1101706	188	10.0735	1893.82	6.5	100	0.0025	0.0625	7.962	0.0016	1.810	<0.0029	N/A
17100128	10241707	189	10.086	1906.25	7	100	0.0025	0.0675	8.599	0.0017	1.785	<0.0031	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 10/31/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-84
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17100124	AS24a	Asbestos PCM	Air	MCE Cassette	10/31/2017	10.104	10.011	2534.49	Liters	7:48:00 AM	12:00:00 PM	252	10.0575	L/min
	17100125	AS26a	Asbestos PCM	Air	MCE Cassette	10/31/2017	10.012	10.048	2487.44	Liters	7:59:00 AM	12:07:00 PM	248	10.03	L/min
	17100126	AS15a	Asbestos PCM	Air	MCE Cassette	10/31/2017	10.031	10.136	2309.12	Liters	8:28:00 AM	12:17:00 PM	229	10.0835	L/min
	17100127	AS24b	Asbestos PCM	Air	MCE Cassette	10/31/2017	10.041	10.106	1893.82	Liters	12:04:00 PM	3:12:00 PM	188	10.0735	L/min
	17100128	AS26b	Asbestos PCM	Air	MCE Cassette	10/31/2017	10.035	10.137	1906.25	Liters	12:10:00 PM	3:19:00 PM	189	10.086	L/min
	17100129	Blank 1			MCE Cassette	10/31/2017									
	17100130	Blank 2			MCE Cassette	10/31/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	(START)	10/31/17		11-1-17	

ADVANTAGE Environmental INC.

Clean your world.

November 3, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/01/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/01/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/1/2017
DATE RECEIVED 11/2/2017
DATE ANALYZED 11/2/2017
DATE REPORTED 11/3/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110006	11021701	0.5	100	0.5/100
17110007	11021702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110001	11021703	Area	AS24a	7:43 AM	11:18 AM	10.065	9.915
17110002	11021704	Area	AS26a	7:53 AM	11:24 AM	10.033	10.027
17110003	11021705	Area	AS15b	11:35 AM	3:34 PM	10.036	10.064
17110004	11021706	Area	AS24b	11:20 AM	3:22 PM	10.087	10.102
17110005	11021707	Area	AS26b	11:25 AM	3:28 PM	10.054	10.152

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110001	11021703	215	9.99	2147.85	6.5	100	0.005	0.0600	7.643	0.0014	1.810	<0.0025	N/A
17110002	11021704	211	10.03	2116.33	7	100	0.005	0.0650	8.280	0.0015	1.785	<0.0027	N/A
17110003	11021705	239	10.05	2401.95	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A
17110004	11021706	242	10.0945	2442.87	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0022	N/A
17110005	11021707	243	10.103	2455.03	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/1/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steven Hall
Contact Phone: 206-920-1739

No: PDX-85
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110001	AS24a	Asbestos PCM	Air	MCE Cassette	11/1/2017	10.065	9.915	2147.85	Liters	7:43:00 AM	11:18:00 AM	215	9.99	L/min
	17110002	AS26a	Asbestos PCM	Air	MCE Cassette	11/1/2017	10.033	10.027	2116.33	Liters	7:53:00 AM	11:24:00 AM	211	10.03	L/min
	17110003	AS15b	Asbestos PCM	Air	MCE Cassette	11/1/2017	10.036	10.064	2401.95	Liters	11:35:00 AM	3:34:00 PM	239	10.05	L/min
	17110004	AS24b	Asbestos PCM	Air	MCE Cassette	11/1/2017	10.087	10.102	2442.87	Liters	11:20:00 AM	3:22:00 PM	242	10.0945	L/min
	17110005	AS26b	Asbestos PCM	Air	MCE Cassette	11/1/2017	10.054	10.152	2455.03	Liters	11:25:00 AM	3:28:00 PM	243	10.103	L/min
	17110006	Blank 1		Blank	MCE Cassette	11/1/2017									
	17110007	Blank 2		Blank	MCE Cassette	11/1/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	(START)	11/1/17		11-2-17	

ADVANTAGE Environmental INC.

Clean your world.

November 6, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/02/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/02/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
Sample 17110009, collected from location AS26a was damaged (filter media-torn) and could not be analyzed.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/2/2017
DATE RECEIVED 11/3/2017
DATE ANALYZED 11/3/2017
DATE REPORTED 11/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110014	11031701	0.5	100	0.5/100
17110015	11031702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110011	11031703	Area	AS24b	11:59 AM	4:04 PM	9.92	9.96
17110012	11031704	Area	AS26b	12:06 PM	4:22 PM	10.33	10.390
17110013	11031705	Area	AS15b	12:21 PM	4:39 PM	10.09	10.15
17110008	11031706	Area	AS24a	7:31 AM	11:58 AM	10.018	9.91
17110009	11031707	Area	AS26a-Filter media inside cassette damaged	8:02 AM	12:05 PM	10.137	10.16
17110010	11031708	Area	AS15a	7:45 AM	12:19 PM	10.009	9.96

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110011	11031703	245	9.94	2435.30	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0022	N/A
17110012	11031704	256	10.36	2652.16	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
17110013	11031705	258	10.12	2610.96	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0022	N/A
17110008	11031706	267	9.964	2660.39	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0023	N/A
17110009	11031707	243	10.1485	2466.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17110010	11031708	274	9.9845	2735.753	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	NA

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/2/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steven Hall
Contact Phone: 206-920-1739

No: PDX-86
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110011	AS24b	Asbestos PCM	Air	MCE Cassette	11/2/2017	9.92	9.96	2435.3	Liters	11:59:00 AM	4:04:00 PM	245	9.94	L/min
	17110012	AS26b	Asbestos PCM	Air	MCE Cassette	11/2/2017	10.33	10.39	2652.16	Liters	12:06:00 PM	4:22:00 PM	256	10.36	L/min
	17110013	AS15b	Asbestos PCM	Air	MCE Cassette	11/2/2017	10.09	10.15	2610.96	Liters	12:21:00 PM	4:39:00 PM	258	10.12	L/min
	17110014	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/2/2017	0	0	0	Liters	7:40:00 AM	4:50:00 PM	550	0	L/min
	17110015	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/2/2017	0	0	0	Liters	7:35:00 AM	4:45:00 PM	550	0	L/min
	17110008	AS24a	Asbestos PCM	Air	MCE Cassette	11/2/2017	10.018	9.91	2660.39	Liters	7:31:00 AM	11:58:00 AM	267	9.964	L/min
	17110009	AS26a	Asbestos PCM	Air	MCE Cassette	11/2/2017	10.137	10.16	2466.09	Liters	8:02:00 AM	12:05:00 PM	243	10.1485	L/min
	17110010	AS15a	Asbestos PCM	Air	MCE Cassette	11/2/2017	10.009	9.96	2735.75	Liters	7:45:00 AM	12:19:00 PM	274	9.9845	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL (overnight service)	Ryan Mitchell STAT Services (courier name from Job Tracker)	11/2/2017 1727		11/3/17	

AS26b - blew out

ADVANTAGE Environmental INC.

Clean your world.

November 7, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/03/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/03/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/3/2017
DATE RECEIVED 11/6/2017
DATE ANALYZED 11/6/2017
DATE REPORTED 11/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110022	11061701	0.5	100	0.5/100
17110023	11061702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection		Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110016	11061703	Area	AS24a		7:30 AM	11:45 AM	9.9938	9.8437
17110017	11061704	Area	AS26a		7:41 AM	11:50 AM	10.053	9.863
17110018	11061705	Area	AS15a		7:56 AM	11:58 AM	10.053	9.9733
17110019	11061706	Area	AS24b		11:48 AM	3:08 PM	10.081	10.216
17110020	11061707	Area	AS26b		11:53 AM	3:02 PM	10.115	10.367
17110021	11061708	Area	AS15b		12:01 PM	3:22 PM	10.039	10.287

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110016	11061703	255	9.9188	2529.28	8	100	0.005	0.0750	9.554	0.0015	1.741	<0.0025	N/A
17110017	11061704	249	9.958	2479.54	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A
17110018	11061705	242	10.0132	2423.18	8	100	0.005	0.0750	9.554	0.0015	1.741	<0.0026	N/A
17110019	11061706	200	10.1485	2029.70	9.5	100	0.005	0.0900	11.465	0.0022	1.690	<0.0037	N/A
17110020	11061707	189	10.241	1935.55	7.5	100	0.005	0.0700	8.917	0.0018	1.775	<0.0031	N/A
17110021	11061708	201	10.163	2042.763	8.5	100	0.005	0.0800	10.191	0.0019	1.720	<0.0033	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/3/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steven Hall
Contact Phone: 206-920-1739

No: PDX-87
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110016	AS24a	Asbestos PCM	Air	MCE Cassette	11/3/2017	9.9938	9.8437	2529.29	Liters	7:30:00 AM	11:45:00 AM	255	9.9188	L/min
	17110017	AS26a	Asbestos PCM	Air	MCE Cassette	11/3/2017	10.053	9.863	2479.54	Liters	7:41:00 AM	11:50:00 AM	249	9.958	L/min
	17110018	AS15a	Asbestos PCM	Air	MCE Cassette	11/3/2017	10.053	9.9733	2423.19	Liters	7:56:00 AM	11:58:00 AM	242	10.0132	L/min
	17110019	AS24b	Asbestos PCM	Air	MCE Cassette	11/3/2017	10.081	10.216	2029.7	Liters	11:48:00 AM	3:08:00 PM	200	10.1485	L/min
	17110020	AS26b	Asbestos PCM	Air	MCE Cassette	11/3/2017	10.115	10.367	1935.55	Liters	11:53:00 AM	3:02:00 PM	189	10.241	L/min
	17110021	AS15b	Asbestos PCM	Air	MCE Cassette	11/3/2017	10.039	10.287	2042.76	Liters	12:01:00 PM	3:22:00 PM	201	10.163	L/min
	17110022	Blank 1		Blank	MCE Cassette	11/3/2017									
	17110023	Blank 2		Blank	MCE Cassette	11/3/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	(START)	11/3/17		11/6/17	

ADVANTAGE Environmental INC.

Clean your world.

November 10, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/06/2017 START-Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 192.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (Start)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (Start)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/6/2017
DATE RECEIVED 11/7/2017
DATE ANALYZED 11/7/2017
DATE REPORTED 11/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110027	11071701	0.5	100	0.5/100
17110028	11071702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection		Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110024	11071703	Area	AS24a		7:49 AM	11:47 AM	10.141	10.166
17110025	11071704	Area	AS26a		8:15 AM	12:03 PM	10.043	10.313
17110026	11071705	Area	AS15a		8:44 AM	12:18 PM	10.076	10.27
17110029	11071706	Area	AS24b		11:49 AM	4:16 PM	10.258	10.243
17110030	11071707	Area	AS26b		12:05 PM	4:08 PM	10.23	10.129
17110031	11071708	Area	AS15b		12:20 PM	4:20 PM	10.152	10.084

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110024	11071703	238	10.1535	2416.53	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0024	N/A
17110025	11071704	228	10.178	2320.58	7	100	0.005	0.0650	8.280	0.0014	1.785	<0.0025	N/A
17110026	11071705	214	10.1730	2177.02	7	100	0.005	0.0650	8.280	0.0015	1.785	<0.0026	N/A
17110029	11071706	267	10.2505	2736.88	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0019	N/A
17110030	11071707	243	10.1795	2473.62	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0022	N/A
17110031	11071708	240	10.118	2428.32	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-88
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110024	AS24a	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.141	10.166	2416.53	Liters	7:49:00 AM	11:47:00 AM	238	10.1535	L/min
	17110025	AS26a	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.043	10.313	2320.58	Liters	8:15:00 AM	12:03:00 PM	228	10.178	L/min
	17110026	AS15a	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.076	10.27	2177.02	Liters	8:44:00 AM	12:18:00 PM	214	10.173	L/min
	17110027	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/6/2017	0	0	0	Liters	7:30:00 AM	4:30:00 PM	540	0	L/min
	17110028	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/6/2017	0	0	0	Liters	7:35:00 AM	4:35:00 PM	540	0	L/min
	17110029	AS24b	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.258	10.243	2736.88	Liters	11:49:00 AM	4:16:00 PM	267	10.2505	L/min
	17110030	AS26b	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.23	10.129	2473.62	Liters	12:05:00 PM	4:08:00 PM	243	10.1795	L/min
	17110031	AS15b	Asbestos PCM	Air	MCE Cassette	11/6/2017	10.152	10.084	2428.32	Liters	12:20:00 PM	4:20:00 PM	240	10.118	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	16:57 11/6/17		11/7/17	

ADVANTAGE Environmental INC

Clean your world.

November 9, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/07/2017 START-Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/07/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 192.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/7/2017
DATE RECEIVED 11/8/2017
DATE ANALYZED 11/8/2017
DATE REPORTED 11/9/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110032	11081701	1	100	1/100
17110036	11081702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110033	11081703	Area	AS24a	8:07 AM	11:49 AM	10.282	10.172
17110034	11081704	Area	AS26a	8:23 AM	12:03 PM	10.078	10.136
17110035	11081705	Area	AS15a	8:53 AM	12:19 PM	9.9306	10.66
17110037	11081706	Area	AS24b	11:52 AM	4:11 PM	10.1	10.101
17110038	11081707	Area	AS26b	12:05 PM	4:27 PM	10.048	10.048
17110039	11081708	Area	AS15b	12:20 PM	4:41 PM	9.8931	9.8931

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110033	11081703	222	10.227	2270.39	9.5	100	0.01	0.0850	10.828	0.0018	1.690	<0.0031	NA
17110034	11081704	220	10.107	2223.54	8.5	100	0.01	0.075	9.554	0.0017	1.720	<0.0028	NA
17110035	11081705	206	10.2953	2120.83	8	100	0.01	0.070	8.917	0.0016	1.741	<0.0028	NA
17110037	11081706	259	10.1005	2616.03	9	100	0.01	0.08	10.191	0.0015	1.705	<0.0026	NA
17110038	11081707	262	10.048	2632.58	9	100	0.01	0.080	10.191	0.0015	1.705	<0.0025	NA
17110039	11081708	261	9.8931	2582.10	8	100	0.01	0.070	8.917	0.0013	1.741	<0.0023	NA

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/8/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-90
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110032	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/7/2017	0	0	0	Liters	7:20:00 AM	12:30:00 PM	310	0	L/min
	17110033	AS24a	Asbestos PCM	Air	MCE Cassette	11/7/2017	10.282	10.172	2270.39	Liters	8:07:00 AM	11:49:00 AM	222	10.227	L/min
	17110034	AS26a	Asbestos PCM	Air	MCE Cassette	11/7/2017	10.078	10.136	2223.54	Liters	8:23:00 AM	12:03:00 PM	220	10.107	L/min
	17110035	AS15a	Asbestos PCM	Air	MCE Cassette	11/7/2017	9.9306	10.066	2059.65	Liters	8:53:00 AM	12:19:00 PM	206	9.9983	L/min
	17110036	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/7/2017	0	0	0	Liters	11:30:00 AM	5:00:00 PM	330	0	L/min
	17110037	AS24b	Asbestos PCM	Air	MCE Cassette	11/7/2017	10.1	10.101	2616.03	Liters	11:52:00 AM	4:11:00 PM	259	10.1005	L/min
	17110038	AS26b	Asbestos PCM	Air	MCE Cassette	11/7/2017	10.048	10.048	2632.58	Liters	12:05:00 PM	4:27:00 PM	262	10.048	L/min
	17110039	AS15b	Asbestos PCM	Air	MCE Cassette	11/7/2017	9.8931	9.8931	2582.1	Liters	12:20:00 PM	4:41:00 PM	261	9.8931	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
AIR Analysis	[illegible]	11/8/17 0934	[illegible]	11/8/17	

ADVANTAGE Environmental INC.

Clean your world.

November 10, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/08/2017 START-Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/08/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 192.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/8/2017
DATE RECEIVED 11/9/2017
DATE ANALYZED 11/9/2017
DATE REPORTED 11/10/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110043	11091701	1	100	1/100
17110047	11091702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110040	11091703	Area	AS24a	7:46 AM	11:28 AM	10.284	10.445
17110041	11091704	Area	AS26a	7:59 AM	11:40 AM	9.8965	10.123
17110042	11091705	Area	AS15a	8:25 AM	12:07 PM	9.9967	10.119
17110044	11091706	Area	AS24b	11:31 AM	3:45 PM	10.321	10.177
17110045	11091707	Area	AS26b	11:43 AM	3:59 PM	10.142	10.034
17110046	11091708	Area	AS15b	12:10 PM	4:19 PM	10.262	10.216

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110040	11091703	222	10.3645	2300.92	8	100	0.0075	0.0725	9.236	0.0015	1.741	<0.0027	N/A
17110041	11091704	221	10.00975	2212.15	8	100	0.0075	0.0725	9.236	0.0016	1.741	<0.0028	N/A
17110042	11091705	222	10.05785	2232.84	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0026	N/A
17110044	11091706	254	10.249	2603.25	8.5	100	0.0075	0.0775	9.873	0.0015	1.720	<0.0025	N/A
17110045	11091707	256	10.088	2582.53	8.5	100	0.0075	0.0775	9.873	0.0015	1.720	<0.0025	N/A
17110046	11091708	249	10.239	2549.51	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

Copy of original

USEPA

DateShipped: 11/9/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-91

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110040	AS24a	Asbestos PCM	Air	MCE Cassette	11/8/2017	10.284	10.445	2300.92	Liters	7:46:00 AM	11:28:00 AM	222	10.3645	L/min
	17110041	AS26a	Asbestos PCM	Air	MCE Cassette	11/8/2017	9.8965	10.123	2212.17	Liters	7:59:00 AM	11:40:00 AM	221	10.0098	L/min
	17110042	AS15a	Asbestos PCM	Air	MCE Cassette	11/8/2017	9.9967	10.119	2232.85	Liters	8:25:00 AM	12:07:00 PM	222	10.0579	L/min
	17110043	Blank 1	Asbestos PCM	Air	MCE Cassette	11/8/2017	0	0	0	Liters	7:30:00 AM	12:30:00 PM	300	0	L/min
	17110044	AS24b	Asbestos PCM	Air	MCE Cassette	11/8/2017	10.321	10.177	2603.25	Liters	11:31:00 AM	3:45:00 PM	254	10.249	L/min
	17110045	AS26b	Asbestos PCM	Air	MCE Cassette	11/8/2017	10.142	10.034	2582.53	Liters	11:43:00 AM	3:59:00 PM	256	10.088	L/min
	17110046	AS15b	Asbestos PCM	Air	MCE Cassette	11/8/2017	10.262	10.216	2549.51	Liters	12:10:00 PM	4:19:00 PM	249	10.239	L/min
	17110047	Blank 2	Asbestos PCM	Air	MCE Cassette	11/8/2017	0	0	0	Liters	11:15:00 AM	4:30:00 PM	315	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Analysis	R. Whitehead START	11/9/2017 0700		11/9/17	

ADVANTAGE Environmental INC

Clean your world.

November 13, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/09/2017 START-Asbestos Air Sampling Results 1300 North River St, Portland, OR.

Personal & (or) Area samples were collected utilizing 25mm mixed cellulose -ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 192, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8-hour time weighted average TWA.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and (or) Area samples collected on 11/09/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and health 192.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully

Sidney Carter
Senior Project Manager/AHERA Project Designer

[Type here]

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/9/2017
DATE RECEIVED 11/10/2017
DATE ANALYZED 11/10/2017
DATE REPORTED 11/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110048	11101701	1	100	1/100
17110052	11101702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110049	11101703	Area	AS24a	7:44 AM	11:54 AM	10.429	10.358
17110050	11101704	Area	AS26a	7:57 AM	12:06 PM	10.191	10.137
17110051	11101705	Area	AS15a	8:15 AM	12:20 PM	10.338	10.326
17110053	11101706	Area	AS24b	11:56 AM	4:10 PM	10.252	10.299
17110054	11101707	Area	AS26b	12:07 PM	4:17 PM	10.032	10.271
17110055	11101708	Area	AS15b	12:21 PM	4:33 PM	10.145	10.126

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110049	11101703	250	10.3935	2598.38	7.5	100	0.01	0.0650	8.280	0.0012	1.775	<0.0022	N/A
17110050	11101704	249	10.164	2530.84	7	100	0.01	0.060	7.643	0.0012	1.785	<0.0021	N/A
17110051	11101705	245	10.332	2531.34	8	100	0.01	0.070	8.917	0.0014	1.741	<0.0024	N/A
17110053	11101706	254	10.2755	2609.98	7	100	0.01	0.06	7.643	0.0011	1.785	<0.0020	N/A
17110054	11101707	250	10.1515	2537.88	7.5	100	0.01	0.065	8.280	0.0013	1.775	<0.0022	N/A
17110055	11101708	252	10.1355	2554.15	7.5	100	0.01	0.065	8.280	0.0012	1.775	<0.0022	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/10/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-92
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110048	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/9/2017	0	0	0	Liters	7:30:00 AM	12:30:00 PM	300	0	L/min
	17110049	AS24a	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.429	10.358	2598.38	Liters	7:44:00 AM	11:54:00 AM	250	10.3935	L/min
	17110050	AS26a	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.191	10.137	2530.84	Liters	7:57:00 AM	12:06:00 PM	249	10.164	L/min
	17110051	AS15a	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.338	10.326	2531.34	Liters	8:15:00 AM	12:20:00 PM	245	10.332	L/min
	17110052	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/9/2017	0	0	0	Liters	11:30:00 AM	4:45:00 PM	315	0	L/min
	17110053	AS24b	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.252	10.299	2609.98	Liters	11:56:00 AM	4:10:00 PM	254	10.2755	L/min
	17110054	AS26b	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.032	10.271	2537.88	Liters	12:07:00 PM	4:17:00 PM	250	10.1515	L/min
	17110055	AS15b	Asbestos PCM	Air	MCE Cassette	11/9/2017	10.145	10.126	2554.15	Liters	12:21:00 PM	4:33:00 PM	252	10.1355	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Analysis	Ryan Whitehead/ESMART	11/10/2017 0657		11/10/17	

ADVANTAGE Environmental INC.

Clean your world.

November 15, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/13/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/13/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/13/2017
DATE RECEIVED 11/14/2017
DATE ANALYZED 11/14/2017
DATE REPORTED 11/15/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110060	11141701	1	100	1/100
17110061	11141702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110056	11141703	Area	AS26a	7:22 AM	11:39 AM	9.976	10.255
17110057	11141704	Area	AS26b	11:42 AM	3:22 PM	9.95	10
17110058	11141705	Area	AS24b	12:00 PM	3:14 PM	10.034	10.347
17110059	11141706	Area	AS24b	11:50 AM	3:29 PM	10.060	10.104

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110056	11141703	257	10.1155	2599.68	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0023	N/A
17110057	11141704	220	9.975	2194.50	8	100	0.0075	0.0725	9.236	0.0016	1.741	<0.0028	N/A
17110058	11141705	194	10.1905	1976.96	9	100	0.0075	0.0825	10.510	0.0020	1.705	<0.0035	N/A
17110059	11141706	219	10.082	2207.96	9.5	100	0.0075	0.0875	11.146	0.0019	1.690	<0.0033	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/14/2017

CHAIN OF CUSTODY RECORD
R10 PDX Combined/OR
Contact Name: Steve Hall
Contact Phone: (206) 920-1739

No: PDX-93
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110056	AS26a	Asbestos PCM	Air	MCE Cassette	11/13/2017	9.976	10.255	2599.68	Liters *	7:22:00 AM	11:39:00 AM	257	10.1155	L/min
	17110057	AS26b	Asbestos PCM	Air	MCE Cassette	11/13/2017	9.95	10	2194.5	Liters	11:42:00 AM	3:22:00 PM	220	9.975	L/min
	17110058	AS24b	Asbestos PCM	Air	MCE Cassette	11/13/2017	10.034	10.347	1976.96	Liters	12:00:00 PM	3:14:00 PM	194	10.1905	L/min
	17110059	AS24b	Asbestos PCM	Air	MCE Cassette	11/13/2017	10.06	10.104	2207.96	Liters	11:50:00 AM	3:29:00 PM	219	10.082	L/min
	17110060	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/13/2017	0		0	Liters	7:30:00 AM		300	0	L/min
	17110061	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/13/2017	0		0	Liters	7:30:00 AM		300	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	E3E/START			11/14/17	
			Vinson White		

ADVANTAGE Environmental INC.

Clean your world.

November 16, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/14/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/14/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/14/2017
DATE RECEIVED 11/15/2017
DATE ANALYZED 11/15/2017
DATE REPORTED 11/16/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110065	11151701	0.5	100	0.5/100
17110069	11151702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110062	11151703	Area	AS24a	7:05 AM	11:43 AM	10.022	10.231
17110063	11151704	Area	AS15a	7:23 AM	11:55 AM	10.103	10.219
17110064	11151705	Area	AS26a	7:39 AM	12:10 PM	10.052	10.213
17110066	11151706	Area	AS24b	11:47 AM	3:36 PM	10.163	10.206
17110067	11151707	Area	AS15b	11:57 AM	3:51 PM	10.374	10.332
17110068	11151708	Area	AS26b	12:13 PM	4:05 PM	10.177	10.154

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110062	11151703	278	10.1265	2815.17	7	100	0.0025	0.0675	8.599	0.0012	1.785	<0.0021	N/A
17110063	11151704	272	10.161	2763.79	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0020	N/A
17110064	11151705	271	10.1325	2745.91	7.5	100	0.0025	0.0725	9.236	0.0013	1.775	<0.0023	N/A
17110066	11151706	229	10.1845	2332.25	7	100	0.0025	0.0675	8.599	0.0014	1.785	<0.0025	N/A
17110067	11151707	234	10.353	2422.60	6.5	100	0.0025	0.063	7.962	0.0013	1.810	<0.0023	N/A
17110068	11151708	232	10.1655	2358.40	6	100	0.0025	0.058	7.325	0.0012	1.839	<0.0022	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name:
Contact Phone:

No: PDX-94
Lab:
Lab Phone:
Lab Address:

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110062	AS24a	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.022	10.231	2815.17	Liters	7:05:00 AM	11:43:00 AM	278	10.1265	L/min
	17110063	AS15a	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.103	10.219	2763.79	Liters	7:23:00 AM	11:55:00 AM	272	10.161	L/min
	17110064	AS26a	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.052	10.213	2745.91	Liters	7:39:00 AM	12:10:00 PM	271	10.1325	L/min
	17110065	Blank1	Asbestos PCM	Blank	MCE Cassette	11/14/2017	0	0	0	Liters	7:06:00 AM		-426	0	L/min
	17110066	AS24b	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.163	10.206	2332.25	Liters	11:47:00 AM	3:36:00 PM	229	10.1845	L/min
	17110067	AS15b	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.374	10.332	2422.6	Liters	11:57:00 AM	3:51:00 PM	234	10.353	L/min
	17110068	AS26b	Asbestos PCM	Air	MCE Cassette	11/14/2017	10.177	10.154	2358.4	Liters	12:13:00 PM	4:05:00 PM	232	10.1655	L/min
	17110069	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/14/2017	0	0		Liters	11:47:00 AM				L/min

Special Instructions:

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	ELIZE START	11/14/17 16:38		11/15/17	

ADVANTAGE Environmental INC.

Clean your world.

November 17, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/15/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/15/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/15/2017
DATE RECEIVED 11/16/2017
DATE ANALYZED 11/16/2017
DATE REPORTED 11/17/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110073	11161701	0	100	0/100
17110074	11161702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110070	11161703	Area	AS24a	7:13 AM	11:43 AM	9.9696	10.068
17110071	11161704	Area	AS26a	7:23 AM	11:48 AM	10.065	10.147
17110072	11161705	Area	AS15a	7:35 AM	11:54 AM	10.033	10.082
17110075	11161706	Area	AS24b	11:45 AM	3:18 PM	10.025	9.938
17110076	11161707	Area	AS26b	11:50 AM	3:23 PM	10.018	9.9848
17110077	11161708	Area	AS15b	11:58 AM	3:30 PM	10.079	10.073

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110070	11161703	270	10.0188	2705.08	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0021	N/A
17110071	11161704	265	10.106	2678.09	7.5	100	0.0025	0.0725	9.236	0.0013	1.775	<0.0024	N/A
17110072	11161705	259	10.0575	2604.89	7.5	100	0.0025	0.0725	9.236	0.0014	1.775	<0.0024	N/A
17110075	11161706	213	9.9815	2126.06	8.5	100	0.0025	0.0825	10.510	0.0019	1.720	<0.0033	N/A
17110076	11161707	213	10.0014	2130.30	6.5	100	0.0025	0.0625	7.962	0.0014	1.810	<0.0026	N/A
17110077	11161708	212	10.076	2136.11	9.5	100	0.0025	0.0925	11.783	0.0021	1.690	<0.0036	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/16/2017

CHAIN OF CUSTODY RECORD
R10 PDX Combined/OR
Contact Name: Steve Hall
Contact Phone:

No: PDX-95
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110070	AS24a	Asbestos PCM	Air	MCE Cassette	11/15/2017	9.9696	10.068	2705.08	Liters	7:13:00 AM	11:43:00 AM	270	10.0188	L/min
	17110071	AS26a	Asbestos PCM	Air	MCE Cassette	11/15/2017	10.065	10.147	2678.09	Liters	7:23:00 AM	11:48:00 AM	265	10.106	L/min
	17110072	AS15a	Asbestos PCM	Air	MCE Cassette	11/15/2017	10.033	10.082	2604.89	Liters	7:35:00 AM	11:54:00 AM	259	10.0575	L/min
	17110073	Blank1	Asbestos PCM	Blank	MCE Cassette	11/15/2017	0		0	Liters	7:06:00 AM		-426	0	L/min
	17110074	Blank2	Asbestos PCM	Blank	MCE Cassette	11/15/2017	0		0	Liters	7:07:00 AM		-426	0	L/min
	17110075	AS24b	Asbestos PCM	Air	MCE Cassette	11/15/2017	10.025	9.938	2126.06	Liters	11:45:00 AM	3:18:00 PM	213	9.9815	L/min
	17110076	AS26b	Asbestos PCM	Air	MCE Cassette	11/15/2017	10.018	9.9848	2130.3	Liters	11:50:00 AM	3:23:00 PM	213	10.0014	L/min
	17110077	AS15b	Asbestos PCM	Air	MCE Cassette	11/15/2017	10.079	10.073	2136.11	Liters	11:58:00 AM	3:30:00 PM	212	10.076	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	B [illegible] ETE START	11-15-17/1602			

ADVANTAGE Environmental INC.

Clean your world.

November 20, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/16/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/16/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/16/2017
DATE RECEIVED 11/17/2017
DATE ANALYZED 11/17/2017
DATE REPORTED 11/20/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110084	11171701	0.5	100	0.5/100
17110085	11171702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110078	11171703	Area	AS24a	7:08 AM	11:14 AM	9.9438	10.143
17110079	11171704	Area	AS26a	7:16 AM	11:21 AM	9.9034	10.194
17110080	11171705	Area	AS15a	7:42 AM	11:27 AM	9.9386	10.188
17110081	11171706	Area	AS24b	11:19 AM	3:21 PM	10.037	10.116
17110082	11171707	Area	AS26b	11:24 AM	3:29 PM	9.9443	9.9821
17110083	11171708	Area	AS15b	11:30 AM	3:35 PM	10.068	10.039

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110078	11171703	246	10.0434	2470.68	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A
17110079	11171704	245	10.0487	2461.93	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A
17110080	11171705	225	10.0633	2264.24	7	100	0.005	0.0650	8.280	0.0014	1.785	<0.0025	N/A
17110081	11171706	242	10.0765	2438.51	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A
17110082	11171707	245	9.9632	2440.98	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A
17110083	11171708	245	10.0535	2463.11	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/17/2017

CHAIN OF CUSTODY RECORD
R10 PDX Combined/OR
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-96
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110078	AS24a	Asbestos PCM	Air	MCE Cassette	11/16/2017	9.9438	10.143	2470.68	Liters	7:08:00 AM	11:14:00 AM	246	10.0434	L/min
	17110079	AS26a	Asbestos PCM	Air	MCE Cassette	11/16/2017	9.9034	10.194	2461.93	Liters	7:16:00 AM	11:21:00 AM	245	10.0487	L/min
	17110080	AS15a	Asbestos PCM	Air	MCE Cassette	11/16/2017	9.9386	10.188	2264.24	Liters	7:42:00 AM	11:27:00 AM	225	10.0633	L/min
	17110081	AS24b	Asbestos PCM	Air	MCE Cassette	11/16/2017	10.037	10.116	2438.51	Liters	11:19:00 AM	3:21:00 PM	242	10.0765	L/min
	17110082	AS26b	Asbestos PCM	Air	MCE Cassette	11/16/2017	9.9443	9.9821	2440.98	Liters	11:24:00 AM	3:29:00 PM	245	9.9632	L/min
	17110083	AS15b	Asbestos PCM	Air	MCE Cassette	11/16/2017	10.068	10.039	2463.11	Liters	11:30:00 AM	3:35:00 PM	245	10.0535	L/min
	17110084	Blank1	Asbestos PCM	Blank	MCE Cassette	11/16/2017	0		0	Liters	7:00:00 AM		-426	0	L/min
	17110085	Blank2	Asbestos PCM	Blank	MCE Cassette	11/16/2017	0		0	Liters	7:00:00 AM		-426	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	Brg — Circles ETE START	11/16/17 1558		11/17/17	

ADVANTAGE Environmental INC.

Clean your world.

November 21, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/17/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/17/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/17/2017
DATE RECEIVED 11/20/2017
DATE ANALYZED 11/20/2017
DATE REPORTED 11/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110092	11201701	1	100	1/100
17110093	11201702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110086	11201703	Area	AS24a	7:20 AM	10:53 AM	9.9917	10.075
17110087	11201704	Area	AS26a	7:27 AM	11:00 AM	9.9532	10.142
17110088	11201705	Area	AS15a	7:39 AM	11:06 AM	9.8874	10.001
17110089	11201706	Area	AS24b	10:57 AM	3:18 PM	10.062	9.98958
17110090	11201707	Area	AS26b	11:02 AM	3:23 PM	10.091	9.9642
17110091	11201708	Area	AS15b	11:09 AM	3:28 PM	9.9306	9.98243

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110086	11201703	213	10.0334	2137.10	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0027	N/A
17110087	11201704	213	10.0476	2140.14	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0027	N/A
17110088	11201705	207	9.9442	2058.45	8	100	0.0075	0.0725	9.236	0.0017	1.741	<0.0030	N/A
17110089	11201706	261	10.0258	2616.73	8	100	0.0075	0.0725	9.236	0.0014	1.741	<0.0024	N/A
17110090	11201707	261	10.0276	2617.20	7.5	100	0.0075	0.0675	8.599	0.0013	1.775	<0.0022	N/A
17110091	11201708	259	9.9565	2578.74	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/20/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-97
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110086	AS24a	Asbestos PCM	Air	MCE Cassette	11/17/2017	9.9917	10.075	2137.11	Liters	7:20:00 AM	10:53:00 AM	213	10.0334	L/min
	17110087	AS26a	Asbestos PCM	Air	MCE Cassette	11/17/2017	9.9532	10.142	2140.14	Liters	7:27:00 AM	11:00:00 AM	213	10.0476	L/min
	17110088	AS15a	Asbestos PCM	Air	MCE Cassette	11/17/2017	9.8874	10.001	2058.45	Liters	7:39:00 AM	11:06:00 AM	207	9.9442	L/min
	17110089	AS24b	Asbestos PCM	Air	MCE Cassette	11/17/2017	10.062	9.98958	2616.73	Liters	10:57:00 AM	3:18:00 PM	261	10.0258	L/min
	17110090	AS26b	Asbestos PCM	Air	MCE Cassette	11/17/2017	10.091	9.9642	2617.2	Liters	11:02:00 AM	3:23:00 PM	261	10.0276	L/min
	17110091	AS15b	Asbestos PCM	Air	MCE Cassette	11/17/2017	9.9306	9.98243	2578.73	Liters	11:09:00 AM	3:28:00 PM	259	9.9565	L/min
	17110092	Blank1	Asbestos PCM	Blank	MCE Cassette	11/17/2017	0		0	Liters	7:00:00 AM		-426	0	L/min
	17110093	Blank2	Asbestos PCM	Blank	MCE Cassette	11/17/2017	0		0	Liters	7:00:00 AM		-426	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
samples	[signature] STAP	9:53 11/20/17	[signature]	11/20/17	

ADVANTAGE Environmental INC.

Clean your world.

November 22, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/20/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/20/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/20/2017
DATE RECEIVED 11/21/2017
DATE ANALYZED 11/21/2017
DATE REPORTED 11/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110100	11211701	0.5	100	0.5/100
17110101	11211702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Vinson White

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110094	11211703	Area	AS24a	7:22 AM	12:39 PM	9.9725	10.083
17110095	11211704	Area	AS26a	7:35 AM	12:54 PM	10.039	10.307
17110096	11211705	Area	AS15a	7:59 AM	1:07 PM	10.051	10.373
17110097	11211706	Area	AS24b	12:40 PM	3:45 PM	10.130	10.04
17110098	11211707	Area	AS26b	12:56 PM	3:58 PM	10.288	10.262
17110099	11211708	Area	AS15b	1:10 PM	4:07 PM	9.9306	9.98243

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110094	11211703	317	10.0278	3178.80	7.5	100	0.0075	0.0675	8.599	0.0010	1.775	<0.0018	N/A
17110095	11211704	319	10.1730	3245.19	8	100	0.0075	0.0725	9.236	0.0011	1.741	<0.0019	N/A
17110096	11211705	308	10.2120	3145.30	7.5	100	0.0075	0.0675	8.599	0.0011	1.775	<0.0019	N/A
17110097	11211706	185	10.0850	1865.73	7.5	100	0.0075	0.0675	8.599	0.0018	1.775	<0.0031	N/A
17110098	11211707	182	10.2750	1870.05	8	100	0.0075	0.0725	9.236	0.0019	1.741	<0.0033	N/A
17110099	11211708	177	9.9565	1762.30	7.5	100	0.0075	0.0675	8.599	0.0019	1.775	<0.0033	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/20/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-98
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110094	AS24a	Asbestos PCM	Blank	MCE Cassette	11/20/2017	9.9725	10.083	3178.81	Liters	7:22:00 AM	12:39:00 PM	317	10.0278	L/min
	17110095	AS26a	Asbestos PCM	Blank	MCE Cassette	11/20/2017	10.039	10.307	3245.19	Liters	7:35:00 AM	12:54:00 PM	319	10.173	L/min
	17110096	AS15a	Asbestos PCM	Blank	MCE Cassette	11/20/2017	10.051	10.373	3145.3	Liters	7:59:00 AM	1:07:00 PM	308	10.212	L/min
	17110097	AS24b	Asbestos PCM	Blank	MCE Cassette	11/20/2017	10.13	10.04	1865.73	Liters	12:40:00 PM	3:45:00 PM	185	10.085	L/min
	17110098	AS26b	Asbestos PCM	Blank	MCE Cassette	11/20/2017	10.288	10.262	1870.05	Liters	12:56:00 PM	3:58:00 PM	182	10.275	L/min
	17110099	AS15b	Asbestos PCM	Blank	MCE Cassette	11/20/2017	10.177	10.109	1795.31	Liters	1:10:00 PM	4:07:00 PM	177	10.143	L/min
	17110100	Blank1	Asbestos PCM	Blank	MCE Cassette	11/20/2017	0		0	Liters	7:00:00 AM		-426	0	L/min
	17110101	Blank2	Asbestos PCM	Blank	MCE Cassette	11/20/2017	0		0	Liters	7:00:00 AM		-426	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	[signature] /START	11/20/17 16:45	[signature]	11/21/17	

ADVANTAGE Environmental INC.

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November 28, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/21/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/21/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/21/2017
DATE RECEIVED 11/22/2017
DATE ANALYZED 11/22/2017
DATE REPORTED 11/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110102	11221701	0.5	100	0.5/100
17110106	11221702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110103	11221703	Area	AS24a	7:41 AM	11:41 AM	9.8849	9.7241
17110104	11221704	Area	AS26a	7:59 AM	11:55 AM	10.383	10.242
17110105	11221705	Area	AS15a	8:18 AM	12:24 PM	10.047	10.011
17110107	11221706	Area	AS24b	11:44 AM	3:56 PM	9.594	9.52
17110108	11221707	Area	AS26b	11:57 AM	4:06 PM	10.289	10.214
17110109	11221708	Area	AS15b	12:26 PM	4:20 PM	10.989	10.773

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110103	11221703	240	9.8045	2353.08	9	100	0.005	0.0850	10.828	0.0018	1.705	<0.0030	N/A
17110104	11221704	236	10.3125	2433.75	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A
17110105	11221705	246	10.0290	2467.13	7.5	100	0.005	0.0700	8.917	0.0014	1.775	<0.0025	N/A
17110107	11221706	252	9.5585	2408.74	8	100	0.005	0.0750	9.554	0.0015	1.741	<0.0027	N/A
17110108	11221707	249	10.2515	2552.62	9.5	100	0.005	0.0900	11.465	0.0017	1.690	<0.0029	N/A
17110109	11221708	234	10.8810	2546.15	6	100	0.005	0.0550	7.006	0.0011	1.839	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/21/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-99
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110102	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/21/2017	0	0	0	Liters *	7:25:00 AM	12:25:00 PM	300	0	L/min
	17110103	AS24a	Asbestos PCM	Air	MCE Cassette	11/21/2017	9.8849	9.7241	2353.08	Liters	7:41:00 AM	11:41:00 AM	240	9.8045	L/min
	17110104	AS26a	Asbestos PCM	Air	MCE Cassette	11/21/2017	10.383	10.242	2433.75	Liters	7:59:00 AM	11:55:00 AM	236	10.3125	L/min
	17110105	AS15a	Asbestos PCM	Air	MCE Cassette	11/21/2017	10.047	10.011	2467.13	Liters	8:18:00 AM	12:24:00 PM	246	10.029	L/min
	17110106	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/21/2017	0	0	0	Liters	10:46:00 AM	4:46:00 PM	360	0	L/min
	17110107	AS24b	Asbestos PCM	Air	MCE Cassette	11/21/2017	9.5936	9.5234	2408.74	Liters	11:44:00 AM	3:56:00 PM	252	9.5585	L/min
	17110108	AS26b	Asbestos PCM	Air	MCE Cassette	11/21/2017	10.289	10.214	2552.62	Liters	11:57:00 AM	4:06:00 PM	249	10.2515	L/min
	17110109	AS15b	Asbestos PCM	Air	MCE Cassette	11/21/2017	10.989	10.773	2546.15	Liters	12:26:00 PM	4:20:00 PM	234	10.881	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL - hold drop right under custody seal.	Ryan Whitehead START - R10	11/21/2017 16:58	Ryan Whitehead START R-10	11/22/2017 0636	As left last night/seal intact.
ALL TO Analysis	Ryan Whitehead START - R10	11/22/2017 0636	Jinsoo Whitlo	11/22/17	

ADVANTAGE Environmental INC.

Clean your world.

November 28, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/22/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/22/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/22/2017
DATE RECEIVED 11/27/2017
DATE ANALYZED 11/27/2017
DATE REPORTED 11/27/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110110	11271701	0.5	100	0.5/100
17110114	11271702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110111	11271703	Area	AS24a	7:24 AM	11:24 AM	9.8364	9.7607
17110112	11271704	Area	AS26a	7:39 AM	11:42 AM	10.256	10.206
17110113	11271705	Area	AS15a	8:08 AM	12:08 PM	9.9107	9.9676

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110111	11271703	240	9.7986	2351.65	7.5	100	0.005	0.0700	8.917	0.0015	1.775	<0.0026	N/A
17110112	11271704	243	10.231	2486.13	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A
17110113	11271705	240	9.9392	2385.40	9.5	100	0.005	0.0900	11.465	0.0019	1.690	<0.0031	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/22/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-100
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110110	Blank 1	Asbestos PCM	Blank	MCE Cassette	11/22/2017	0	0	0	Liters	6:55:00 AM	12:25:00 PM	330	0	L/min
	17110111	AS24a	Asbestos PCM	Air	MCE Cassette	11/22/2017	9.8364	9.7607	2351.66	Liters	7:24:00 AM	11:24:00 AM	240	9.7986	L/min
	17110112	AS26a	Asbestos PCM	Air	MCE Cassette	11/22/2017	10.256	10.206	2486.13	Liters	7:39:00 AM	11:42:00 AM	243	10.231	L/min
	17110113	AS15a	Asbestos PCM	Air	MCE Cassette	11/22/2017	9.9107	9.9676	2385.41	Liters	8:08:00 AM	12:08:00 PM	240	9.9392	L/min
	17110114	Blank 2	Asbestos PCM	Blank	MCE Cassette	11/27/2017	0	0		Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ASI to Lab	Meven Fulton / START	11-27-2017 0700	Sidney Carter AET	11/27/17 10Am	Good

ADVANTAGE Environmental INC.

Clean your world.

November 29, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/27/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/27/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/27/2017
DATE RECEIVED 11/28/2017
DATE ANALYZED 11/28/2017
DATE REPORTED 11/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110118	11281701	1	100	1/100
17110122	11281702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110115	11281703	Area	AS24a	7:48 AM	11:47 AM	10	10.077
17110116	11281704	Area	AS26a	8:13 AM	11:54 AM	9.999	10.208
17110117	11281705	Area	AS15a	8:32 AM	12:06 PM	9.924	10.146
17110119	11281706	Area	AS24b	11:48 AM	3:55 PM	9.973	9.99
17110120	11281707	Area	AS26b	11:55 AM	4:07 PM	10.106	10.125
17110121	11281708	Area	AS15b	12:08 PM	4:15 PM	10.085	10.114

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110115	11281703	239	10.0385	2399.20	7	100	0.0075	0.0625	7.962	0.0013	1.785	<0.0023	N/A
17110116	11281704	221	10.104	2232.87	8	100	0.0075	0.0725	9.236	0.0016	1.741	<0.0028	N/A
17110117	11281705	214	10.0350	2147.49	7	100	0.0075	0.0625	7.962	0.0014	1.785	<0.0025	N/A
17110119	11281706	247	9.9820	2465.55	10	100	0.0075	0.0925	11.783	0.0018	1.670	<0.0031	N/A
17110120	11281707	252	10.1155	2549.11	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
17110121	11281708	247	10.0995	2494.58	9	100	0.0075	0.0825	10.510	0.0016	1.705	<0.0028	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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USEPA
DateShipped: 11/27/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-101
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110115	AS24a	Asbestos PCM	Air	MCE Cassette	11/27/2017	10	10.077	2399.2	Liters	7:48:00 AM	11:47:00 AM	239	10.0385	L/min
	17110116	AS26a	Asbestos PCM	Air	MCE Cassette	11/27/2017	9.999	10.208	2232.87	Liters	8:13:00 AM	11:54:00 AM	221	10.1035	L/min
	17110117	AS15a	Asbestos PCM	Air	MCE Cassette	11/27/2017	9.924	10.146	2147.49	Liters	8:32:00 AM	12:06:00 PM	214	10.035	L/min
	17110118	Blank1	Asbestos PCM	Blank	MCE Cassette	11/27/2017	0			Liters					L/min
	17110119	AS24b	Asbestos PCM	Air	MCE Cassette	11/27/2017	9.973	9.991	2465.55	Liters	11:48:00 AM	3:55:00 PM	247	9.982	L/min
	17110120	AS26b	Asbestos PCM	Air	MCE Cassette	11/27/2017	10.106	10.125	2549.11	Liters	11:55:00 AM	4:07:00 PM	252	10.1155	L/min
	17110121	AS15b	Asbestos PCM	Air	MCE Cassette	11/27/2017	10.085	10.114	2494.58	Liters	12:08:00 PM	4:15:00 PM	247	10.0995	L/min
	17110122	Blank2	Asbestos PCM	Blank	MCE Cassette	11/27/2017	0			Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Portland	Melissa Fulton START	10:57 11/27/17	Sidney Carter AFI	11/28/17 8:20	Good

ADVANTAGE Environmental INC.

Clean your world.

November 30, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/28/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/28/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/28/2017
DATE RECEIVED 11/29/2017
DATE ANALYZED 11/29/2017
DATE REPORTED 11/30/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110126	11291701	0.5	100	0.5/100
17110130	11291702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110123	11291703	Area	AS24a	7:12 AM	12:20 PM	9.943	9.926
17110124	11291704	Area	AS26a	7:23 AM	12:40 PM	10.003	10.074
17110125	11291705	Area	AS15a	7:38 AM	12:31 PM	9.994	10.148
17110127	11291706	Area	AS24b	12:23 PM	4:04 PM	10.012	9.99
17110128	11291707	Area	AS26b	12:42 PM	4:17 PM	9.961	10.105
17110129	11291708	Area	AS15b	12:34 PM	4:25 PM	10.099	9.999

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110123	11291703	308	9.9345	3059.83	8	100	0.005	0.0750	9.554	0.0012	1.741	<0.0021	N/A
17110124	11291704	317	10.039	3182.2	9	100	0.005	0.0850	10.828	0.0013	1.705	<0.0022	N/A
17110125	11291705	293	10.0710	2950.8	12	100	0.005	0.1150	14.650	0.0019	1.620	<0.0031	N/A
17110127	11291706	221	10.0005	2210.11	6.5	100	0.005	0.0600	7.643	0.0013	1.810	<0.0024	N/A
17110128	11291707	215	10.0330	2157.1	11	100	0.005	0.1050	13.376	0.0024	1.655	<0.0040	N/A
17110129	11291708	231	10.0490	2321.32	9	100	0.005	0.0850	10.828	0.0018	1.705	<0.0031	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 11/28/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-102
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110123	AS24a	Asbestos PCM	Air	MCE Cassette	11/28/2017	9.943	9.926	3059.83	Liters	7:12:00 AM	12:20:00 PM	308	9.9345	L/min
	17110124	AS26a	Asbestos PCM	Air	MCE Cassette	11/28/2017	10.003	10.074	3182.2	Liters	7:23:00 AM	12:40:00 PM	317	10.0385	L/min
	17110125	AS15a	Asbestos PCM	Air	MCE Cassette	11/28/2017	9.994	10.148	2950.8	Liters	7:38:00 AM	12:31:00 PM	293	10.071	L/min
	17110126	Blank 1	Asbestos PCM	Air	MCE Cassette	11/28/2017				Liters					L/min
	17110127	AS24b	Asbestos PCM	Air	MCE Cassette	11/28/2017	10.012	9.989	2210.11	Liters	12:23:00 PM	4:04:00 PM	221	10.0005	L/min
	17110128	AS26b	Asbestos PCM	Air	MCE Cassette	11/28/2017	9.961	10.105	2157.1	Liters	12:42:00 PM	4:17:00 PM	215	10.033	L/min
	17110129	AS15b	Asbestos PCM	Air	MCE Cassette	11/28/2017	10.099	9.999	2321.32	Liters	12:34:00 PM	4:25:00 PM	231	10.049	L/min
	17110130	Blank 2	Asbestos PCM	Air	MCE Cassette	11/28/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, slynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Meven Fulton START	16:43 11/28/17	Sidney Cook	11/29/17 6:40	Good

ADVANTAGE Environmental INC.

Clean your world.

January 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/17/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/17/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/17/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-143
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010062	AS24	Asbestos PCM	Air	MCE Cassette	1/16/2018	10.074	9.854	2889.56	Liters	7:59:00 AM	12:49:00 PM	290	9.964	L/min
	18010063	AS26	Asbestos PCM	Air	MCE Cassette	1/16/2018	9.933	9.915	3016.9	Liters	8:13:00 AM	1:17:00 PM	304	9.924	L/min
	18010064	AS15	Asbestos PCM	Air	MCE Cassette	1/16/2018	10.011	9.916	2829.63	Liters	8:22:00 AM	1:06:00 PM	284	9.9635	L/min
	18010065	Blank 1	Asbestos PCM	Air	MCE Cassette	1/16/2018				Liters					L/min
	18010066	Blank 2	Asbestos PCM	Air	MCE Cassette	1/16/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/1 Lab	[signature] START	1/16/18 15:10	Sichuan Carter AEI	1/17/18 650	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/16/2018
DATE RECEIVED 1/17/2018
DATE ANALYZED 1/17/2018
DATE REPORTED 1/18/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010065	1171801	0	100	0/100
18010066	1171802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010062	1171803	Area	AS24	7:59 AM	12:49 PM	10.074	9.854
18010063	1171804	Area	AS26	8:13 AM	1:17 PM	9.933	9.915
18010064	1171805	Area	AS15	8:22 AM	1:06 PM	10.011	9.916

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010062	1171803	290	9.9640	2889.56	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0019	N/A
18010063	1171804	304	9.924	3016.9	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0017	N/A
18010064	1171805	284	9.9635	2829.63	7.5	100	0.0025	0.0725	9.236	0.0013	1.775	<0.0022	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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ADVANTAGE Environmental INC.

Clean your world.

January 18, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/16/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

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Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/16/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/16/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-142
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010057	AS24	Asbestos PCM	Air	MCE Cassette	1/15/2018	10.014	9.92	2770.83	Liters	8:13:00 AM	12:51:00 PM	278	9.967	L/min
	18010058	AS26	Asbestos PCM	Air	MCE Cassette	1/15/2018	9.981	10.021	2740.27	Liters	8:37:00 AM	1:11:00 PM	274	10.001	L/min
	18010059	AS15	Asbestos PCM	Air	MCE Cassette	1/15/2018	10.055	10.087	2719.17	Liters	8:31:00 AM	1:01:00 PM	270	10.071	L/min
	18010060	Blank 1	Asbestos PCM	Air	MCE Cassette	1/15/2018				Liters					L/min
	18010061	Blank 2	Asbestos PCM	Air	MCE Cassette	1/15/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	Marie Fulton START	1/15/18 14:43	AGT	1/16/18 1:20	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START) | **ADVANTAGE PROJECT #** 17-225a | **DATE COLLECTED** 1/15/2018
ATTENTION Erin Lynch | **CLIENT PROJECT #** 10QD | **DATE RECEIVED** 1/16/2018
CONTRACTOR Ecology and Environmental, Inc. (START) | **REPORT #** 1 | **DATE ANALYZED** 1/16/2018
PROJECT River Street Water Front Portland, OR | **PAGE** 1 **OF** 1 | **DATE REPORTED** 1/17/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010060	1161801	1	100	1/100
18010061	1161802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010057	1161803	Area	AS24	8:13 AM	12:51 PM	10.014	9.92
18010058	1161804	Area	AS26	8:37 AM	1:11 PM	9.981	10.021
18010059	1161805	Area	AS15	8:31 AM	1:01 PM	10.055	10.087

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010057	1161803	278	9.9670	2770.83	9	100	0.005	0.0850	10.828	0.0015	1.705	<0.0026	N/A
18010058	1161804	274	10.001	2740.27	6	100	0.005	0.0550	7.006	< LOD	1.839	<1.8390	N/A
18010059	1161805	270	10.0710	2719.17	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0022	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 17, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/15/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/15/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA

DateShipped: 1/12/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-140

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010047	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/12/2018	0	0	0	Liters	7:15:00 AM	3:15:00 PM	480	0	L/min
	18010048	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/12/2018	0	0	0	Liters	7:20:00 AM	3:20:00 PM	480	0	L/min
	18010049	AS24	Asbestos PCM	Air	MCE Cassette	1/12/2018	9.9449	9.9526	4287.93	Liters	7:30:00 AM	2:41:00 PM	431	9.9488	L/min
	18010050	AS26	Asbestos PCM	Air	MCE Cassette	1/12/2018	10.174	10.153	4400.8	Liters	7:41:00 AM	2:54:00 PM	433	10.1635	L/min
	18010051	AS15	Asbestos PCM	Air	MCE Cassette	1/12/2018	10.034	9.994	4235.92	Liters	8:08:00 AM	3:11:00 PM	423	10.014	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL/overnight storage, samples	Ryan Leibfritz/START	1/12/2018 17:04			
	START	13:19 1/13/2018	AET	1/13/18 12:20	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/12/2018
DATE RECEIVED 1/13/2018
DATE ANALYZED 1/13/2018
DATE REPORTED 1/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010047	1131801	0	100	0/100
18010048	1131802	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010049	1131803	Area	AS24	7:30 AM	2:41 PM	9.9449	9.9526
18010050	1131804	Area	AS26	7:41 AM	2:54 PM	10.174	10.153
18010051	1131805	Area	AS15	8:08 AM	3:11 PM	10.034	9.994

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010049	1131803	431	9.9488	4287.93	6	100	0.005	0.0550	7.006	0.0006	1.839	<0.0012	N/A
18010050	1131804	433	10.1635	4400.8	8	100	0.005	0.0750	9.554	0.0008	1.741	<0.0015	N/A
18010051	1131805	423	10.014	4235.92	6.5	100	0.005	0.0600	7.643	0.0007	1.810	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 16, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/12/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/12/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/12/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-139
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010042	AS26	Asbestos PCM	Air	MCE Cassette	1/11/2018	10.012	9.9755	2928.18	Liters	8:34:00 AM	1:27:00 PM	293	9.9938	L/min
	18010043	AS15	Asbestos PCM	Air	MCE Cassette	1/11/2018	9.9644	10.021	2767.98	Liters	9:17:00 AM	1:54:00 PM	277	9.9927	L/min
	18010044	AS24	Asbestos PCM	Air	MCE Cassette	1/11/2018	9.9199	9.8883	2634.49	Liters	8:52:00 AM	1:18:00 PM	266	9.9041	L/min
	18010045	Blank 1	Asbestos PCM	Air	MCE Cassette	1/11/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18010046	Blank 2	Asbestos PCM	Air	MCE Cassette	1/11/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight	START	15:24 PM 14:31 1/11/18	ACE	1/12/18 12:00	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START) | **ADVANTAGE PROJECT #** 17-225a | **DATE COLLECTED** 1/11/2018
ATTENTION Erin Lynch | **CLIENT PROJECT #** 10QD | **DATE RECEIVED** 1/12/2018
CONTRACTOR Ecology and Environmental, Inc. (START) | **REPORT #** 1 | **DATE ANALYZED** 1/12/2018
PROJECT River Street Water Front Portland, OR | **PAGE** 1 **OF** 1 | **DATE REPORTED** 1/15/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010045	1121801	0.5	100	0.5/100
18010046	1121802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010042	1121803	Area	AS26	8:34 AM	1:27 PM	10.012	9.9755
18010043	1121804	Area	AS15	9:17 AM	1:54 PM	9.9644	10.021
18010044	1121805	Area	AS24	8:52 AM	1:18 PM	9.9199	9.8883

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010042	1121803	293	9.9938	2928.18	6	100	0.0025	0.0575	7.325	0.0010	1.839	<0.0018	N/A
18010043	1121804	277	9.9927	2767.98	5.5	100	0.0025	0.0525	6.688	< LOD	1.871	<1.8705	N/A
18010044	1121805	266	9.9041	2634.49	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 15, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/11/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/11/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/11/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-138
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010037	AS26	Asbestos PCM	Air	MCE Cassette	1/10/2018	9.918	10.1	2682.41	Liters	9:19:00 AM	1:47:00 PM	268	10.009	L/min
	18010038	AS15	Asbestos PCM	Air	MCE Cassette	1/10/2018	9.9468	10.138	2791.79	Liters	8:34:00 AM	1:12:00 PM	278	10.0424	L/min
	18010039	AS24	Asbestos PCM	Air	MCE Cassette	1/10/2018	10.006	10.168	2562.1	Liters	9:09:00 AM	1:23:00 PM	254	10.087	L/min
	18010040	Blank 2	Asbestos PCM	Air	MCE Cassette	1/10/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18010041	Blank 1	Asbestos PCM	Air	MCE Cassette	1/10/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight	START	14:41 1/10/18	Sidney Cutri MEI	1/11/18 720	Cool
samples	START	1120 1/11/18			

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/10/2018
DATE RECEIVED 1/11/2018
DATE ANALYZED 1/11/2018
DATE REPORTED 1/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010040	1111801	0	100	0/100
18010041	1111802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010037	1111803	Area	AS26	9:19 AM	1:47 PM	9.918	10.1
18010038	1111804	Area	AS15	8:34 AM	1:12 PM	9.9468	10.138
18010039	1111805	Area	AS24	9:09 AM	1:23 PM	10.006	10.168

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010037	1111803	268	10.009	2682.41	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0021	N/A
18010038	1111804	278	10.0424	2791.79	7	100	0.0025	0.0675	8.599	0.0012	1.785	<0.0021	N/A
18010039	1111805	254	10.087	2562.10	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/10/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/10/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/10/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-137
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010032	Blank 1	Asbestos PCM	Air	MCE Cassette	1/9/2018				Liters					L/min
	18010033	Blank 2	Asbestos PCM	Air	MCE Cassette	1/9/2018				Liters					L/min
	18010034	AS24	Asbestos PCM	Air	MCE Cassette	1/9/2018	9.992	9.731	2780.94	Liters	8:23:00 AM	1:05:00 PM	282	9.8615	L/min
	18010035	AS26	Asbestos PCM	Air	MCE Cassette	1/9/2018	9.95	9.988	2851.13	Liters	8:32:00 AM	1:18:00 PM	286	9.969	L/min
	18010036	AS15	Asbestos PCM	Air	MCE Cassette	1/9/2018	9.989	10.001	2938.53	Liters	8:48:00 AM	1:42:00 PM	294	9.995	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight	START	16:09 1/9/18	Sidney Carter HEP 1/10/18 715		Good
Samples	START	06:52 1/10/18			

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START) | **ADVANTAGE PROJECT #** 17-225a | **DATE COLLECTED** 1/9/2018
ATTENTION Erin Lynch | **CLIENT PROJECT #** 10QD | **DATE RECEIVED** 1/10/2018
CONTRACTOR Ecology and Environmental, Inc. (START) | **REPORT #** 1 | **DATE ANALYZED** 1/10/2018
PROJECT River Street Water Front Portland, OR | **PAGE** 1 **OF** 1 | **DATE REPORTED** 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010029	1101801	0.5	100	0.5/100
18010030	1101802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010026	1101803	Area	AS24	8:05 AM	12:48 PM	10.075	10.015
18010027	1101804	Area	AS26	7:49 AM	1:00 PM	9.975	9.972
18010028	1101805	Area	AS15	8:35 AM	1:15 PM	9.934	10.065

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010026	1101803	283	10.045	2842.74	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0019	N/A
18010027	1101804	311	9.9735	3101.76	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0018	N/A
18010028	1101805	280	9.9995	2799.86	6	100	0.005	0.0550	7.006	0.0010	1.839	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 11, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/09/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/09/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/9/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-136
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010026	AS24	Asbestos PCM	Air	MCE Cassette	1/8/2018	10.075	10.015	2842.74	Liters	8:05:00 AM	12:48:00 PM	283	10.045	L/min
	18010027	AS26	Asbestos PCM	Air	MCE Cassette	1/8/2018	9.975	9.972	3101.76	Liters	7:49:00 AM	1:00:00 PM	311	9.9735	L/min
	18010028	AS15	Asbestos PCM	Air	MCE Cassette	1/8/2018	9.934	10.065	2799.86	Liters	8:35:00 AM	1:15:00 PM	280	9.9995	L/min
	18010029	Blank 1	Asbestos PCM	Air	MCE Cassette	1/8/2018				Liters					L/min
	18010030	Blank 2	Asbestos PCM	Air	MCE Cassette	1/8/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples Overnight		14:53 1/8/18			
Samples		09:53 1/9/18	A&E	1/9/18 12:12	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/8/2018
DATE RECEIVED 1/9/2018
DATE ANALYZED 1/9/2018
DATE REPORTED 1/11/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010029	1091801	0.5	100	0.5/100
18010030	1091802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010026	1091803	Area	AS24	8:05 AM	12:48 PM	10.075	10.015
18010027	1091804	Area	AS26	7:49 AM	1:00 PM	9.975	9.972
18010028	1091805	Area	AS15	8:35 AM	1:15 PM	9.934	10.065

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010026	1091803	283	10.045	2842.74	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0019	N/A
18010027	1091804	311	9.9735	3101.76	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0018	N/A
18010028	1091805	280	9.9995	2799.86	6	100	0.005	0.0550	7.006	0.0010	1.839	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 11, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/08/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/08/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped:

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone:

No: PDX-131
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010016	AS24	Asbestos PCM	Air	MCE Cassette	1/5/2018	10.092	9.9735	3270.69	Liters	7:55:00 AM	1:21:00 PM	326	10.0328	L/min
	18010017	AS26	Asbestos PCM	Air	MCE Cassette	1/5/2018	10.078	10.148	3286.73	Liters	8:02:00 AM	1:27:00 PM	325	10.113	L/min
	18010018	AS15	Asbestos PCM	Air	MCE Cassette	1/5/2018	10.032	10.147	3188.28	Liters	8:18:00 AM	1:34:00 PM	316	10.0895	L/min
	18010019	Blank 1	Asbestos PCM	Air	MCE Cassette	1/5/2018				Liters					L/min
	18010020	Blank 2	Asbestos PCM	Air	MCE Cassette	1/5/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	(START E&E)	1/5/18 1350	AEI	1/6/18 12:24	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START) | **ADVANTAGE PROJECT #** 17-225a | **DATE COLLECTED** 1/5/2018
ATTENTION Erin Lynch | **CLIENT PROJECT #** 10QD | **DATE RECEIVED** 1/6/2018
CONTRACTOR Ecology and Environmental, Inc. (START) | **REPORT #** 1 | **DATE ANALYZED** 1/6/2018
PROJECT River Street Water Front Portland, OR | **PAGE** 1 **OF** 1 | **DATE REPORTED** 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010019	1061801	0	100	0/100
18010020	1061802	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010016	1061803	Area	AS24	7:55 AM	1:21 PM	10.092	9.9735
18010017	1061804	Area	AS26	8:02 AM	1:27 PM	10.078	10.148
18010018	1061805	Area	AS15	8:18 AM	1:34 PM	12:46 AM	10.147

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010016	1061803	326	10.0328	3270.68	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0016	N/A
18010017	1061804	325	10.113	3286.73	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0017	N/A
18010018	1061805	316	10.0895	3188.28	7.5	100	0.005	0.0700	8.917	0.0011	1.775	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

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January 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/05/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/05/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA

DateShipped: 1/4/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-130

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010011	AS24	Asbestos PCM	Air	MCE Cassette	1/4/2018	10.02	10.073	3305.3	Liters	7:50:00 AM	1:19:00 PM	329	10.0465	L/min
	18010012	AS26	Asbestos PCM	Air	MCE Cassette	1/4/2018	10.014	10.183	3292.11	Liters	8:00:00 AM	1:26:00 PM	326	10.0985	L/min
	18010013	AS15	Asbestos PCM	Air	MCE Cassette	1/4/2018	10.016	10.234	3240	Liters	8:13:00 AM	1:33:00 PM	320	10.125	L/min
	18010014	Blank1	Asbestos PCM	Air	MCE Cassette	1/4/2018									
	18010015	Blank 2	Asbestos PCM	Air	MCE Cassette	1/4/2018									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	(E+E START)	1/4/18 1347	AET	2:00 1/5/18	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/4/2018
DATE RECEIVED 1/5/2018
DATE ANALYZED 1/5/2018
DATE REPORTED 1/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010014	1051801	0.5	100	0.5/100
18010015	1051802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010011	1051803	Area	AS24	7:50 AM	1:19 PM	10.02	10.073
18010012	1051804	Area	AS26	8:00 AM	1:26 PM	10.014	10.183
18010013	1051805	Area	AS15	8:13 AM	1:33 PM	12:23 AM	10.234

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010011	1051803	329	10.0465	3305.3	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0016	N/A
18010012	1051804	326	10.0985	3292.11	7.5	100	0.0025	0.0725	9.236	0.0011	1.775	<0.0019	N/A
18010013	1051805	320	10.125	3240	9	100	0.0025	0.0875	11.146	0.0013	1.705	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/04/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/04/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/3/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-129
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010009	Blank 1	Asbestos PCM	Air	MCE Cassette	1/3/2018				Liters					L/min
	18010010	Blank 2	Asbestos PCM	Air	MCE Cassette	1/3/2018				Liters					L/min
	18010006	AS24	Asbestos PCM	Air	MCE Cassette	1/3/2018	10.036	10.003	3266.36	Liters	7:54:00 AM	1:20:00 PM	326	10.0195	L/min
	18010007	AS26	Asbestos PCM	Air	MCE Cassette	1/3/2018	10.017	10.18	3251.72	Liters	8:03:00 AM	1:25:00 PM	322	10.0985	L/min
	18010008	AS15	Asbestos PCM	Air	MCE Cassette	1/3/2018	10.093	10.358	3221.03	Liters	8:19:00 AM	1:34:00 PM	315	10.2255	L/min

Special Instructions: Please proces air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	(START E+E)	1/3/18 1354	Sidney Carter AEI	1/4/18 710	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/3/2018
DATE RECEIVED 1/4/2018
DATE ANALYZED 1/4/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010009	1041801	0	100	0/100
18010010	1041802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010006	1041803	Area	AS24	7:54 AM	1:20 PM	10.036	10.003
18010007	1041804	Area	AS26	8:03 AM	1:25 PM	10.017	10.18
18010008	1041805	Area	AS15	8:19 AM	1:34 PM	10.093	10.358

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010006	1041803	326	10.0195	3266.36	11	100	0.0025	0.1075	13.694	0.0016	1.655	<0.0027	N/A
18010007	1041804	322	10.0985	3251.72	9	100	0.0025	0.0875	11.146	0.0013	1.705	<0.0023	N/A
18010008	1041805	315	10.2255	3221.03	12	100	0.0025	0.1175	14.968	0.0018	1.620	<0.0029	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/03/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/03/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/2/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-128
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010001	AS24	Asbestos PCM	Air	MCE Cassette	1/2/2018	10.065	10.441	3404	Liters	7:37:00 AM	1:09:00 PM	332	10.253	L/min
	18010002	AS26	Asbestos PCM	Air	MCE Cassette	1/2/2018	10.034	10.397	3360.9	Liters	7:47:00 AM	1:16:00 PM	329	10.2155	L/min
	18010003	AS15	Asbestos PCM	Air	MCE Cassette	1/2/2018	10.087	10.39	3317.27	Liters	7:59:00 AM	1:23:00 PM	324	10.2385	L/min
	18010004	Blank 1	Asbestos PCM	Air	MCE Cassette	1/2/2018				Liters					L/min
	18010005	Blank 2	Asbestos PCM	Air	MCE Cassette	1/2/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	E+E START	1/2/18 13:49	Sidney Carter HEI	1/3/18 6:50	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/2/2018
DATE RECEIVED 1/3/2018
DATE ANALYZED 1/3/2018
DATE REPORTED 1/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010004	1031801	0.5	100	0.5/100
18010005	1031802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010001	1031803	Area	AS24	7:37 AM	1:09 PM	10.065	10.441
18010002	1031804	Area	AS26	7:47 AM	1:16 PM	10.034	10.397
18010003	1031805	Area	AS15	7:59 AM	1:23 PM	10.087	10.39

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010001	1031803	332	10.253	3404	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0016	N/A
18010002	1031804	329	10.2155	3360.9	13	100	0.005	0.1250	15.924	0.0018	1.610	<0.0029	N/A
18010003	1031805	324	10.2385	3317.27	8	100	0.005	0.0750	9.554	0.0011	1.741	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

January 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 01/02/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 01/02/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/2/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-127
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120100	AS24	Asbestos PCM	Air	MCE Cassette	12/29/2017	9.9492	9.8123	3310.07	Liters	8:00:00 AM	1:35:00 PM	335	9.8808	L/min
	17120101	AS26	Asbestos PCM	Air	MCE Cassette	12/29/2017	9.8943	9.8216	2957.4	Liters	8:38:00 AM	1:38:00 PM	300	9.858	L/min
	17120102	AS15	Asbestos PCM	Air	MCE Cassette	12/29/2017	9.878	9.8699	2932.58	Liters	8:46:00 AM	1:43:00 PM	297	9.874	L/min
	17120103	Blank 1	Asbestos PCM	Air	MCE Cassette	12/29/2017				Liters					L/min
	17120104	Blank 2	Asbestos PCM	Air	MCE Cassette	12/29/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	EHE, START	12/29/17 1435	ACT	1/2/18 7:11	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/29/2017
DATE RECEIVED 1/2/2018
DATE ANALYZED 1/2/2018
DATE REPORTED 1/3/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120103	1021801	0.5	100	0.5/100
17120104	1021802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120100	1021803	Area	AS24	8:00 AM	1:35 PM	9.9492	9.8123
17120101	1021804	Area	AS26	8:38 AM	1:38 PM	9.8943	9.8216
17120102	1021805	Area	AS15	8:46 AM	1:43 PM	9.878	9.8699

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120100	1021803	335	9.88075	3310.05	8	100	0.005	0.0750	9.554	0.0011	1.741	<0.0019	N/A
17120101	1021804	300	9.85795	2957.39	15	100	0.005	0.1450	18.471	0.0024	1.575	<0.0038	N/A
17120102	1021805	297	9.87395	2932.56	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 3, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/29/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/29/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/29/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-126
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120095	AS24	Asbestos PCM	Air	MCE Cassette	12/28/2017	9.969	9.787	3170.84	Liters	8:23:00 AM	1:44:00 PM	321	9.878	L/min
	17120096	AS26	Asbestos PCM	Air	MCE Cassette	12/28/2017	10.01	10.082	3194.63	Liters	8:46:00 AM	2:04:00 PM	318	10.046	L/min
	17120097	AS15	Asbestos PCM	Air	MCE Cassette	12/28/2017	10.093	10.053	3223.36	Liters	8:35:00 AM	1:55:00 PM	320	10.073	L/min
	17120098	Blank 1	Asbestos PCM	Air	MCE Cassette	12/28/2017				Liters					L/min
	17120099	Blank 2	Asbestos PCM	Air	MCE Cassette	12/28/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	[signature] START	1500 12/28/17	[signature] AEI	12/29/17	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/28/2017
DATE RECEIVED 12/29/2017
DATE ANALYZED 12/29/2017
DATE REPORTED 1/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120098	12291701	0	100	0/100
17120099	12291702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120095	12291703	Area	AS24	8:23 AM	1:44 PM	9.969	9.787
17120096	12291704	Area	AS26	8:46 AM	2:04 PM	10.01	10.082
17120097	12291705	Area	AS15	8:35 AM	1:55 PM	10.093	10.053

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120095	12291703	321	9.878	3170.84	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0016	N/A
17120096	12291704	318	10.046	3194.63	11	100	0.0025	0.1075	13.694	0.0017	1.655	<0.0027	N/A
17120097	12291705	320	10.073	3223.36	7	100	0.0025	0.0675	8.599	0.0010	1.785	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 2, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/28/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/28/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/28/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-125
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120090	AS24	Asbestos PCM	Air	MCE Cassette	12/27/2017	10.091	9.975	3942.97	Liters	8:09:00 AM	2:42:00 PM	393	10.033	L/min
	17120091	AS26	Asbestos PCM	Air	MCE Cassette	12/27/2017	9.892	10.192	3564.91	Liters	8:55:00 AM	2:50:00 PM	355	10.042	L/min
	17120092	AS15	Asbestos PCM	Air	MCE Cassette	12/27/2017	9.97	10.134	3779.55	Liters	8:30:00 AM	2:46:00 PM	376	10.052	L/min
	17120093	Blank 1	Asbestos PCM	Air	MCE Cassette	12/27/2017				Liters					L/min
	17120094	Blank 2	Asbestos PCM	Air	MCE Cassette	12/27/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	[signature] / START	15:00 12/27/17	Sidney Carter AEI	12/27/17 1715	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/27/2018
DATE RECEIVED 12/28/2017
DATE ANALYZED 12/28/2017
DATE REPORTED 12/29/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120093	12281701	0	100	0/100
17120094	12281702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120090	12281703	Area	AS24	8:09 AM	2:42 PM	10.091	9.975
17120091	12281704	Area	AS26	8:55 AM	2:50 PM	9.892	10.192
17120092	12281705	Area	AS15	8:30 AM	2:46 PM	9.97	10.134

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120090	12281703	393	10.033	3942.97	8	100	0.005	0.0750	9.554	0.0009	1.741	<0.0016	N/A
17120091	12281704	355	10.042	3564.91	6.5	100	0.005	0.0600	7.643	0.0008	1.810	<0.0015	N/A
17120092	12281705	376	10.052	3779.55	7	100	0.005	0.0650	8.280	0.0008	1.785	<0.0015	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 29, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/27/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/27/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/27/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-124
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120085	AS24	Asbestos PCM	Air	MCE Cassette	12/26/2017	9.804	9.917	2721.5	Liters	8:25:00 AM	1:01:00 PM	276	9.8605	L/min
	17120086	AS26	Asbestos PCM	Air	MCE Cassette	12/26/2017	9.831	10.052	2753.8	Liters	8:31:00 AM	1:08:00 PM	277	9.9415	L/min
	17120087	AS15	Asbestos PCM	Air	MCE Cassette	12/26/2017	9.791	10.079	2602.97	Liters	8:50:00 AM	1:12:00 PM	262	9.935	L/min
	17120088	Blank 1	Asbestos PCM	Air	MCE Cassette	12/26/2017				Liters					L/min
	17120089	Blank 2	Asbestos PCM	Air	MCE Cassette	12/26/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/to lab	Mark Fulton/STARS	15:30 12/26/17	Sidney Carter AEI	12/27/17 7:10	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/26/2017
DATE RECEIVED 12/27/2017
DATE ANALYZED 12/27/2017
DATE REPORTED 12/28/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120088	12271701	0.5	100	0.5/100
17120089	12271702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120085	12271703	Area	AS24	8:25 AM	1:01 PM	9.804	9.917
17120086	12271704	Area	AS26	8:31 AM	1:08 PM	9.831	10.052
17120087	12271705	Area	AS15	8:50 AM	1:12 PM	9.791	10.079

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120085	12271703	276	9.8605	2721.50	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A
17120086	12271704	277	9.9415	2753.80	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
17120087	12271705	262	9.935	2602.97	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 28, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/26/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/26/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/26/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-123
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120080	AS24	Asbestos PCM	Air	MCE Cassette	12/22/2017	9.94	9.957	3004.45	Liters	8:08:00 AM	1:10:00 PM	302	9.9485	L/min
	17120081	AS26	Asbestos PCM	Air	MCE Cassette	12/22/2017	9.969	10.015	3147.48	Liters	8:15:00 AM	1:30:00 PM	315	9.992	L/min
	17120082	AS15	Asbestos PCM	Air	MCE Cassette	12/22/2017	9.952	10.134	2952.64	Liters	8:27:00 AM	1:21:00 PM	294	10.043	L/min
	17120083	Blank 1	Asbestos PCM	Air	MCE Cassette	12/22/2017				Liters					L/min
	17120084	Blank 2	Asbestos PCM	Air	MCE Cassette	12/22/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	START	12/22/17 15:30		12/26/17 9:45	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/22/2017
DATE RECEIVED 12/26/2017
DATE ANALYZED 12/26/2017
DATE REPORTED 12/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120083	12261701	0.5	100	0.5/100
17120084	12261702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120080	12261703	Area	AS24	8:08 AM	1:10 PM	9.94	9.957
17120081	12261704	Area	AS26	8:15 AM	1:30 PM	9.969	10.015
17120082	12261705	Area	AS15	8:27 AM	1:21 PM	9.952	10.134

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120080	12261703	302	9.9485	3004.45	7.5	100	0.0025	0.0725	9.236	0.0012	1.775	<0.0021	N/A
17120081	12261704	315	9.992	3147.48	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0016	N/A
17120082	12261705	294	10.043	2952.64	6	100	0.0025	0.0575	7.325	0.0010	1.839	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 26, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/22/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/22/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/22/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-122
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120075	AS24	Asbestos PCM	Air	MCE Cassette	12/21/2017	10.028	10.014	3347.01	Liters	8:05:00 AM	1:39:00 PM	334	10.021	L/min
	17120076	AS26	Asbestos PCM	Air	MCE Cassette	12/21/2017	10.017	10.153	3388.56	Liters	8:16:00 AM	1:52:00 PM	336	10.085	L/min
	17120077	AS15	Asbestos PCM	Air	MCE Cassette	12/21/2017	10.025	10.282	3208.51	Liters	8:29:00 AM	1:45:00 PM	316	10.1535	L/min
	17120078	Blank 1	Asbestos PCM	Air	MCE Cassette	12/21/2017				Liters					L/min
	17120079	Blank 2	Asbestos PCM	Air	MCE Cassette	12/21/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/to lab	Maren Fulton START	15:30/12/21/17			good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/21/2017
DATE RECEIVED 12/22/2017
DATE ANALYZED 12/22/2017
DATE REPORTED 12/26/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120078	12221701	0	100	0/100
17120079	12221702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120075	12221703	Area	AS24	8:05 AM	1:39 PM	10.028	10.014
17120076	12221704	Area	AS26	8:16 AM	1:52 PM	10.017	10.153
17120077	12221705	Area	AS15	8:29 AM	1:45 PM	10.025	10.282

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120075	12221703	334	10.021	3347.01	7	100	0.0025	0.0675	8.599	0.0010	1.785	<0.0018	N/A
17120076	12221704	336	10.085	3388.56	10	100	0.0025	0.0975	12.420	0.0014	1.670	<0.0024	N/A
17120077	12221705	316	10.1535	3208.51	8	100	0.0025	0.0775	9.873	0.0012	1.741	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 26, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/21/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/21/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/21/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-121
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120070	AS24	Asbestos PCM	Air	MCE Cassette	12/20/2017	10.026	10.108	3312.04	Liters	8:15:00 AM	1:44:00 PM	329	10.067	L/min
	17120071	AS26	Asbestos PCM	Air	MCE Cassette	12/20/2017	10.025	10.061	3083.2	Liters	8:40:00 AM	1:47:00 PM	307	10.043	L/min
	17120072	AS15	Asbestos PCM	Air	MCE Cassette	12/20/2017	10.008	10.108	2997.28	Liters	8:28:00 AM	1:26:00 PM	298	10.058	L/min
	17120073	Blank 1	Asbestos PCM	Air	MCE Cassette	12/20/2017				Liters	8:00:00 AM				L/min
	17120074	Blank 2	Asbestos PCM	Air	MCE Cassette	12/20/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	Marian Fulton START	12/20/17 15:00	Sidney Carter AEI	12/21/17 705	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/20/2017
DATE RECEIVED 12/21/2017
DATE ANALYZED 12/21/2017
DATE REPORTED 12/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120073	12211701	0	100	0/100
17120074	12211702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120070	12211703	Area	AS24	8:15 AM	1:44 PM	0:37	10.108
17120071	12211704	Area	AS26	8:40 AM	1:47 PM	10.025	10.061
17120072	12211705	Area	AS15	8:28 AM	1:26 PM	10.008	10.108

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120070	12211703	329	10.067	3312.04	7	100	0.0025	0.0675	8.599	0.0010	1.785	<0.0018	N/A
17120071	12211704	307	10.043	3083.2	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0017	N/A
17120072	12211705	298	10.058	2997.28	7.5	100	0.0025	0.0725	9.236	0.0012	1.775	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 22, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/20/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

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Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/20/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-120
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120065	AS24	Asbestos PCM	Air	MCE Cassette	12/19/2017	10.043	9.904	3141.65	Liters	8:10:00 AM	1:25:00 PM	315	9.9735	L/min
	17120066	AS26	Asbestos PCM	Air	MCE Cassette	12/19/2017	10.031	9.866	3223.31	Liters	7:55:00 AM	1:19:00 PM	324	9.9485	L/min
	17120067	AS15	Asbestos PCM	Air	MCE Cassette	12/19/2017	9.926	9.959	3022.52	Liters	8:36:00 AM	1:40:00 PM	304	9.9425	L/min
	17120068	Blank 1	Asbestos PCM	Air	MCE Cassette	12/19/2017				Liters	8:00:00 AM				L/min
	17120069	Blank 2	Asbestos PCM	Air	MCE Cassette	12/19/2017				Liters	8:00:00 AM				L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight	David Tucker START	12/19/17 14:48	Sidney Caider HEI	12/20/17 7:10	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/19/2017
DATE RECEIVED 12/20/2017
DATE ANALYZED 12/20/2017
DATE REPORTED 12/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120068	12201701	1	100	1/100
17120069	12201702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120065	12201703	Area	AS24	8:10 AM	1:25 PM	10.043	9.904
17120066	12201704	Area	AS26	7:55 AM	1:19 PM	10.031	9.866
17120067	12201705	Area	AS15	8:36 AM	1:40 PM	9.926	9.959

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120065	12201703	315	9.9735	3141.65	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0018	N/A
17120066	12201704	324	9.9485	3223.31	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0017	N/A
17120067	12201705	304	9.9425	3022.52	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD**= Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 21, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/19/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/19/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/18/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-119
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120060	Blank 1	Asbestos PCM	Blank	MCE Cassette	12/18/2017	0	0	0	Liters	7:25:00 AM	3:45:00 PM	500	0	L/min
	17120061	Blank 2	Asbestos PCM	Blank	MCE Cassette	12/18/2017	0	0	0	Liters	7:30:00 AM	3:50:00 PM	500	0	L/min
	17120062	AS24	Asbestos PCM	Air	MCE Cassette	12/18/2017	10.053	10.156	4193.37	Liters	7:56:00 AM	2:51:00 PM	415	10.1045	L/min
	17120063	AS26	Asbestos PCM	Air	MCE Cassette	12/18/2017	9.8782	10.086	4062.71	Liters	8:12:00 AM	2:59:00 PM	407	9.9821	L/min
	17120064	AS15	Asbestos PCM	Air	MCE Cassette	12/18/2017	10.268	10.422	4241.45	Liters	8:29:00 AM	3:19:00 PM	410	10.345	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All 5	Ryan Whitehurch START for overnight shipment to EP.	12/18/2017 15:54			
Samples	START	7:06 12/19/17	AGI	12/19/17 7:07	

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/18/2017
DATE RECEIVED 12/19/2017
DATE ANALYZED 12/19/2017
DATE REPORTED 12/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120060	12181701	0.5	100	0.5/100
17120061	12181702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120062	12181703	Area	AS24	7:56 AM	2:51 PM	10.053	10.156
17120063	12181704	Area	AS26	8:12 AM	2:59 PM	9.8782	10.086
17120064	12181705	Area	AS15	8:29 AM	3:19 PM	10.268	10.422

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120062	12181703	415	10.1045	4193.4	9	100	0.005	0.0850	10.828	0.0010	1.705	<0.0017	N/A
17120063	12181704	407	9.9821	4062.71	7.5	100	0.005	0.0700	8.917	0.0008	1.775	<0.0015	N/A
17120064	12181705	410	10.345	4241.5	8	100	0.005	0.0750	9.554	0.0009	1.741	<0.0015	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 21, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/18/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/18/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/18/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-118
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120055	AS15	Asbestos PCM	Air	MCE Cassette	12/16/2017	10.105	10.291	4099.6	Liters	8:38:00 AM	3:20:00 PM	402	10.198	L/min
	17120056	AS24	Asbestos PCM	Air	MCE Cassette	12/16/2017	10.08	10.03	3247.77	Liters	8:09:00 AM	1:32:00 PM	323	10.055	L/min
	17120057	AS26	Asbestos PCM	Air	MCE Cassette	12/16/2017	10.153	10.193	3316.4	Liters	7:59:00 AM	1:25:00 PM	326	10.173	L/min
	17120058	Blank 1	Asbestos PCM	Air	MCE Cassette	12/16/2017				Liters					L/min
	17120059	Blank 2	Asbestos PCM	Air	MCE Cassette	12/16/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] START	15:57 12/16/17	Sidney Carter AEI	12/18 [illegible]	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/16/2017
DATE RECEIVED 12/18/2017
DATE ANALYZED 12/18/2017
DATE REPORTED 12/19/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120058	12181701	0.5	100	0.5/100
17120059	12181702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120055	12181703	Area	AS15	8:38 AM	3:20 PM	10.105	10.291
17120056	12181704	Area	AS24	8:09 AM	1:32 PM	10.08	10.03
17120057	12181705	Area	AS26	7:59 AM	1:25 PM	10.153	10.193

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120055	12181703	402	10.198	4099.6	8	100	0.005	0.0750	9.554	0.0009	1.741	<0.0016	N/A
17120056	12181704	323	10.055	3247.77	6	100	0.005	0.0550	7.006	0.0008	1.839	<0.0015	N/A
17120057	12181705	326	10.173	3316.4	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0016	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 19, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/16/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/16/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/16/2017

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-117
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120050	AS15	Asbestos PCM	Air	MCE Cassette	12/15/2017	10.022	10.065	3013.05	Liters	9:45:00 AM	2:45:00 PM	300	10.0435	L/min
	17120051	AS26	Asbestos PCM	Air	MCE Cassette	12/15/2017	10.054	9.8587	3365.26	Liters	8:42:00 AM	2:20:00 PM	338	9.9564	L/min
	17120052	AS24	Asbestos PCM	Air	MCE Cassette	12/15/2017	10.071	9.9204	3138.65	Liters	8:59:00 AM	2:13:00 PM	314	9.9957	L/min
	17120053	Blank 1	Asbestos PCM	Air	MCE Cassette	12/15/2017				Liters					L/min
	17120054	Blank 2	Asbestos PCM	Air	MCE Cassette	12/15/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	15:40 12/15/17			
Samples	START	7:02 12/16/17	ACI	12/16/17 7:03	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/15/2017
DATE RECEIVED 12/18/2017
DATE ANALYZED 12/18/2017
DATE REPORTED 12/18/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120053	12161701	0	100	0/100
17120054	12161702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120050	12161703	Area	AS15	9:45 AM	2:45 PM	10.022	10.065
17120051	12161704	Area	AS26	8:42 AM	2:20 PM	10.054	9.8587
17120052	12161705	Area	AS24	8:59 AM	2:13 PM	10.071	9.9204

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120050	12161703	300	10.0435	3013.05	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0020	N/A
17120051	12161704	338	9.9564	3365.26	6	100	0.0025	0.0575	7.325	0.0008	1.839	<0.0015	N/A
17120052	12161705	314	9.9957	3138.65	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0017	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 18, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/15/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

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The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/15/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/15/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-116
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120045	AS24	Asbestos PCM	Air	MCE Cassette	12/14/2017	10.056	9.857	3912.9	Liters	8:20:00 AM	2:53:00 PM	393	9.9565	L/min
	17120046	AS26	Asbestos PCM	Air	MCE Cassette	12/14/2017	9.9967	9.9682	3833.28	Liters	8:35:00 AM	2:59:00 PM	384	9.9825	L/min
	17120047	AS15	Asbestos PCM	Air	MCE Cassette	12/14/2017	9.9713	10.09	3380.35	Liters	9:06:00 AM	2:43:00 PM	337	10.0307	L/min
	17120048	Blank 1	Asbestos PCM	Air	MCE Cassette	12/14/2017									
	17120049	Blank 2	Asbestos PCM	Air	MCE Cassette	12/14/2017									

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	15:30 12/14/17			
Samples	START	7:08 12/15/17	ACE	12/15/17 7:08	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/14/2017
DATE RECEIVED 12/15/2017
DATE ANALYZED 12/15/2017
DATE REPORTED 12/18/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120048	12151701	0.5	100	0.5/100
17120049	12151702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120045	12151703	Area	AS24	8:20 AM	2:53 PM	10.056	9.857
17120046	12151704	Area	AS26	8:35 AM	2:59 PM	9.9967	9.9682
17120047	12151705	Area	AS15	9:06 AM	2:43 PM	9.9713	10.09

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120045	12151703	393	9.957	3912.90	6	100	0.0025	0.0575	7.325	0.0007	1.839	<0.0013	N/A
17120046	12151704	384	9.9825	3833.28	6	100	0.0025	0.0575	7.325	0.0007	1.839	<0.0014	N/A
17120047	12151705	337	10.0307	3380.35	7.5	100	0.0025	0.0725	9.236	0.0011	1.775	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 18, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/14/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/14/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/14/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-115
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120041	AS26	Asbestos PCM	Air	MCE Cassette	12/13/2017	10.06	10.064	3199.72	Liters	8:33:00 AM	1:51:00 PM	318	10.062	L/min
	17120042	AS15	Asbestos PCM	Air	MCE Cassette	12/13/2017	9.975	10.01	3177.62	Liters	8:20:00 AM	1:38:00 PM	318	9.9925	L/min
	17120043	Blank 1	Asbestos PCM	Air	MCE Cassette	12/13/2017				Liters					L/min
	17120044	Blank 2	Asbestos PCM	Air	MCE Cassette	12/13/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Maryn Fulton START	14:58 12/13/17	Sidney Carter AEI	12/14 7:15	Good
Samples	START	7:07 12/14/17			

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/13/2017
DATE RECEIVED 12/14/2017
DATE ANALYZED 12/14/2017
DATE REPORTED 12/14/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120043	12141701	0.5	100	0.5/100
17120044	12141702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120041	12141703	Area	AS26	8:33 AM	1:51 PM	10.06	10.064
17120042	12141704	Area	AS15	8:20 AM	1:38 PM	9.975	10.01

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120041	12141703	318	10.062	3199.72	11	100	0.0075	0.1025	13.057	0.0016	1.655	<0.0026	N/A
17120042	12141704	318	9.9925	3177.62	12.5	100	0.0075	0.1175	14.968	0.0018	1.620	<0.0029	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 15, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/13/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/13/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/13/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-114
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120035	AS24	Asbestos PCM	Air	MCE Cassette	12/12/2017	9.9652	9.8471	4259.67	Liters *	8:11:00 AM	3:21:00 PM	430	9.9062	L/min
	17120036	AS15	Asbestos PCM	Air	MCE Cassette	12/12/2017	9.9407	10.128	3963.59	Liters	8:57:00 AM	3:32:00 PM	395	10.0344	L/min
	17120037	AS26	Asbestos PCM	Air	MCE Cassette	12/12/2017	10.022	10.189	4213.99	Liters	8:21:00 AM	3:18:00 PM	417	10.1055	L/min
	17120038	Blank 1	Asbestos PCM	Air	MCE Cassette	12/12/2017				Liters					L/min
	17120039	Blank 2	Asbestos PCM	Air	MCE Cassette	12/12/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM [redacted]
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
samples	[signature] START	15:53 12/12/17	Sidney Carter AEI	12/13 0850	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/12/2017
DATE RECEIVED 12/13/2017
DATE ANALYZED 12/13/2017
DATE REPORTED 12/14/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120038	12131701	0.5	100	0.5/100
17120039	12131702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120035	12131703	Area	AS24	8:11 AM	3:21 PM	9.9652	9.8471
17120036	12131704	Area	AS15	8:57 AM	3:32 PM	9.9407	10.128
17120037	12131705	Area	AS26	8:21 AM	3:18 PM	10.022	10.189

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120035	12131703	430	9.9062	4259.67	6.5	100	0.005	0.0600	7.643	0.0007	1.810	<0.0013	N/A
17120036	12131704	395	10.0344	3963.59	7	100	0.005	0.0650	8.280	0.0008	1.785	<0.0014	N/A
17120037	12131705	417	10.1055	4213.99	6.5	100	0.005	0.0600	7.643	0.0007	1.810	<0.0013	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 14, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/12/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/12/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/12/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-113
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120030	AS15	Asbestos PCM	Air	MCE Cassette	12/11/2017	10.105	10.241	3021.38	Liters	8:43:00 AM	1:40:00 PM	297	10.173	L/min
	17120031	AS24	Asbestos PCM	Air	MCE Cassette	12/11/2017	9.998	9.8946	3083.35	Liters	8:21:00 AM	1:31:00 PM	310	9.9463	L/min
	17120032	AS26	Asbestos PCM	Air	MCE Cassette	12/11/2017	10.126	10.048	3147.14	Liters	8:10:00 AM	1:22:00 PM	312	10.087	L/min
	17120033	Blank 1	Asbestos PCM	Air	MCE Cassette	12/11/2017				Liters					L/min
	17120034	Blank 2	Asbestos PCM	Air	MCE Cassette	12/11/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
samples		15:07 12/11/17			
samples		11:08 am 12/12/17	11:09 AEL	11:09 12/12/17	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/11/2017
DATE RECEIVED 12/12/2017
DATE ANALYZED 12/12/2017
DATE REPORTED 12/13/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120033	12121701	0.5	100	0.5/100
17120034	12121702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120030	12121703	Area	AS15	8:43 AM	1:40 PM	10.105	10.241
17120031	12121704	Area	AS24	8:21 AM	1:31 PM	9.998	9.8946
17120032	12121705	Area	AS26	8:10 AM	1:22 PM	10.126	10.048

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120030	12121703	297	10.1730	3021.38	7.5	100	0.0025	0.0725	9.236	0.0012	1.775	<0.0021	N/A
17120031	12121704	310	9.9463	3083.35	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0017	N/A
17120032	12121705	312	10.0870	3147.14	6.5	100	0.0025	0.0625	7.962	0.0010	1.810	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

December 13, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/11/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/11/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/11/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-112
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120025	AS24	Asbestos PCM	Air	MCE Cassette	12/9/2017	10.081	9.944	2493.11	Liters	8:05:00 AM	12:14:00 PM	249	10.0125	L/min
	17120026	AS26	Asbestos PCM	Air	MCE Cassette	12/9/2017	10.188	10.266	2515.84	Liters	8:25:00 AM	12:31:00 PM	246	10.227	L/min
	17120027	AS15	Asbestos PCM	Air	MCE Cassette	12/9/2017	10.081	10.118	2504.68	Liters	8:15:00 AM	12:23:00 PM	248	10.0995	L/min
	17120028	Blank 1	Asbestos PCM	Air	MCE Cassette	12/9/2017				Liters	7:00:00 AM				L/min
	17120029	Blank 2	Asbestos PCM	Air	MCE Cassette	12/9/2017				Liters	7:05:00 AM				L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Mauren Fulton START	1245 12/9/17			
	Paul Cox START	12/11/17	Sidney Carter AEI	12/11/17 640	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/9/2017
DATE RECEIVED 12/11/2017
DATE ANALYZED 12/11/2017
DATE REPORTED 12/12/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120028	12111701	0.5	100	0.5/100
117120029	12111702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120025	12111703	Area	AS24	8:05 AM	12:14 PM	10.081	9.94
17120026	12111704	Area	AS26	8:25 AM	12:31 PM	10.188	10.266
17120027	12111705	Area	AS15	8:15 AM	12:23 PM	10.081	10.118

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120025	12111703	249	10.0125	2493.11	9	100	0.005	0.0850	10.828	0.0017	1.705	<0.0029	N/A
17120026	12111704	246	10.2270	2515.84	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0021	N/A
17120027	12111705	248	10.0995	2504.68	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 12, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/09/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/09/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/8/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-111
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120017	AS24a	Asbestos PCM	Air	MCE Cassette	12/8/2017	9.948	10.16	2573.82	Liters	7:13:00 AM	11:29:00 AM	256	10.054	L/min
	17120018	AS26a	Asbestos PCM	Air	MCE Cassette	12/8/2017	9.977	10.161	2617.94	Liters	7:38:00 AM	11:58:00 AM	260	10.069	L/min
	17120019	AS15a	Asbestos PCM	Air	MCE Cassette	12/8/2017	10.114	10.364	2692.86	Liters	7:25:00 AM	11:48:00 AM	263	10.239	L/min
	17120020	Blank 1	Asbestos PCM	Air	MCE Cassette	12/8/2017				Liters	7:00:00 AM				L/min
	17120021	AS24b	Asbestos PCM	Air	MCE Cassette	12/8/2017	10.155	10.12	2260.66	Liters	11:30:00 AM	3:13:00 PM	223	10.1375	L/min
	17120022	AS26b	Asbestos PCM	Air	MCE Cassette	12/8/2017	10.188	10.12	2152.65	Liters	11:59:00 AM	3:31:00 PM	212	10.154	L/min
	17120023	AS15b	Asbestos PCM	Air	MCE Cassette	12/8/2017	10.242	10.149	2171.64	Liters	11:50:00 AM	3:23:00 PM	213	10.1955	L/min
	17120024	Blank 2	Asbestos PCM	Air	MCE Cassette	12/8/2017				Liters	11:00:00 AM				L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Marcia Fulton START	16:10 12/8/17	Esther Archer AEI	12/8/17 1640	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/8/2017
DATE RECEIVED 12/9/2017
DATE ANALYZED 12/9/2017
DATE REPORTED 12/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120020	12091701	1	100	1/100
17120024	12091702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120017	12091703	Area	AS24a	7:13 AM	11:29 AM	9.948	10.16
17120018	12091704	Area	AS26a	7:38 AM	11:58 AM	9.977	10.161
17120019	12091705	Area	AS15a	7:25 AM	11:48 AM	10.114	10.364
121720021	12091706	Area	AS24b	11:30 AM	3:13 PM	10.155	10.12
17120022	12091707	Area	AS26b	11:59 AM	3:31 PM	10.188	10.12
17120023	12091708	Area	AS15b	11:50 AM	3:23 PM	10.242	10.149

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120017	12091703	256	10.0540	2573.82	7	100	0.0075	0.0625	7.962	0.0012	1.785	<0.0021	N/A
17120018	12091704	260	10.0690	2617.94	8	100	0.0075	0.0725	9.236	0.0014	1.741	<0.0024	N/A
17120019	12091705	263	10.2390	2692.86	9.5	100	0.0075	0.0875	11.146	0.0016	1.690	<0.0027	N/A
121720021	12091706	223	10.1375	2260.66	7.5	100	0.0075	0.0675	8.599	0.0015	1.775	<0.0026	N/A
17120022	12091707	212	10.1540	2152.65	8	100	0.0075	0.0725	9.236	0.0017	1.741	<0.0029	N/A
17120023	12091708	213	10.1955	2171.64	7	100	0.0075	0.0625	7.962	0.0014	1.785	<0.0025	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 11, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/08/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/08/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/8/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-110
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120009	AS24a	Asbestos PCM	Air	MCE Cassette	12/7/2017	9.9842	9.952	2282.69	Liters	7:32:00 AM	11:21:00 AM	229	9.9681	L/min
	17120010	AS15a	Asbestos PCM	Air	MCE Cassette	12/7/2017	9.9361	10.062	2219.8	Liters	7:56:00 AM	11:38:00 AM	222	9.9991	L/min
	17120011	AS26a	Asbestos PCM	Air	MCE Cassette	12/7/2017	9.9469	9.9744	2320.84	Liters	7:21:00 AM	11:14:00 AM	233	9.9607	L/min
	17120012	Blank 1	Asbestos PCM	Air	MCE Cassette	12/7/2017				Liters	7:00:00 AM				L/min
	17120013	AS24b	Asbestos PCM	Air	MCE Cassette	12/7/2017	9.9129	9.8694	2492.58	Liters	11:29:00 AM	3:41:00 PM	252	9.8912	L/min
	17120014	AS26b	Asbestos PCM	Air	MCE Cassette	12/7/2017	10.064	10.087	2599.48	Liters	11:16:00 AM	3:34:00 PM	258	10.0755	L/min
	17120015	AS15b	Asbestos PCM	Air	MCE Cassette	12/7/2017	10.187	10.234	2552.63	Liters	11:45:00 AM	3:55:00 PM	250	10.2105	L/min
	17120016	Blank 2	Asbestos PCM	Air	MCE Cassette	12/7/2017				Liters	11:00:00 AM				L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	START	10:25 12/7/17	AEI	12/8/17 10:46	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/7/2017
DATE RECEIVED 12/8/2017
DATE ANALYZED 12/8/2017
DATE REPORTED 12/11/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120012	12081701	0.5	100	0.5/100
17120016	12081702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120009	12081703	Area	AS24a	7:32 AM	11:21 AM	9.9842	9.952
17120010	12081704	Area	AS15a	7:56 AM	11:38 AM	9.9361	10.062
17120011	12081705	Area	AS26a	7:21 AM	11:14 AM	9.9469	9.9744
17120012	12081706	Area	AS24b	11:29 AM	3:41 PM	9.9129	9.8694
17120013	12081707	Area	AS26b	11:16 AM	3:34 PM	10.064	10.087
17120014	12081708	Area	AS15b	11:45 AM	3:55 PM	10.187	10.234

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120009	12081703	229	9.9681	2282.69	9	100	0.0025	0.0875	11.146	0.0019	1.705	<0.0032	N/A
17120010	12081704	222	9.9991	2219.8	6.5	100	0.0025	0.0625	7.962	0.0014	1.810	<0.0025	N/A
17120011	12081705	233	9.9607	2320.84	6	100	0.0025	0.0575	7.325	0.0012	1.839	<0.0022	N/A
17120012	12081706	252	9.8912	2492.58	8	100	0.0025	0.0775	9.873	0.0015	1.741	<0.0027	N/A
17120013	12081707	258	10.0755	2599.48	10	100	0.0025	0.0975	12.420	0.0018	1.670	<0.0031	N/A
17120014	12081708	250	10.2105	2552.63	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 11, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/07/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/07/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/7/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-108
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120001	AS24a	Asbestos PCM	Air	MCE Cassette	12/6/2017	9.838	9.857	2442.18	Liters	7:24:00 AM	11:32:00 AM	248	9.8475	L/min
	17120002	AS26a	Asbestos PCM	Air	MCE Cassette	12/6/2017	9.949	9.995	2502.97	Liters	7:48:00 AM	11:59:00 AM	251	9.972	L/min
	17120003	AS15a	Asbestos PCM	Air	MCE Cassette	12/6/2017	9.956	10.032	2488.51	Liters	7:38:00 AM	11:47:00 AM	249	9.994	L/min
	17120004	Blank 1	Asbestos PCM	Blank	MCE Cassette	12/6/2017	0		0	Liters	7:00:00 AM			0	L/min
	17120005	AS24b	Asbestos PCM	Air	MCE Cassette	12/6/2017	10.064	10.177	3127.23	Liters	11:36:00 AM	4:45:00 PM	309	10.1205	L/min
	17120006	AS26b	Asbestos PCM	Air	MCE Cassette	12/6/2017	10.023	10.061	2701.3	Liters	12:00:00 PM	4:29:00 PM	269	10.042	L/min
	17120007	AS15b	Asbestos PCM	Air	MCE Cassette	12/6/2017	9.951	10.058	2661.2	Liters	11:49:00 AM	4:15:00 PM	266	10.0045	L/min
	17120008	Blank 2	Asbestos PCM	Blank	MCE Cassette	12/6/2017	0		0	Liters	11:00:00 AM			0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/Soil	[signature] START	12/6/17 7:30	Sidney Carter AET	12/8/17 6:40	Good
Samples	[signature] START	12/7/17			

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/6/2017
DATE RECEIVED 12/7/2017
DATE ANALYZED 12/7/2017
DATE REPORTED 12/8/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17120004	12071701	1	100	1/100
17120008	12071702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17120001	12071703	Area	AS24a	7:24 AM	11:32 AM	9.838	9.857
17120002	12071704	Area	AS26a	7:48 AM	11:59 AM	9.949	9.995
17120003	12071705	Area	AS15a	7:38 AM	11:47 AM	9.956	10.032
17120005	12071706	Area	AS24b	11:36 AM	4:45 PM	10.064	10.177
17120006	12071707	Area	AS26b	12:00 PM	4:29 PM	10.023	10.061
17120007	12071708	Area	AS15b	11:49 AM	4:15 PM	9.951	10.058

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17120001	12071703	248	9.8475	2442.18	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0023	N/A
17120002	12071704	251	9.9720	2502.97	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0021	N/A
17120003	12071705	249	9.9940	2488.51	8	100	0.005	0.0750	9.554	0.0015	1.741	<0.0026	N/A
17120005	12071706	309	10.1205	3127.23	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0017	N/A
17120006	12071707	269	10.0420	2701.3	7.5	100	0.005	0.0700	8.917	0.0013	1.775	<0.0023	N/A
17120007	12071708	266	10.0045	2661.2	10	100	0.005	0.0950	12.102	0.0018	1.670	<0.0029	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 8, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/06/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/06/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/5/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-107
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110163	Blank 1	Asbestos PCM	Blank	MCE Cassette	12/5/2017	0	0	0	Liters	7:00:00 AM	11:55:00 AM	295	0	L/min
	17110164	AS24a	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.9734	9.7154	2352.81	Liters	7:23:00 AM	11:22:00 AM	239	9.8444	L/min
	17110165	AS26a	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.971	9.9837	2244.92	Liters	7:48:00 AM	11:33:00 AM	225	9.9774	L/min
	17110166	AS15a	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.8267	9.9185	2260.83	Liters	8:03:00 AM	11:52:00 AM	229	9.8726	L/min
	17110167	Blank 2	Asbestos PCM	Blank	MCE Cassette	12/5/2017	0	0	0	Liters	11:00:00 AM	4:00:00 PM	300	0	L/min
	17110168	AS24b	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.8765	10.106	2377.93	Liters	11:24:00 AM	3:22:00 PM	238	9.9913	L/min
	17110169	AS26b	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.8199	10.008	2309.96	Liters	11:35:00 AM	3:28:00 PM	233	9.914	L/min
	17110170	AS15b	Asbestos PCM	Air	MCE Cassette	12/5/2017	9.8682	10.093	2285.56	Liters	11:54:00 AM	3:43:00 PM	229	9.9806	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL Overnight storage w/custody seal.	Ryan Whitehead 12/5/2017 START	12/5/2017 16:39	Sidney Carter AEI	12/6/17 6:44	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/5/2017
DATE RECEIVED 12/6/2017
DATE ANALYZED 12/6/2017
DATE REPORTED 12/7/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110163	12071701	0.5	100	0.5/100
17110167	12071702	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110164	12071703	Area	AS24a	7:23 AM	11:22 AM	9.9734	9.7154
17110165	12071704	Area	AS26a	7:48 AM	11:33 AM	9.971	9.9837
17110166	12071705	Area	AS15a	8:03 AM	11:52 AM	9.8267	9.9185
17110168	12071706	Area	AS24b	11:24 AM	3:22 PM	9.8765	10.106
17110169	12071707	Area	AS26b	11:35 AM	3:28 PM	9.8199	10.008
17110170	12071708	Area	AS15b	11:54 AM	3:43 PM	9.8682	10.093

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110164	12071703	239	9.8444	2352.81	6.5	100	0.005	0.0600	7.643	0.0013	1.810	<0.0023	N/A
17110165	12071704	225	9.9774	2244.92	7	100	0.005	0.0650	8.280	0.0014	1.785	<0.0025	N/A
17110166	12071705	229	9.8726	2260.83	9	100	0.005	0.0850	10.828	0.0018	1.705	<0.0031	N/A
17110168	12071706	238	9.9913	2377.93	7	100	0.005	0.0650	8.280	0.0013	1.785	<0.0024	N/A
17110169	12071707	233	9.9140	2309.96	7.5	100	0.005	0.0700	8.917	0.0015	1.775	<0.0026	N/A
17110170	12071708	229	9.9806	2285.56	9	100	0.005	0.0850	10.828	0.0018	1.705	<0.0031	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 7, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/05/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/05/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/4/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-106
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	✓ 17110155	Blank 1	Asbestos PCM	Blank	MCE Cassette	12/4/2017	0	0	0	Liters	7:18:00 AM	12:24:00 PM	306	0	L/min
	✓ 17110156	AS24a	Asbestos PCM	Air	MCE Cassette	12/4/2017	10.056	9.9207	2417.19	Liters	7:50:00 AM	11:52:00 AM	242	9.9884	L/min
	✓ 17110157	AS26a	Asbestos PCM	Air	MCE Cassette	12/4/2017	9.8306	9.8476	2312.19	Liters	8:06:00 AM	12:01:00 PM	235	9.8391	L/min
	✓ 17110158	AS15a	Asbestos PCM	Air	MCE Cassette	12/4/2017	9.9362	10.038	2307.02	Liters	8:31:00 AM	12:22:00 PM	231	9.9871	L/min
	✓ 17110159	Blank 2	Asbestos PCM	Blank	MCE Cassette	12/4/2017	0	0	0	Liters	9:30:00 AM	3:50:00 PM	380	0	L/min
	✓ 17110160	AS24b	Asbestos PCM	Air	MCE Cassette	12/4/2017	9.8728	10.026	1820.74	Liters	11:55:00 AM	2:58:00 PM	183	9.9494	L/min
	✓ 17110161	AS26b	Asbestos PCM	Air	MCE Cassette	12/4/2017	10.04	10.178	1860.06	Liters	12:03:00 PM	3:07:00 PM	184	10.109	L/min
	✓ 17110162	AS15b	Asbestos PCM	Air	MCE Cassette	12/4/2017	10.015	10.07	1847.82	Liters	12:24:00 PM	3:28:00 PM	184	10.0425	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL/Overnight Storage Universal	Ryan Whitehead/START	12/4/2017 1559	Ryan Whitehead START	12-5-17 10:46	Custody seal intact, 8 cassettes good.
ALL to Advantage	Ryan Whitehead/START	12/5/2017 10:46	[signature]	10:48 12/5/17	8 cassettes good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/4/2017
DATE RECEIVED 12/5/2017
DATE ANALYZED 12/5/2017
DATE REPORTED 12/6/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110155	12051701	1	100	1/100
17110159	12051702	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110156	12051703	Area	AS24a	7:50 AM	11:52 AM	10.056	9.9207
17110157	12051704	Area	AS26a	8:06 AM	12:01 PM	9.8306	9.8476
17110158	12051705	Area	AS15a	8:31 AM	12:22 PM	9.9362	10.038
17110160	12051706	Area	AS24b	11:55 AM	2:58 PM	9.8728	10.026
17110161	12051707	Area	AS26b	12:03 PM	3:07 PM	10.04	10.178
17110162	12051708	Area	AS15b	12:24 PM	3:28 PM	10.015	10.07

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110156	12051703	242	9.9884	2417.19	8	100	0.01	0.0700	8.917	0.0014	1.741	<0.0025	N/A
17110157	12051704	235	9.839	2312.19	8	100	0.01	0.0700	8.917	0.0015	1.741	<0.0026	N/A
17110158	12051705	231	9.9871	2307.02	13	100	0.01	0.1200	15.287	0.0026	1.610	<0.0041	N/A
17110160	12051706	183	9.9494	1820.74	8	100	0.01	0.0700	8.917	0.0019	1.741	<0.0033	N/A
17110161	12051707	184	10.1090	1860.06	10	100	0.01	0.0900	11.465	0.0024	1.670	<0.0040	N/A
17110162	12051708	184	10.0425	1847.82	9	100	0.01	0.0800	10.191	0.0021	1.705	<0.0036	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 6, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/04/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 12/04/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 12/4/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-105
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110147	AS24a	Asbestos PCM	Air	MCE Cassette	12/1/2017	9.995	10.03	2382.98	Liters	7:07:00 AM	11:05:00 AM	238	10.0125	L/min
	17110148	AS26a	Asbestos PCM	Air	MCE Cassette	12/1/2017	10.004	9.965	2416.25	Liters	7:37:00 AM	11:39:00 AM	242	9.9845	L/min
	17110149	AS15a	Asbestos PCM	Air	MCE Cassette	12/1/2017	9.929	10.065	2769.17	Liters	7:15:00 AM	11:52:00 AM	277	9.997	L/min
	17110150	Blank 1	Asbestos PCM	Air	MCE Cassette	12/1/2017				Liters					L/min
	17110151	AS24b	Asbestos PCM	Air	MCE Cassette	12/1/2017	10.023	10.039	2317.16	Liters	11:33:00 AM	3:24:00 PM	231	10.031	L/min
	17110152	AS26b	Asbestos PCM	Air	MCE Cassette	12/1/2017	10.022	10.053	2318.66	Liters	11:53:00 AM	3:44:00 PM	231	10.0375	L/min
	17110153	AS15b	Asbestos PCM	Air	MCE Cassette	12/1/2017	10.007	10.022	2313.35	Liters	11:42:00 AM	3:33:00 PM	231	10.0145	L/min
	17110154	Blank 2	Asbestos PCM	Air	MCE Cassette	12/1/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all/N Lab	Mark Fuller START	12/1/17 17:50	Ryan Whitehead START	12/4/2017 0638	Seal, intact, 8 cassettes.
ALL To Advantage	Ryan Whitehead START	12/4/17 0640	Exchange Carrier AEA	12/4/17 0640	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 12/1/2017
DATE RECEIVED 12/4/2017
DATE ANALYZED 12/4/2017
DATE REPORTED 12/4/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110150	12041701	1	100	1/100
17110154	12041702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110147	12041703	Area	AS24a	7:07 AM	11:05 AM	9.995	10.03
17110148	12041704	Area	AS26a	7:37 AM	11:39 AM	10.004	9.965
17110149	12041705	Area	AS15a	7:15 AM	11:52 AM	9.929	10.065
17110151	12041706	Area	AS24b	11:33 AM	3:24 PM	10.023	10.04
17110152	12047107	Area	AS26ab	11:53 AM	3:44 PM	10.022	10.053
17110153	12041708	Area	AS15b	11:42 AM	3:33 PM	10.007	10.022

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110147	12041703	238	10.0125	2382.98	11	100	0.005	0.1050	13.376	0.0022	1.655	<0.0036	N/A
17110148	12041704	242	9.985	2416.25	14	100	0.005	0.1350	17.197	0.0027	1.590	<0.0044	N/A
17110149	12041705	277	9.9970	2769.17	16	100	0.005	0.1550	19.745	0.0027	1.550	<0.0043	N/A
17110151	12041706	231	10.0310	2317.16	10	100	0.005	0.0950	12.102	0.0020	1.670	<0.0034	N/A
17110152	12047107	231	10.0375	2318.66	6	100	0.005	0.0550	7.006	0.0012	1.839	<0.0021	N/A
17110153	12041708	231	10.0145	2313.35	7	100	0.005	0.0650	8.280	0.0014	1.785	<0.0025	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 4, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 12/01/2017 Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal & Area sample/s collected utilized 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected by AEI on 12/01/2017 are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in of the air samples that were collected and analyzed for this day by AEI.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Field technician did not note any fiber release or and anomalies in the field.

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 11/30/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-104
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110139	AS24a	Asbestos PCM	Air	MCE Cassette	11/30/2017	9.912	10.261	2582.14	Liters	7:24:00 AM	11:40:00 AM	256	10.0865	L/min
	17110140	AS26a	Asbestos PCM	Air	MCE Cassette	11/30/2017	10.029	10.34	2607.23	Liters	7:43:00 AM	11:59:00 AM	256	10.1845	L/min
	17110141	AS15a	Asbestos PCM	Air	MCE Cassette	11/30/2017	9.884	10.257	2618.33	Liters	7:30:00 AM	11:50:00 AM	260	10.0705	L/min
	17110142	Blank 1	Asbestos PCM	Air	MCE Cassette	11/30/2017				Liters					L/min
	17110143	AS24b	Asbestos PCM	Air	MCE Cassette	11/30/2017	10.279	10.059	2521.91	Liters	11:41:00 AM	3:49:00 PM	248	10.169	L/min
	17110144	AS26b	Asbestos PCM	Air	MCE Cassette	11/30/2017	10.08	9.055	2391.88	Liters	12:00:00 PM	4:10:00 PM	250	9.5675	L/min
	17110145	AS15b	Asbestos PCM	Air	MCE Cassette	11/30/2017	10.178	10.004	2502.57	Liters	11:52:00 AM	4:00:00 PM	248	10.091	L/min
	17110146	Blank 2	Asbestos PCM	Air	MCE Cassette	11/30/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	Marion Fulton START	11/30/17 16:35		12/1/17 Gillian	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/30/2017
DATE RECEIVED 12/1/2017
DATE ANALYZED 12/1/2017
DATE REPORTED 12/4/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110142	12011712	0	100	0/100
17110146	12011713	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110139	12011714	Area	AS24a	7:24 AM	11:40 AM	9.912	10.261
17110140	12011715	Area	AS26a	7:43 AM	11:59 AM	10.029	10.340
17110141	12011716	Area	AS15a	7:30 AM	11:50 AM	9.884	10.257
17110143	12011717	Area	AS24b	11:41 AM	3:49 PM	10.279	10.06
17110144	12011718	Area	AS26b	12:00 PM	4:10 PM	10.08	9.055
17110145	12011719	Area	AS15b	11:52 AM	4:00 PM	10.178	10.004

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110139	12011714	256	10.0865	2582.14	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A
17110140	12011715	256	10.185	2607.23	13	100	0.0025	0.1275	16.242	0.0024	1.610	<0.0039	N/A
17110141	12011716	260	10.0705	2618.33	7	100	0.0025	0.0675	8.599	0.0013	1.785	<0.0023	N/A
17110143	12011717	248	10.1690	2521.91	5.5	100	0.0025	0.0525	6.688	< LOD	NA	NA	N/A
17110144	12011718	250	9.5675	2391.88	12	100	0.0025	0.1175	14.968	0.0024	1.620	<0.0039	N/A
17110145	12011719	248	10.0910	2502.57	9	100	0.0025	0.0875	11.146	0.0017	1.705	<0.0029	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 4, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/30/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/30/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 11/30/2017

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-103
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17110131	AS24a	Asbestos PCM	Air	MCE Cassette	11/29/2017	10.043	10.232	2463.41	Liters	7:14:00 AM	11:17:00 AM	243	10.1375	L/min
	17110132	AS26a	Asbestos PCM	Air	MCE Cassette	11/29/2017	9.905	10.216	2414.52	Liters	7:43:00 AM	11:43:00 AM	240	10.0605	L/min
	17110133	AS15a	Asbestos PCM	Air	MCE Cassette	11/29/2017	9.995	10.216	2435.43	Liters	7:31:00 AM	11:32:00 AM	241	10.1055	L/min
	17110134	Blank 1	Asbestos PCM	Air	MCE Cassette	11/29/2017				Liters					L/min
	17110135	AS24b	Asbestos PCM	Air	MCE Cassette	11/29/2017	10.125	9.96	2671.31	Liters	11:21:00 AM	3:47:00 PM	266	10.0425	L/min
	17110136	AS26b	Asbestos PCM	Air	MCE Cassette	11/29/2017	10.035	9.967	2630.28	Liters	11:44:00 AM	4:07:00 PM	263	10.001	L/min
	17110137	AS15b	Asbestos PCM	Air	MCE Cassette	11/29/2017	10.088	9.984	2619.4	Liters	11:37:00 AM	3:58:00 PM	261	10.036	L/min
	17110138	Blank 2	Asbestos PCM	Air	MCE Cassette	11/29/2017				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to Lab	Maren Fulker START	11/29/17 16:37	Sidney Carter	11/30/17 6:40	Good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 11/29/2017
DATE RECEIVED 11/30/2017
DATE ANALYZED 11/30/2017
DATE REPORTED 12/1/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
17110134	11301701	1	100	1/100
17110138	11301702	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
17110131	11301703	Area	AS24a	7:14 AM	11:17 AM	10.043	10.232
17110132	11301704	Area	AS26b	7:43 AM	11:43 AM	9.905	10.216
17110133	11301705	Area	AS15a	7:31 AM	11:32 AM	9.995	10.216
17110135	11301706	Area	AS24b	11:21 AM	3:47 PM	10.125	9.96
17110136	11301707	Area	AS26b	11:44 AM	4:07 PM	10.035	9.967
17110137	11301708	Area	AS15b	11:37 AM	3:58 PM	10.088	9.984

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
17110131	11301703	243	10.1375	2463.41	9	100	0.005	0.0850	10.828	0.0017	1.705	<0.0029	N/A
17110132	11301704	240	10.061	2414.52	10	100	0.005	0.0950	12.102	0.0019	1.670	<0.0032	N/A
17110133	11301705	241	10.1055	2435.43	6.5	100	0.005	0.0600	7.643	0.0012	1.810	<0.0022	N/A
17110135	11301706	266	10.0425	2671.31	7	100	0.005	0.0650	8.280	0.0012	1.785	<0.0021	N/A
17110136	11301707	263	10.0010	2630.26	11	100	0.005	0.1050	13.376	0.0020	1.655	<0.0032	N/A
17110137	11301708	261	10.0360	2619.40	6.5	100	0.005	0.0600	7.643	0.0011	1.810	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

December 1, 2017

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 11/29/2017 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 11/29/2017 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START) | **ADVANTAGE PROJECT #** 17-225a | **DATE COLLECTED** 1/30/2018
ATTENTION Erin Lynch | **CLIENT PROJECT #** 10QD | **DATE RECEIVED** 1/31/2018
CONTRACTOR Ecology and Environmental, Inc. (START) | **REPORT #** 1 | **DATE ANALYZED** 1/31/2018
PROJECT River Street Water Front Portland, OR | **PAGE** 1 **OF** 1 | **DATE REPORTED** 2/1/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010125	1311801	0	100	0/100
18010126	1311802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010122	1311803	Area	AS24	7:53 AM	1:18 PM	9.9344	10.14
18010123	1311804	Area	AS26	8:11 AM	1:28 PM	10.022	10.239
18010124	1311805	Area	AS15	8:07 AM	1:34 PM	9.9331	10.164

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010122	1311803	325	10.0372	3262.09	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0016	N/A
18010123	1311804	317	10.1305	3211.37	6	100	0.0025	0.0575	7.325	0.0009	1.839	<0.0016	N/A
18010124	1311805	327	10.0486	3285.88	8	100	0.0025	0.0775	9.873	0.0012	1.741	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

February 1, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/30/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/30/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA
DateShipped: 1/30/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-154
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010117	AS24	Asbestos PCM	Air	MCE Cassette	1/29/2018	9.995	9.8293	3092.61	Liters	8:00:00 AM	1:12:00 PM	312	9.9122	L/min
	18010118	AS26	Asbestos PCM	Air	MCE Cassette	1/29/2018	9.9814	10.012	3088.98	Liters	8:08:00 AM	1:17:00 PM	309	9.9967	L/min
	18010119	AS15	Asbestos PCM	Air	MCE Cassette	1/29/2018	9.9367	9.9001	3044.95	Liters	8:16:00 AM	1:23:00 PM	307	9.9184	L/min
	18010120	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/29/2018	0			Liters	7:45:00 AM	1:30:00 PM			L/min
	18010121	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/29/2018	0			Liters	7:46:00 AM	1:31:00 PM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	CH/START	1-29-18/1348	AECL	1/30/18 7:52	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/29/2018
DATE RECEIVED 1/30/2018
DATE ANALYZED 1/30/2018
DATE REPORTED 1/31/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010120	1301801	0	100	0/100
18010121	1301802	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010117	1301803	Area	AS24	8:00 AM	1:12 PM	9.995	9.8293
18010118	1301804	Area	AS26	8:08 AM	1:17 PM	9.9814	10.012
18010119	1301805	Area	AS15	8:16 AM	1:23 PM	9.9367	9.9001

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010117	1301803	312	9.9122	3092.61	6.5	100	0.005	0.0600	7.643	0.0010	1.810	<0.0017	N/A
18010118	1301804	309	9.9967	3088.98	6	100	0.005	0.0550	7.006	0.0009	1.839	<0.0016	N/A
18010119	1301805	307	9.9184	3044.95	8	100	0.005	0.0750	9.554	0.0012	1.741	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE Environmental INC.

Clean your world.

January 31, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/29/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/29/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA

DateShipped: 1/27/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-153

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010112	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/27/2018	0	0	0	Liters	7:25:00 AM	1:45:00 PM	380	0	L/min
	18010113	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/27/2018	0	0	0	Liters	7:30:00 AM	1:50:00 PM	380	0	L/min
	18010114	AS24	Asbestos PCM	Air	MCE Cassette	1/27/2018	10.01	9.8183	3202.29	Liters	7:58:00 AM	1:21:00 PM	323	9.9142	L/min
	18010115	AS26	Asbestos PCM	Air	MCE Cassette	1/27/2018	9.4888	9.4509	3039.84	Liters	8:11:00 AM	1:32:00 PM	321	9.4699	L/min
	18010116	AS15	Asbestos PCM	Air	MCE Cassette	1/27/2018	9.9158	9.9429	3117.83	Liters	8:28:00 AM	1:42:00 PM	314	9.9294	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALLOWABLE	Ryan Whitehead START	1/27/2018 1456	Sidney Cutler AEI	1/29/18 0847	Good

ADVANTAGE Environmental INC.

Clean your world.

January 30, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/27/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/27/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/27/2018
DATE RECEIVED 1/29/2018
DATE ANALYZED 1/29/2018
DATE REPORTED 1/30/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010112	1291801	0	100	0/100
18010113	1291802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010114	1291803	Area	AS24	7:58 AM	1:21 PM	10.01	9.8183
18010115	1291804	Area	AS26	8:11 AM	1:32 PM	9.4888	9.4509
18010116	1291805	Area	AS15	8:28 AM	1:42 PM	9.9158	9.9429

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010114	1291803	323	9.9142	3202.27	7	100	0.0025	0.0675	8.599	0.0010	1.785	<0.0018	N/A
18010115	1291804	321	9.4699	3039.82	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0019	N/A
18010116	1291805	314	9.9294	3117.82	6.5	100	0.0025	0.0625	7.962	0.0010	1.810	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/26/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steven Hall
Contact Phone: 206-920-1739

No: PDX-152
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010107	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/26/2018	0	0	0	Liters	6:50:00 AM		-410	0	L/min
	18010108	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/26/2018	0	0	0	Liters	6:55:00 AM		-415	0	L/min
	18010109	AS24	Asbestos PCM	Air	MCE Cassette	1/26/2018	9.8697	9.98	3582.89	Liters	7:19:00 AM	1:20:00 PM	361	9.9249	L/min
	18010110	AS26	Asbestos PCM	Air	MCE Cassette	1/26/2018	9.443	9.6105	3277.22	Liters	7:31:00 AM	1:15:00 PM	344	9.5268	L/min
	18010111	AS15	Asbestos PCM	Air	MCE Cassette	1/26/2018	9.8258	10.061	3241.55	Liters	8:07:00 AM	1:33:00 PM	326	9.9434	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	(START E+E)	1/26/18 1350		1/27/18 0654	

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/26/2018
DATE RECEIVED 1/27/2018
DATE ANALYZED 1/27/2018
DATE REPORTED 1/29/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010107	1271801	1	100	1/100
18010108	1271802	1	100	1/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Pete Coleman

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010109	1271803	Area	AS24	7:19 AM	1:20 PM	9.8697	9.98
18010110	1271804	Area	AS26	7:31 AM	1:15 PM	9.443	9.6105
18010111	1271805	Area	AS15	8:07 AM	1:33 PM	9.8258	10.061

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010109	1271803	361	9.9249	3582.87	14	100	0.01	0.1300	16.561	0.0018	1.590	<0.0028	N/A
18010110	1271804	344	9.5268	3277.22	12	100	0.01	0.1100	14.013	0.0016	1.620	<0.0027	N/A
18010111	1271805	326	9.9434	3241.55	7.5	100	0.01	0.0650	8.280	0.0010	1.775	<0.0017	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE Environmental INC.

Clean your world.

January 29, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/26/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/26/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

USEPA

DateShipped: 1/25/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-151

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010102	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/25/2018	0	0	0	Liters	7:15:00 AM	1:50:00 PM	395	0	L/min
	18010103	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/25/2018	0	0	0	Liters	7:20:00 AM	1:55:00 PM	395	0	L/min
	18010104	AS24	Asbestos PCM	Air	MCE Cassette	1/25/2018	9.8719	9.9349	3426.58	Liters	7:38:00 AM	1:24:00 PM	346	9.9034	L/min
	18010105	AS26	Asbestos PCM	Air	MCE Cassette	1/25/2018	9.5108	9.6982	3265.53	Liters	7:51:00 AM	1:31:00 PM	340	9.6045	L/min
	18010106	AS15	Asbestos PCM	Air	MCE Cassette	1/25/2018	9.9094	10.061	3315.09	Liters	8:13:00 AM	1:45:00 PM	332	9.9852	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL Overnight Shipments	Ryan Whitehead START - R10	1/25/2018 1460	AEI	1/26/18 7:32	good

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/17/2018
DATE RECEIVED 1/18/2018
DATE ANALYZED 1/18/2018
DATE REPORTED 1/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010067	1181801	0.5	100	0.5/100
18010068	1181802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010069	1181803	Area	AS24	8:15 AM	1:25 PM	10.094	9.9845
18010070	1181804	Area	AS26	7:59 AM	1:33 PM	9.9034	9.897
18010071	1181805	Area	AS15	8:39 AM	1:45 PM	9.9158	9.971

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010069	1181803	310	10.0393	3112.18	11	100	0.005	0.1050	13.376	0.0017	1.655	<0.0027	N/A
18010070	1181804	334	9.9002	3306.67	8	100	0.005	0.0750	9.554	0.0011	1.741	<0.0019	N/A
18010071	1181805	306	9.9434	3042.68	9	100	0.005	0.0850	10.828	0.0014	1.705	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/17/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-144
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010067	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/17/2018	0	0	0	Liters	7:30:00 AM	1:50:00 PM	380	0	L/min
	18010068	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/17/2018	0	0	0	Liters	7:35:00 AM	1:55:00 PM	380	0	L/min
	18010069	AS24	Asbestos PCM	Air	MCE Cassette	1/17/2018	10.094	9.9845	3112.18	Liters	8:15:00 AM	1:25:00 PM	310	10.0393	L/min
	18010070	AS26	Asbestos PCM	Air	MCE Cassette	1/17/2018	9.9034	9.897	3306.67	Liters	7:59:00 AM	1:33:00 PM	334	9.9002	L/min
	18010071	AS15	Asbestos PCM	Air	MCE Cassette	1/17/2018	9.9158	9.971	3042.68	Liters	8:39:00 AM	1:45:00 PM	306	9.9434	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All (overnight storage)	Ryan Litchfield START R10	1/17/2018 1431	Sidney Carter AET	1/18/18 915	Good

ADVANTAGE Environmental INC.

Clean your world.

January 22, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/18/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/18/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/18/2018
DATE RECEIVED 1/19/2018
DATE ANALYZED 1/19/2018
DATE REPORTED 1/22/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010075	1191801	0.5	100	0.5/100
18010076	1191802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010072	1191803	Area	AS24	8:14 AM	12:56 PM	10.118	10.02
18010073	1191804	Area	AS26	8:35 AM	1:25 PM	10.026	10.032
18010074	1191805	Area	AS15	8:25 AM	1:15 PM	10.032	10.026

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010072	1191803	282	10.0690	2839.46	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0020	N/A
18010073	1191804	290	10.029	2908.41	8	100	0.0025	0.0775	9.873	0.0013	1.741	<0.0023	N/A
18010074	1191805	290	10.0290	2908.41	9.5	100	0.0025	0.0925	11.783	0.0016	1.690	<0.0026	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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USEPA
DateShipped: 1/19/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-145
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010072	AS24	Asbestos PCM	Air	MCE Cassette	1/18/2018	10.118	10.02	2839.46	Liters	8:14:00 AM	12:56:00 PM	282	10.069	L/min
	18010073	AS26	Asbestos PCM	Air	MCE Cassette	1/18/2018	10.026	10.032	2908.41	Liters	8:35:00 AM	1:25:00 PM	290	10.029	L/min
	18010074	AS15	Asbestos PCM	Air	MCE Cassette	1/18/2018	10.032	10.026	2908.41	Liters	8:25:00 AM	1:15:00 PM	290	10.029	L/min
	18010075	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/18/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18010076	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/18/2018	0		0	Liters	7:35:00 AM		380	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Steve Hall START	14:47 1/18/18	AET	1/19/18 9:20	good

ADVANTAGE Environmental INC.

Clean your world.

January 22, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/19/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/19/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/19/2018
DATE RECEIVED 1/20/2018
DATE ANALYZED 1/20/2018
DATE REPORTED 1/22/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010080	1201801	0.5	100	0.5/100
18010081	1201802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010077	1201803	Area	AS24	7:43 AM	1:10 PM	10.074	9.949
18010078	1201804	Area	AS26	7:53 AM	1:29 PM	10.019	9.996
18010079	1201805	Area	AS15	8:04 AM	1:19 PM	9.998	10.011

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010077	1201803	327	10.0115	3273.76	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0017	N/A
18010078	1201804	336	10.0075	3362.52	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0016	N/A
18010079	1201805	315	10.0045	3151.42	9.5	100	0.005	0.0900	11.465	0.0014	1.690	<0.0024	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/20/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-146
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010077	AS24	Asbestos PCM	Air	MCE Cassette	1/19/2018	10.074	9.949	3273.76	Liters	7:43:00 AM	1:10:00 PM	327	10.0115	L/min
	18010078	AS26	Asbestos PCM	Air	MCE Cassette	1/19/2018	10.019	9.996	3362.52	Liters	7:53:00 AM	1:29:00 PM	336	10.0075	L/min
	18010079	AS15	Asbestos PCM	Air	MCE Cassette	1/19/2018	9.998	10.011	3151.42	Liters	8:04:00 AM	1:19:00 PM	315	10.0045	L/min
	18010080	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/19/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18010081	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/19/2018	0		0	Liters	7:35:00 AM		380	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all 24 hrs	START	1/19/18 14:00		1/20/18 6:56	good

ADVANTAGE Environmental INC.

Clean your world.

January 24, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/20/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/20/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/20/2018
DATE RECEIVED 1/22/2018
DATE ANALYZED 1/22/2018
DATE REPORTED 1/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010085	1221801	0.5	100	0.5/100
18010086	1221802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010082	1221803	Area	AS24	7:59 AM	1:06 PM	10	9.873
18010083	1221804	Area	AS26	8:12 AM	1:23 PM	10.091	10.124
18010084	1221805	Area	AS15	8:26 AM	1:16 PM	9.933	10.037

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010082	1221803	307	9.9365	3050.51	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0019	N/A
18010083	1221804	311	10.1075	3143.43	9	100	0.0025	0.0875	11.146	0.0014	1.705	<0.0023	N/A
18010084	1221805	290	9.9850	2895.65	8.5	100	0.0025	0.0825	10.510	0.0014	1.720	<0.0024	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/22/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-147
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010082	AS24	Asbestos PCM	Air	MCE Cassette	1/20/2018	10	9.873	3050.51	Liters	7:59:00 AM	1:06:00 PM	307	9.9365	L/min
	18010083	AS26	Asbestos PCM	Air	MCE Cassette	1/20/2018	10.091	10.124	3143.43	Liters	8:12:00 AM	1:23:00 PM	311	10.1075	L/min
	18010084	AS15	Asbestos PCM	Air	MCE Cassette	1/20/2018	9.933	10.037	2895.65	Liters	8:26:00 AM	1:16:00 PM	290	9.985	L/min
	18010085	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/20/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18010086	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/20/2018	0		0	Liters	7:35:00 AM		380	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	[signature] START	1/20/18 14:00	[signature] Courier NEI	1/22/18 650	Good

ADVANTAGE Environmental INC.

Clean your world.

January 24, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/22/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/22/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/22/2018
DATE RECEIVED 1/23/2018
DATE ANALYZED 1/23/2018
DATE REPORTED 1/24/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010087	1231801	1	100	1/100
18010088	1231802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010089	1231803	Area	AS24	8:02 AM	1:15 PM	9.913	9.9213
18010090	1231804	Area	AS26	8:21 AM	1:25 PM	9.9085	10.085
18010091	1231805	Area	AS15	8:50 AM	2:31 PM	9.8814	10.062

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010089	1231803	313	9.9172	3104.08	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0017	N/A
18010090	1231804	304	9.99675	3039.03	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0019	N/A
18010091	1231805	341	9.9717	3400.35	9	100	0.005	0.0850	10.828	0.0012	1.705	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/22/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-148
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010087	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/22/2018	0	0	0	Liters	7:30:00 AM	2:35:00 PM	425	0	L/min
	18010088	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/22/2018	0	0	0	Liters	7:35:00 AM	2:40:00 PM	425	0	L/min
	18010089	AS24	Asbestos PCM	Air	MCE Cassette	1/22/2018	9.913	9.9213	3104.08	Liters	8:02:00 AM	1:15:00 PM	313	9.9172	L/min
	18010090	AS26	Asbestos PCM	Air	MCE Cassette	1/22/2018	9.9085	10.085	3039.03	Liters	8:21:00 AM	1:25:00 PM	304	9.9968	L/min
	18010091	AS15	Asbestos PCM	Air	MCE Cassette	1/22/2018	9.8814	10.062	3400.35	Liters	8:50:00 AM	2:31:00 PM	341	9.9717	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL Overnight storage in trailer	Ryan Whitehead START	1/22/2018 15:40	AEI	1/23/18 10:56	good

ADVANTAGE Environmental INC.

Clean your world.

January 26, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/23/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/23/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/23/2018
DATE RECEIVED 1/24/2018
DATE ANALYZED 1/24/2018
DATE REPORTED 1/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010095	1241801	0.5	100	0.5/100
18010096	1241802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010092	1241803	Area	AS24	8:53 AM	1:23 PM	9.9422	9.8411
18010093	1241804	Area	AS26	8:36 AM	1:14 PM	10.115	9.9449
18010094	1241805	Area	AS15	9:18 AM	1:41 PM	9.9043	9.9404

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010092	1241803	270	9.8917	2670.76	7	100	0.0025	0.0675	8.599	0.0012	1.785	<0.0022	N/A
18010093	1241804	278	10.02995	2788.34	10	100	0.0025	0.0975	12.420	0.0017	1.670	<0.0029	N/A
18010094	1241805	263	9.9224	2609.59	6	100	0.0025	0.0575	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 1/24/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-149
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010092	AS24	Asbestos PCM	Air	MCE Cassette	1/23/2018	9.9422	9.8411	2670.76	Liters	8:53:00 AM	1:23:00 PM	270	9.8917	L/min
	18010093	AS26	Asbestos PCM	Air	MCE Cassette	1/23/2018	10.115	9.9449	2788.34	Liters	8:36:00 AM	1:14:00 PM	278	10.03	L/min
	18010094	AS15	Asbestos PCM	Air	MCE Cassette	1/23/2018	9.9043	9.9404	2609.59	Liters	9:18:00 AM	1:41:00 PM	263	9.9224	L/min
	18010095	Blank 1	Asbestos PCM	Air	MCE Cassette	1/23/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18010096	Blank 2	Asbestos PCM	Air	MCE Cassette	1/23/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
samples overnight	START	1/23/18 14:22	Sidney Cucker HEI	1/24/18 0655	Good

ADVANTAGE Environmental INC.

Clean your world.

January 26, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/24/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/24/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/24/2018
DATE RECEIVED 1/25/2018
DATE ANALYZED 1/25/2018
DATE REPORTED 1/26/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010097	1251801	0.5	100	0.5/100
18010098	1251802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010099	1251803	Area	AS24	8:04 AM	1:09 PM	9.8416	9.9046
18010100	1251804	Area	AS26	8:17 AM	1:25 PM	9.5565	9.6548
18010101	1251805	Area	AS15	8:35 AM	1:39 PM	9.937	10.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010099	1251803	305	9.8731	3011.3	9	100	0.005	0.0850	10.828	0.0014	1.705	<0.0024	N/A
18010100	1251804	308	9.60565	2958.56	7.5	100	0.005	0.0700	8.917	0.0012	1.775	<0.0021	N/A
18010101	1251805	304	9.9985	3039.54	6	100	0.005	0.0550	7.006	0.0009	1.839	<0.0016	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 1/24/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-150

Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010097	Blank 1	Asbestos PCM	Blank	MCE Cassette	1/24/2018	0	0	0	Liters	7:30:00 AM	1:50:00 PM	380	0	L/min
	18010098	Blank 2	Asbestos PCM	Blank	MCE Cassette	1/24/2018	0	0	0	Liters	7:35:00 AM	1:55:00 PM	380	0	L/min
	18010099	AS24	Asbestos PCM	Air	MCE Cassette	1/24/2018	9.8416	9.9046	3011.3	Liters	8:04:00 AM	1:09:00 PM	305	9.8731	L/min
	18010100	AS26	Asbestos PCM	Air	MCE Cassette	1/24/2018	9.5565	9.6548	2958.56	Liters	8:17:00 AM	1:25:00 PM	308	9.6057	L/min
	18010101	AS15	Asbestos PCM	Air	MCE Cassette	1/24/2018	9.937	10.06	3039.54	Liters	8:35:00 AM	1:39:00 PM	304	9.9985	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com, and rlocke@ene.com. Samples and original COC custody sealed in bag overnight in START desk in jobsite trailer.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL [illegible]	Ryan [illegible] START	1/24/2018 1514	Sidney Carter AEI	1/25 0851	Good

ADVANTAGE Environmental INC.

Clean your world.

January 29, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/25/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/25/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/25/2018
DATE RECEIVED 1/26/2018
DATE ANALYZED 1/26/2018
DATE REPORTED 1/29/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010102	1261801	1	100	1/100
18010103	1261802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010104	1261803	Area	AS24	7:38 AM	1:24 PM	9.8719	9.9349
18010105	1261804	Area	AS26	7:51 AM	1:31 PM	9.5108	9.6982
18010106	1261805	Area	AS15	8:13 AM	1:45 PM	9.9094	10.061

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010104	1261803	346	9.9034	3426.58	9	100	0.005	0.0850	10.828	0.0012	1.705	<0.0021	N/A
18010105	1261804	340	9.6045	3265.53	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0017	N/A
18010106	1261805	332	9.9852	3315.09	6.5	100	0.005	0.0600	7.643	0.0009	1.810	<0.0016	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE
Environmental INC.

EPA RIVER STREET
EMPLOYEE EXPOSURE

Project:
1525 North River Street
Portland, OR

Prepared By:
Advantage Environmental Inc.
9317 NE Hwy 99., Suite A
Vancouver, WA 98665

ADVANTAGE Environmental INC.

Clean your world.

September 25, 2017

Environmental Quality Management
Jerry Wade
6825 216th Street SW, Suite J
Lynnwood, WA 98036

RE: Employee exposure: River St Water Front Project
1525 North River Street. Portland, OR

Dear Mr. Wade,

Per our discussion on Friday September 21, concerning employee asbestos exposure for the above-mentioned address, and whether certified abatement workers and supervisors are required to move material to an area for Performance Abatement Services (PAS) to load for transport. Advantage Environmental, Inc. (AEI) is pleased to provide our findings for exposure and possible risks.

Advantage Environmental, Inc. (AEI) has been involved in this project from the onset. We have been performing area monitoring and personal air monitoring, as well as providing daily oversight of the project by certified NISOH equivalent Technicians and senior management.

The historic air data that we have from phase one of the project, showed that all area air sampling and personal employee air sampling, came back below that PEL on all days that was work being performed at the burn site. This sampling was performed on employees on the ground as well as employees in heavy equipment. Additionally, we have been performing area air sampling and personal employee air sampling when phase two began at the burn site. Air sampling thus far on phase two have all resulted below the PEL.

The current strategy at this time for the burn site is that all areas of the trestle will be demarcated and the demarcated areas will run along the perimeters of the trestle. That current strategy allows the trestle to be outside of the regulated area. It is our belief that all work performed on the trestle is outside of the regulated area and does not meet the standards of the employees needing to be certified asbestos workers and supervisors. This is supported by historic and current air data, as well as conversations with Oregon Department of Environmental Quality (DEQ) rep Zebuliah Bates.

Requirements for the trestle and employees within that area to NOT be certified asbestos workers and supervisors would be the following: All EQM employees will need asbestos awareness training. They will need to stay outside of the regulated areas. Performance Abatement Services (PAS) employees perform all waste load out in a regulated area that is only accessed by certified asbestos workers. Area and personal air monitoring is performed on the trestle and employees on a daily basis. In the event that there is an elevation in the air sampling results, all work will be halted until work procedures/corrections are implemented to stop elevated fiber counts/air sampling results.

We appreciate the opportunity to advise you on your project. Please feel free to contact us at 503 522-1369 if you have any questions.

Respectfully,

Advantage Environmental, Inc.

Sidney Carter
Senior Project Manager
AHERA Project Designer #MP-16-4512B

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 9/20/2017
DATE RECEIVED 9/20/2017
DATE ANALYZED 9/20/2017
DATE REPORTED 9/21/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9201701	1	100	1/100
B2	9201702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92001	9201703	STEL	Jacob Johnson-Burn cell-Running water hose-Pump LV-5	1:25 PM	1:55 PM	2.06	2.06
92002	9201704	STEL	Jim Boyse-Burn cell-Running excavator-Pump LV-21	1:28 PM	1:58 PM	2.06	2.06
92003	9201705	P	Jacob Johnson-Burn cell-Running water hose-Pump LV-5	1:55 PM	2:30 PM	2.06	2.06
92004	9201706	P	Jim Boyse-Burn cell-Running excavator-Pump LV-21	1:55 PM	2:30 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
92001	9201703	30	2.06	61.8	8	100	0.005	0.0750	9.554	0.0595	1.741	<0.1036	0.0082
92002	9201704	30	2.06	61.8	10	100	0.005	0.0950	12.102	0.0754	1.670	<0.1259	0.0099
92003	9201705	35	2.06	72.1	9.5	100	0.005	0.0900	11.465	0.0612	1.690	<0.1035	0.0082
92004	9201706	35	2.06	72.1	11	100	0.005	0.1050	13.376	0.0714	1.655	<0.1182	0.0099

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

APPENDIX L
Negative Exposure

Advantage Environmental

Daily Project Log

Time	Observations

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:15-15:30-Less 30-minute lunchbreak

Total Technician Hours: **5.75**

Senior Project Manager:
Sidney Carter: 00:00-00:00

Total Senior Project Manager Hours: **4**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/272018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-30, LV-32 & LV-36 ~ HV Pumps: None

Daily Weather: 40° F, 76% Humidity

Time	Observations
09:10	PAS continues removing debris from beach
09:11	Observed pontoons are fully functional in the water
09:15	Placed Sample on Pump #LV-36 on Brent Hardinger
09:18	Placed Sample on Pump #LV-30 on Jacob Johnson
09:20	Placed Sample on Pump #LV-32 mounted to front of Excavator
09:20	Excavator moves rock onto trucks
09:45	Removed Sample from Pump #LV-36
09:46	Placed Sample on Pump #LV-36 on Brent Hardinger
09:48	Removed Sample from Pump #LV-30
09:49	Placed Sample on Pump #LV-30 on Jacob Johnson
10:00	Sid, Jibri & Ronnie with Advantage Environmental conduct visual inspection of beach
12:20	Sid, Jibri & Ronnie finish beach inspection
12:21	Removed Sample from Pump #LV-36
12:23	Removed Sample from Pump #LV-30
12:40	Placed Sample on Pump #LV-36 on Brent Hardinger
12:41	Placed Sample on Pump #LV-30 on Jacob Johnson
13:30	Excavator continues moving rock
14:33	Removed Sample from Pump #LV-30
14:36	Removed Sample from Pump #LV-36
14:37	Removed Sample from Pump #LV-32
15:30	Left worksite
16:30	Completed documentation and end of work shift

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:42	Placed Sample on Pump #LV-38 on Brent Hardinger
12:56	Sid, Jibri & Jacob did inspection of beach and laid out plan to Jacob for PAS to implement in cleaning of Beach of debris
13:10	Walkthrough complete
13:15	Forklift brings poly-lined Low Side to Center Area
13:16	Excavator fills Low Side with debris
13:27	Forklift removes Low Side
13:36	Forklift brings Low Side
13:37	Excavator fills Low Side
13:52	Forklift removes Low Side
14:00	2 O'clock Meeting
14:25	Began collecting pumps and samples from air monitoring
14:30	Removed Sample from Pump #LV-1
14:34	Removed Sample from Pump #LV-38
15:00	Left worksite for the day
16:00	Completed documentation and end of work shift

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-15:00-Less 30-minute lunchbreak **Total Technician Hours:** **5.5**

Senior Project Manager:
Sidney Carter: 07:00-09:30 **Total Senior Project Manager Hours:** **2.5**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/26/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-38 ~ HV Pumps: None

Daily Weather: 36° F, 72% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:35	Observed pontoons are fully functional in the water
08:00	2 Trucks get filled with rock
08:05	PAS begins picking-up debris from Beach
08:05	Placed Sample on Pump #LV-1 on Ever Bonilla
08:10	Placed Sample on Pump #LV-38 on Brent Hardinger
08:35	Removed Sample from Pump #LV-1
08:36	Placed Sample on Pump #LV-1 on Ever Bonilla
08:40	Removed Sample from Pump #LV-38
08:41	Placed Sample on Pump #LV-38 on Brent Hardinger
08:50	Placed Sample on Pump #HV-52 at the End of Loading Area
09:15	Trucks depart with rock
10:55	PAS continues to clean beach
10:59	Dumpster Truck drops off poly-lined Low Side in Center Area
11:00	Removed Sample from Pump #HV-52
11:02	Excavator removes some debris from poly-lined Low Side
11:06	Dumpster Truck picks-up waiting filled Low Side and hauls it away from worksite for offloading
11:50	Removed Sample from Pump #LV-1
11:52	Removed Sample from Pump #LV-38
12:00	Lunchbreak
12:40	Placed Sample on Pump #LV-1 on Ever Bonilla

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

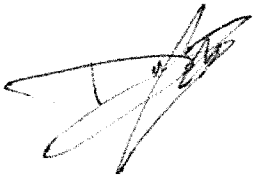
Time	Observations
13:10	Removed Sample from Pump #LV-38
13:12	Removed Sample from Pump #LV-1
13:30	Finished analyzing and left worksite for the day
14:30	Finished documentation and end of work shift

Total air sampled collected / analyzed=6
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-14:30-Less 30-minute lunchbreak **Total Technician Hours:** **7**

Senior Project Manager:
Denis Dooley: 0:00-0:00 **Total Senior Project Manager Hours:** **0.00**

Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/24/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-38 ~ HV Pumps: None

Daily Weather: 36° F, 72% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	PAS begins clearing the beach of debris
07:25	Observed pontoons are fully functional in the water
07:30	Forklift brings Low Side 1 to Center Area
07:30	Placed Sample on Pump #LV-38 on Brent Hardinger
07:31	Excavator fills Low Side 1
07:34	Placed Sample on Pump #LV-1 on Dave Nelson
08:00	Removed Sample from Pump #LV-38
08:01	Placed Sample on Pump #LV-38 on Brent Hardinger
08:04	Removed Sample from Pump #LV-1
08:05	Placed Sample on Pump #LV-1 on Dave Nelson
09:00	PAS continues to clean embankment of debris
10:00	PAS continues to clean embankment of debris
10:52	PAS continues to clean embankment of debris
11:55	Removed Sample from Pump #LV-38
11:56	Removed Sample from Pump #LV-1
12:00	Lunchbreak
12:30	PAS goes back to cleaning beach of debris
12:35	Placed Sample on Pump #LV-38 on Brent Hardinger
12:36	Placed Sample on Pump #LV-1 on Dave Nelson
13:00	Began collecting pumps and air samples to be analyzed

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:27	Forklift removes Low Side 4
10:31	PAS continues to wrap Low Side sin poly
10:35	Jibri & Sid perform inspection on beach to make determination in clean-up and conclude there is still a lot of clean-up to perform, Sid takes bulk samples of roof debris that is littered on NW embankment
11:22	PAS continues to clean beach of debris
11:50	Removed Sample from Pump #LV-1
11:52	Removed Sample from Pump #LV-38
12:00	Lunchbreak
12:00	Removed Sample from Pump #HV-52
12:31	Placed Sample on Pump #LV-1 on Daniel McConnell
12:33	Placed Sample on Pump #LV-38 on Brent Hardinger
12:35	Forklift brings Low Side to Center Loading Area
12:36	Excavator fills Low Side with debris
12:51	Forklift removes Low Side & brings another
13:12	Excavator fills Low Side with debris
13:30	Forklift removes poly lined and secured Low Side
14:00	2 O'clock Meeting
14:25	Removed Sample from Pump #LV-1
14:27	Removed Sample from Pump #LV-38
14:30	Finished collecting personal and area pumps and air samples
15:30	Finished analyzing personal and area air samples and left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-Less 30-minute lunchbreak **Total Technician Hours:** **9**

Senior Project Manager:
Denis Dooley: 0:00-0:00 **Total Senior Project Manager Hours:** **0.00**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/23/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-38 ~ HV Pumps: HV-52

Daily Weather: 32° F, 61% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	Placed Sample on Pump #LV-1 on Daniel McConnell
07:22	Placed Sample on Pump #LV-38 on Brent Hardinger
07:25	PAS begins lining end Dump 1 & 4 Low Sides
07:30	Excavator begins processing debris in Center Area
07:30	Placed Sample on Pump #HV-52 at Center Loading Area
07:50	Removed Sample from Pump #LV-1
07:51	Placed Sample on Pump #LV-1 on Daniel McConnell
07:52	Removed Sample from Pump #LV-38
07:53	Placed Sample on Pump #LV-38 on Brent Hardinger
08:00	End Dump 1 moves into position
08:02	Excavator fills End Dump1
08:40	End Dump 1 moves forward for PAS to wrap and secure in poly
08:43	Forklift brings Low Side 1 to Center Area
08:45	Excavator fills Low Side 1 with debris
09:07	Forklift removes Low Side 1 & brings Low Side 2
09:17	Excavator fills Low Side 2
09:30	Forklift removes Low Side 2 & brings Low Side 3
09:45	Excavator fills Low Side 3 with debris
10:00	Forklift removes Low Side 3 and brings Low Side 4
10:15	Excavator fills Low Side 4

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:20	PAS continues to cut piling poles from concrete blocks
11:53	Removed Sample from Pump #LV-38
11:56	Removed Sample from Pump #LV-1
11:58	Removed Sample from Pump #HV-52
11:59	Placed Sample on Pump #HV-52 at Center Loading Area
12:00	Lunchbreak
12:31	Placed Sample on Pump #LV-38 on Brent Hardinger
12:34	Placed Sample on Pump #LV-1 on Jacob Johnson
12:35	PAS begins lining 2 Low Sides with poly
13:15	Forklift brings Low Side 1 to Center Loading Area
13:16	Excavator fills Low Side 1
13:26	Forklift Removes Low Side 1
13:36	Forklift brings Low Side 2 to Center Loading Area
13:37	Excavator fills Low Side 2 with debris
13:56	Forklift removes Low Side 2
14:27	Removed Sample from Pump #HV-52
14:31	Removed Sample from Pump #LV-38
14:33	Removed Sample from Pump #LV-1
14:45	Left worksite for the day
15:45	Completed analyzing, completed documentation and end of work shift

Total air sampled collected / analyzed=5
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 11:00-14:45-Less 30-minute lunchbreak **Total Technician Hours:** **3.25**

Senior Project Manager:
Denis Dooley: 07:00-11:00 **Total Senior Project Manager Hours:** **4**

Denis Dooley / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/22/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

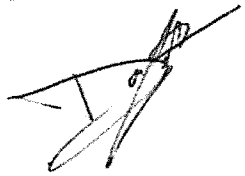
Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-38 ~ HV Pumps: HV-52

Daily Weather: 33° F, 89% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Picked up Start Samples
07:30	Observed pontoons are fully operational within the water
07:30	Placed Sample on Pump #HV-52 at Center Loading Area
07:40	Placed Sample on Pump #LV-38 on Brent Hardinger
07:40	EQM began loading the 1st dumpster
07:45	Placed Sample on Pump #LV-1 on Jacob Johnson
08:00	2nd dumpster began to be loaded
08:10	Removed Sample from Pump #LV-38
08:11	Placed Sample on Pump #LV-38 on Brent Hardinger
08:15	Removed Sample from Pump #LV-1
08:16	Placed Sample on Pump #LV-1 on Jacob Johnson
08:20	3rd box loaded
08:30	PAS began to seal boxes with poly
09:00	All four dumpsters on site are now full with debris. PAS continues to seal the dumpsters in pol. The 350 G is off and Brent is out of the cab
09:30	Talked with PAS Dave, two dumpsters are on the way to be delivered to the worksite
10:15	PAS crew is suiting back up to resume debris cleanup beneath the pier foundation and beach areas
10:40	PAS work crew are using a chainsaw to cut off the creosoted poles from concrete post that were damaged during the fire and ensuing cleanup

Denis Dooley / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
09:42	Excavator fills Roll Off 4
10:10	Forklift removes Roll Off 4
10:30	Randy announces that worksite is going to shutdown at 12:00pm for inclement weather conditions
10:40	Began collecting area and personal personal pumps and samples
10:41	Removed Sample from Pump #LV-38
10:45	Removed Sample from Pump #HV-52
10:46	Inspected area on beach that PAS has cleaned, area looks clear of debris and in good condition
10:48	Removed Sample from Pump #LV-1
11:15	Left worksite for site shutdown due to inclement weather conditions
12:15	Completed analyzation of area and personal samples and documentation, end of work shift

Total air sampled collected / analyzed=5
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-11:15

Total Technician Hours: **4.25**

Senior Project Manager:
Sidney Carter: 08:45 to 09:15

Total Senior Project Manager Hours: **.50**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/20/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-38 ~ HV Pumps: HV-52

Daily Weather: 36° F, 96% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:30	Observed pontoons are fully functional in the water
07:30	PAS lines 4 rolls of dumpsters
07:40	Forklift brings Roll Off 1 to Center Loading Area
07:41	Excavator fills Roll Off 1
07:47	Placed Sample on Pump #LV-38 on Tommy Smith
07:50	Placed Sample on Pump #LV-1 on Ever Bonilla
07:52	Placed Sample on Pump #HV-52 in Center Loading Area
07:53	Forklift Removes Roll Off 1
08:00	Forklift brings Roll Off 2 to Center Loading Area
08:02	Excavator fills Roll Off 2
08:17	Forklift removes Roll Off 2
08:17	Removed Sample from Pump #LV-38
08:18	Placed Sample on Pump #LV-38 on Tommy Smith
08:20	Removed Sample from Pump #LV-1
08:21	Placed Sample on Pump #LV-1 on Ever Bonilla
08:26	Forklift brings Roll Off 3
08:27	Excavator fills Roll Off 3
08:41	Forklift removes Roll Off 3
09:15	Excavator moves rock in Center Loading Area
09:40	Forklift brings Roll Off 4 into place

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

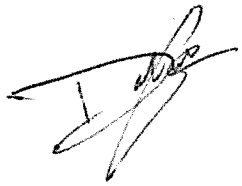
Time	Observations
12:00	Removed Sample from Pump #LV-31
12:01	Removed Sample from Pump #HV-52
12:02	Placed Sample on Pump #HV-52 at Northeast corner of worksite
12:30	PAS returns to cleaning Beach
12:31	Placed Sample on Pump #LV-31 on Brent Hardinger
12:32	Placed Sample on Pump #LV-1 on Jacob Johnson
13:00	Roll off dumpsters arrive for PAS to line in poly
13:36	Forklift moves roll off to Center Area for excavator
13:37	Excavator fills Roll Off 1
14:00	2 O'clock Meeting
14:30	Began collecting area and personal air samples
14:33	Removed Sample from Pump #LV-31
14:35	Removed Sample from Pump #LV-1
14:36	Removed Sample from Pump #HV-52
15:00	Left worksite
16:00	Completed documentation and end of work shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:00-less 30-minute lunch **Total Technician Hours:** **6.75**

Senior Project Manager:
Denis Dooley: 07:00 to 10:00 **Total Senior Project Manager Hours:** **3**

Denis Dooley / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/19/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-31 ~ HV Pumps: HV-52

Daily Weather: 34° F, 78% Humidity

Time	Observations
07:00	Morning Safety Meeting: winding down and processes entailed within the means of doing so, most made it in, all but one of the generators are being removed from the worksite, Sid said during meeting that AEI is OK with monitoring the Truck Loading Area only calling for fewer air samples to be run
07:15	Meeting over, headed to trailer and then to inspect pontoons
07:20	Arrived at worksite and observed that pontoons are fully functional
07:28	Began running air monitoring
07:28	Placed Sample on Pump #HV-52 at Northeast corner of worksite
07:30	Placed Sample on Pump #LV-31 on Brent Hardinger
07:36	Placed Sample on Pump #LV-1 on Jacob Johnson
07:50	Regrouped with Sid to discuss final inspection with David & Jacob of PAS
08:00	Removed Sample from Pump #LV-31
08:01	Placed Sample on Pump #LV-31 on Brent Hardinger
08:06	Removed Sample from Pump #LV-1
08:07	Placed Sample on Pump #LV-1 on Jacob Johnson
08:50	EQM is washing down steel plates with the water truck prior to removing them from worksite
09:00	Sid, Denis & Jibri walked beach with PAS to inspect and gather debris
10:00	Inspection done for the day
11:30	Inspected NE section of beach and concluded that more work is needed before rock is laid down
11:55	Removed Sample from Pump #LV-1
12:00	Lunch

Denis Dooley / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:13	PAS begins lining High Side 3 with poly
10:42	High Side 2 moves into place
10:43	Excavator begins to fill High Side 2
11:20	High Side 2 moves forward
11:22	PAS begins wrapping High Side 2 with poly
11:27	High Side 3 moves into place to be loaded with debris
11:28	Excavator begins filling High Side 3 with debris
11:50	Removed Sample from Pump #LV-1
11:52	High Side 3 moves forward to be wrapped and secured with poly by PAS
11:52	Removed Sample from Pump #LV-36
12:00	Lunch Break
12:00	Removed Sample from Pump #HV-33
12:01	Placed Sample on Pump #HV-33 on Southside of Regulated Area
12:04	Removed Sample from Pump #HV-22
12:05	Placed Sample on Pump #HV-22 in Center Area
12:06	Removed Sample from Pump #HV-52
12:07	Placed Sample on Pump #HV-52 at Northside of Regulated Area
12:36	Placed Sample on Pump #LV-36 on Brent Hardinger
12:40	PAS begins lining 4 Low Sides with poly for debris to be loaded into
12:52	Placed Sample on Pump #LV-1 on Ever Bonilla
12:57	Forklift moves Low Side 1 into place
12:58	Excavator fills Low Side 1 with debris
13:15	Forklift removes Low Side 1
13:20	Forklift moves Low Side 2 into place to be loaded with debris
13:22	PAS wraps and secures Low Side 1 in poly
13:35	Forklift removes Low Side 2
13:40	Forklift moves Low Side 3 into place to be loaded with debris
13:41	Excavator fills Low Side 3 with debris
13:57	Forklift removes Low Side 3
14:00	2 O'clock Meeting
14:32	Removed Sample from Pump #LV-1
14:34	Removed Sample from Pump #LV-36
14:40	Removed Sample from Pump #HV-33
14:43	Removed Sample from Pump #HV-22
14:45	Removed Sample from Pump #HV-52
14:45	Finished collecting pumps with area and personal samples
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/10/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

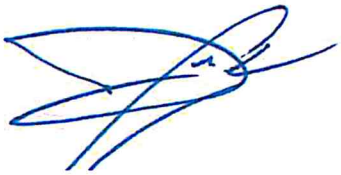
Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 52° F, 89% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Began setting pumps and samples after observing pontoons are fully operational in the water
07:16	Placed Sample on Pump #LV-1 on Ever Bonilla
07:18	Placed Sample on Pump #LV-36 on Brent Hardinger
07:20	Placed Sample on Pump #HV-33 on Southside of Regulated Area
07:24	Placed Sample on Pump #HV-22 in Center Area
07:26	Placed Sample on Pump #HV-52 at Northside of Regulated Area
07:35	PAS lining dumpsters in poly for debris to be loaded into
07:46	Removed Sample from Pump #LV-1
07:47	Placed Sample on Pump #LV-1 on Ever Bonilla
07:48	Removed Sample from Pump #LV-36
07:49	Placed Sample on Pump #LV-36 on Brent Hardinger
07:58	Excavator begins processing debris in Center Area while fire hose is wetting debris in order to maintain dust control
08:10	High Side Dumpster Truck 1 begins getting lined with poly by PAS for debris to be loaded into
09:10	High Side 1 moves into position for excavator to fill with debris
09:12	Excavator begins filling High Side 1
09:32	High Side 1 moves forward to be wrapped and secured with poly by PAS
09:33	PAS lines High Side 2 with poly for debris to be loaded into
09:45	High Side 2 moves into position to be loaded with debris
09:46	Excavator begins filling High Side 2 with debris

Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
08:53	Forklift begins removing AAC equipment & placing into their Staging Area
09:10	Excavator processes debris in Center Area
09:35	Crane flies another deck section
10:06	Crane flies another deck section
10:15	EQM sprays water on debris in Center Area in order to maintain dust control while excavator is crunching and munching
10:32	Crane flies another deck section
11:00	Excavator continuing to process debris
11:07	EQM continues to spray water on debris in order to maintain dust control
11:15	Crane flies another deck section
11:42	Crane flies another deck section
11:49	Excavator processes deck section
11:53	Removed Sample from Pump #LV-1
11:55	Removed Sample from Pump #LV-30
11:59	Removed Sample from Pump #LV-32
12:00	Lunch Break
12:03	Removed Sample from Pump #HV-33
12:04	Placed Sample on Pump #HV-33 on Southside of Regulated Area
12:07	Removed Sample from Pump #HV-22
12:08	Placed Sample on Pump #HV-22 at Center Area
12:10	Removed Sample from Pump #HV-52
12:11	Placed Sample on Pump #HV-52 at Northside of Regulated Area
12:31	Placed Sample on Pump #LV-1 on Daniel McConnell
12:37	Placed Sample on Pump #LV-30 on Tommy Smith
12:39	Placed Sample on Pump #LV-32 on Kent Parker
13:00	Crane flies another deck section
13:20	Excavator continues to process deck sections & debris in Center Area
14:00	2 O'clock Meeting
14:30	Began collecting area and personal pumps and samples
14:36	Removed Sample from Pump #LV-30
14:39	Removed Sample from Pump #LV-32
14:43	Removed Sample from Pump #HV-33
14:46	Removed Sample from Pump #HV-22
14:50	Removed Sample from Pump #HV-52
14:51	Removed Sample from Pump #LV-1
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/09/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger, Dale Cox / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-30 & LV-33 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 45° F, 74% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:25	Began to set area and personal pumps after observing that pontoons were fully functional in the water
07:27	Placed Sample on Pump #LV-30 on Tommy Smith
07:30	Placed Sample on Pump #LV-1 on Daniel McConnell
07:32	Placed Sample on Pump #HV-33 on Southside of Regulated Area
07:33	Placed Sample on Pump #LV-32 on Kent Parker
07:36	Placed Sample on Pump #HV-22 at Center Area
07:39	Placed Sample on Pump #HV-52 at Northside of Regulated Area
07:46	Crane dumps skirt bucket on debris pile
07:57	Removed Sample from Pump #LV-30
07:58	Placed Sample on Pump #LV-30 on Tommy Smith
08:00	Removed Sample from Pump #LV-1
08:00	Excavator begins moving 2 rocks in Center Area
08:01	Placed Sample on Pump #LV-1 on Daniel McConnell
08:02	Crane lowers steel square for PAS to attach deck sections to for removal
08:03	Removed Sample from Pump #LV-32
08:04	Placed Sample on Pump #LV-32 on Kent Parker
08:30	Crane flies deck section to Center Area
08:50	Crane flies another deck section

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:05	Pettibone moves more mud matts to AAC Staging Area
09:27	Crane lifts steel beam from Trestle 2 to Center Area
09:38	Crane lifts another steel beam from Trestle 2 to Center Area
10:09	Crane lowers debris bucket for PAS to fill with debris
10:22	Crane dumps bucket onto Center Area of Debris Pile
10:46	Crane lifts another steel beam to Center Area
10:48	PAS lines high side dumpster with poly
11:15	High side moves into position
11:17	Excavator fills high side
11:38	High side drives away to be wrapped and secured with poly by PAS
11:52	Removed Sample from Pump #LV-32
11:56	Removed Sample from Pump #LV-38
12:00	Lunch break
12:00	Removed Sample from Pump #LV-1
12:05	Removed Sample from Pump #HV-52
12:06	Placed Sample on Pump #HV-52 on Southside of Loading Area
12:08	Removed Sample from Pump #HV-22
12:09	Placed Sample on Pump #HV-22 at Central Loading Area
12:11	Removed Sample from Pump #HV-33
12:12	Placed Sample on Pump #HV-33 on the Northside of Regulated Area
12:30	Pettibone removes pilings from Center Area to AAC Staging Area
12:30	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
12:31	Placed Sample on Pump #LV-38 on Kent Parker
12:32	Placed Sample on Pump #LV-1 on Daniel McConnell
12:40	PAS lines high side dumpster with poly
13:00	Excavator begins filling high side
13:45	PAS continues cutting and removing sections of decking in Center Area
14:15	Crane vibrates another piling
14:30	2 O'clock Meeting
14:36	Removed Sample from Pump #LV-32
14:38	Removed Sample from Pump #LV-38
14:41	Removed Sample from Pump #LV-1
14:43	Removed Sample from Pump #HV-52
14:45	Removed Sample from Pump #HV-22
14:47	Removed Sample from Pump #HV-33
15:00	Began collecting pumps and samples
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/08/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-32 & LV-38 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 55° F, 73% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:05	Picked-up Samples from Start
07:20	Placed Sample on Pump #HV-33 on the Northside of Regulated Area
07:24	Placed Sample on Pump #HV-22 at Central Loading Area
07:26	Placed Sample on Pump #HV-52 on Southside of Loading Area
07:30	PAS went onto the beach to begin cleaning debris
07:35	Placed Sample on Pump #LV-38 on Kent Parker
07:40	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
07:45	AAC began removing decking from last section of Trestle 2
07:45	Placed Sample on Pump #LV-1 on Daniel McConnell
08:00	PAS continues to cut sections of decking in order to prepare to remove them on Monday
08:05	Removed Sample from Pump #LV-38
08:06	Placed Sample on Pump #LV-38 on Kent Parker
08:10	Removed Sample from Pump #LV-32
08:11	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
08:15	Inspected beach for preparation of final cleaning & observed pontoons are fully functional in the water
08:15	Removed Sample from Pump #LV-38
08:16	Placed Sample on Pump #LV-1 on Daniel McConnell
08:30	AAC continues to remove Trestle decking from Trestle 2
08:50	Pettibone moves mud matts to AAC Staging Area

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

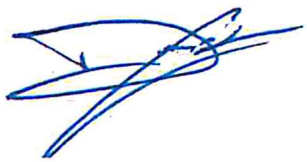
Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:45	AAC emptied one skiff from Beach Head
08:58	Crane lifts steel beams onto waiting Flatbed Truck
09:10	Excavator fills poly-lined High Side Dumpster
09:30	High Side Dumpster drives to Staging Area to be wrapped in poly by PAS
09:45	Water Truck sprays water onto roadway of N River St to maintain dust control
10:19	Crane lifts out piling to Center Loading Area
10:30	AAC begins cutting clamped end of piling off
10:35	Crane using hydraulic hammer begins vibrating out another piling in order to remove it from Trestle 2
10:45	Crane lifts piling to Center Area
10:59	Poly-lined High Side Dumpster moves into place
11:00	Excavator begins filling High Side Dumpster
11:30	Crane lifts another piling to Center Area
11:40	Excavator fills another High Side Dumpster
11:50	Removed Sample from Pump #LV-38
11:53	Removed Sample from Pump #LV-32
11:57	Removed Sample from Pump #LV-1
12:00	Lunch Break
12:04	Removed Sample from Pump #HV-52
12:05	Placed Sample on Pump #HV-52 on Southside of Loading Area
12:07	Removed Sample from Pump #HV-22
12:08	Placed Sample on Pump #HV-22 at Center by Loading Area
12:10	Removed Sample from Pump #HV-33
12:11	Placed Sample on Pump #HV-33 on Northside by Regulated Area
12:31	Placed Sample on Pump #LV-38 on Brent Hardinger
12:34	Placed Sample on Pump #LV-32 on Mark Jeffers
12:37	Placed Sample on Pump #LV-1 on Misty Klampe
12:40	Forklift and Pettibone remove piling to AAC Staging Area
13:00	Crane lifts another piling to Center Area
13:30	Excavator fills another High Side Dumpster
13:45	Forklift & Pettibone remove another piling
13:50	Left worksite to begin analyzing area and personal samples from earlier in workday
14:00	2 O'clock Meeting
14:20	Left to begin collecting pumps and samples
14:25	Removed Sample from Pump #LV-38
14:29	Removed Sample from Pump #LV-32
14:31	Removed Sample from Pump #LV-1
14:37	Removed Sample from Pump #HV-22
14:34	Removed Sample from Pump #HV-52
14:40	Removed Sample from Pump #HV-33

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/07/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-32 & LV-38 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 43° F, 74% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:10	Picked-up Start Samples
07:17	Placed Sample on Pump #LV-38 on Brent Hardinger
07:20	Prepared pumps for area monitoring and personal sampling after observed pontoons in water are fully functional and operational
07:25	Placed Sample on Pump #HV-33 on Northside by Regulated Area
07:30	Placed Sample on Pump #HV-22 at Center by Loading Area
07:30	PAS began lining first set of trailers and sealing last dumpster from yesterday in poly
07:36	Placed Sample on Pump #HV-52 on Southside of Loading Area
07:45	AAC preparing to remove section of beams out today
07:45	Placed Sample on Pump #LV-1 on Misty Klampe
07:47	Removed Sample from Pump #LV-38
07:48	Placed Sample on Pump #LV-38 on Brent Hardinger
07:50	Placed Sample on Pump #LV-32 on Mark Jeffers
08:00	AAC continues to remove beams from Trestle 2
08:16	Removed Sample from Pump #LV-1
08:17	Placed Sample on Pump #LV-1 on Misty Klampe
08:20	Removed Sample from Pump #LV-32
08:21	Placed Sample on Pump #LV-32 on Mark Jeffers
08:30	1 Truck loaded with waste and being sealed in poly to be disposed of offsite
08:40	AAC removed all beams onto truck to be removed from worksite

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Total air sampled collected / analyzed=14
Total blank air samples analyzed=2
No injuries reported

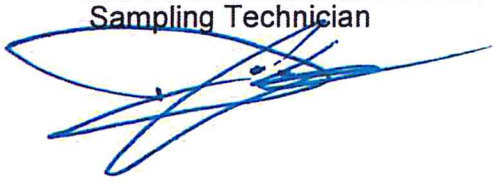
Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: **0**

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
08:15	Crane flies another section of decking
08:26	Crane flies another section of decking
08:31	High Side Dumpster drives away
08:33	Crane flies another section of decking
08:52	Poly lined double dumpster truck moves into position
08:53	Excavator fills double dumpster truck
09:00	Crane flies another section of decking
09:24	Double dumpster truck drives away
09:25	Crane flies another deck section
09:30	Excavator processes debris in Center Area
09:40	Crane flies another section of decking
09:52	Crane flies another section of decking
10:00	Left worksite to read samples at trailer
10:45	High side dumpster is being lined with poly
11:00	Crane lowers debris bucket for PAS to fill
11:10	High side dumpster moves into position
11:11	Excavator begins filling high side dumpster
11:25	Crane dumps debris from bucket into Center Area
11:40	Crane dumps another bucket load
11:44	High side dumpster drives away
11:50	Removed Sample from Pump #HV-52
11:51	Placed Sample on Pump #HV-52 at Middle Northside of Regulated Area
12:00	Lunchbreak for all work crews
12:00	Removed Sample from Pump #LV-1
12:01	Placed Sample on Pump #LV-1 on Bob Bidilio
12:02	Removed Sample from Pump #LV-32
12:03	Placed Sample on Pump #LV-32 on Tommy Smith
12:04	Removed Sample from Pump #HV-22
12:05	Placed Sample on Pump #HV-22 in Center Area
12:08	Removed Sample from Pump #HV-33
12:09	Placed Sample on Pump #HV-33 at South Loading Area
12:45	PAS begins sealing the loaded truck with poly for transport and then begins lining the next truck with poly
13:00	EQM begins processing material
13:30	EQM begins loading 4th truck
14:00	2 O'clock meeting+
14:45	AAC removing trusses from Trestle 2
14:42	Removed Sample from Pump #LV-32
14:45	Removed Sample from Pump #LV-1
14:50	Removed Sample from Pump #LV-38
14:58	Removed Sample from pump #HV-33
15:00	EQM finished loading another truck
15:00	Removed Sample from Pump #HV-52
15:05	Removed Sample from Pump #HV-22
15:30	Left worksite
16:30	Completed documentation and end of work shift

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/06/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes, Bob Bidilio / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-32 & LV-38 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 45° F, 84% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	Began setting pumps with personal and area air samples after observing that pontoons are fully functional and operational in the water
07:22	Placed Sample on Pump #LV-1 on Bob Bidilio
07:25	Placed Sample on Pump #LV-32 on Tommy Smith
07:27	AAC & PAS move fencing for site access
07:29	Placed Sample on Pump #LV-38 on Kent Parker
07:32	Placed Sample on Pump #HV-52 at Middle Northside of Regulated Area
07:35	Placed Sample on Pump #HV-22 in Center Area
07:37	Placed Sample on Pump #HV-33 at South Loading Area
07:40	PAS begins lining High Side Dumpster with poly
07:45	Crane lowers steel square for panel attachment
07:46	PAS attaches decking section to square
07:52	Removed Sample from Pump #LV-1
07:53	Placed Sample on Pump #LV-1 on Bob Bidilio
07:55	Removed Sample from Pump #LV-32
07:56	Placed Sample on Pump #LV-32 on Tommy Smith
07:59	Removed Sample from Pump #LV-38
08:00	Placed Sample on Pump #LV-38 on Kent Parker
08:05	Crane flies section to Center Area debris pile
08:09	Poly lined High Side 1 moves in front of area previously known as Trestle 1
08:12	Excavator begins filling poly lined High Side 1

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

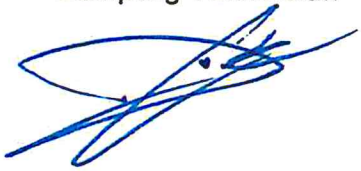
Daily Project Log

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

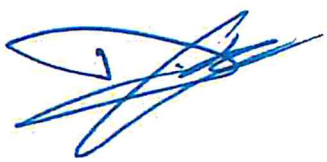


Advantage Environmental

Daily Project Log

Time	Observations
09:00	Crane continues to remove Trestle 2 mud matts sections
09:02	3 lined Low Side Dumpsters await filling in Southeast Loading Area
09:06	Double Dumpster Truck drives away
09:10	Forklift brings over Low Side 1
09:11	Excavator fills Low Side 1
09:17	Forklift takes away filled Low Side 1
09:22	Forklift brings over Low Side 2
09:23	Excavator fills Low Side 2
10:00	Pettibone picks-up & removes Trestle 2 mud matts from Trestle 2 Ramp
10:20	Crane lifts more mud matts to Trestle 2 ramp
10:25	Pettibone comes and picks
10:43	High Side Dumpster truck moves into place for excavator to fill
10:45	Excavator begins filling High Side Dumpster
10:46	PAS continues to wrap filled Low Sides
10:53	Crane lifts steel beam from Trestle 2 onto waiting Flatbed Truck
10:59	High Side drives away
11:24	Crane lifts off another stele beam from Trestle 2
11:30	Crane lifts off another Trestle 2 steel beam sets it on top of the other
11:50	Crane puts steel beams onto Flatbed Truck
11:50	Removed Sample from Pump #LV-8
11:52	Removed Sample from Pump #LV-32
11:56	Removed Sample from Pump #LV-1
11:58	Flatbed Truck drives beams away
12:00	Removed Sample from Pump #HV-52
12:01	Placed Sample on Pump #HV-52 at Southeast Corner of Burn Site
12:03	Removed Sample from pump #HV-22
12:04	Placed Sample on Pump #HV-22 at Central Loading Area
12:07	Removed Sample from Pump #HV-33
12:08	Placed Sample on Pump #HV-33 at Mid-Point of Northside of Regulated Area
12:30	Placed Sample on Pump #LV-8 on Mark Jeffers
12:33	Placed Sample on Pump #LV-32 on Jacob Johnson
12:46	Placed Sample on Pump #LV-1 on Brent Hardinger
12:48	Excavator begins filling High Side Dumpster
13:32	High Side Dumpster gets wrapped by PAS then drives away
13:37	Excavator scrapes asphalt from area where Trestle 1used to be
13:53	Forklift brings over lined Low Side Dumpster
14:00	2 O'clock Meeting
15:00	Began collecting pumps and samples from today's monitoring
15:03	Removed Sample from Pump #LV-8
15:06	Removed Sample from Pump #LV-32
15:09	Removed Sample from Pump #LV-1
15:10	Removed Sample from Pump #HV-52 at Southeast corner of Burn Site
15:13	Removed Sample from Pump #HV-22
15:15	Removed Sample from Pump #HV-33
15:30	Left work site for the day

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/05/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS =** Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

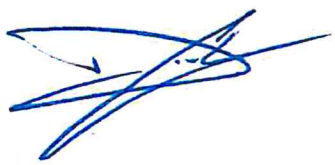
Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-8 & LV-32 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 43° F, 79% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:10	Picked up Start Samples
07:18	Prepped pumps for today's work after observing that.pontoons are fully operational in the water
07:20	Placed Sample on Pump #HV-22 at Central Loading Area
07:23	Placed Sample on Pump #HV-33 at Mid-Point of Northside of Regulated Area
07:30	AAC loaded two sections of span onto truck to be loaded out
07:30	Placed Sample on Pump #HV-52 at Southeast Corner of Burn Site
07:37	Placed Sample on Pump #LV-8 on Mark Jeffers
07:45	Placed Sample on Pump #LV-1 on Brent Hardinger
07:45	PAS lined 1 set of trailers to be loaded with waste
07:50	Placed Sample on Pump #LV-32 on Jacob Johnson
08:00	EQM began prepping area for loading
08:07	Removed Sample from Pump #LV-8
08:08	Placed Sample on Pump #LV-8 on Mark Jeffers
08:15	Removed Sample from Pump #LV-1
08:16	Placed Sample on Pump #LV-1 on Brent Hardinger
08:20	Removed Sample from Pump #LV-32
08:21	Placed Sample on Pump #LV-32 on Jacob Johnson
08:30	PAS went onto deck to begin cutting
08:50	Double Dumpster Truck moves into position at start of removal of Trestle 1
08:52	Excavator fills Double Dumpster

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
09:17	Excavator fills High Side 2
09:40	High Side 2 drives away
09:45	High Side 3 is moved into place
09:46	Excavator begins filling High Side 3 with debris
10:15	High Side 3 drives away
10:50	PAS begins lining Low Side Dumpster 1
11:30	Excavator begins filling Low Side Dumpste 1 with debris
11:50	Excavator breaks down
11:55	Removed Sample from Pump #LV-32
11:58	Removed Sample from Pump #LV-36
12:00	Lunch Break
12:00	Removed Sample from Pump #HV-22
12:01	Placed Sample on Pump #HV-22 at Northside of Regulated Area
12:05	Removed Sample from Pump #HV-52
12:06	Placed Sample on Pump #HV-52 at the End of Trestle 2
12:10	Removed Sample from Pump #HV-33
12:11	Placed Sample on Pump #HV-33 at Boat Ramp
12:30	Safety Meeting
12:45	Placed Sample on Pump #LV-36 on Tommy Smith
12:47	Placed Sample on Pump #LV-32 on Misty Klampe
13:15	Long Reach begins scraping asphalt where Trestle 1 used to be
13:40	Repair Guy shows-up to fix broken down Excavator
13:43	PAS continues to clean-up Beach under removed decking in Center of Deck Area
14:00	2 O'clock Meeting
14:30	Collected Pumps & Air Samples
14:30	Removed Sample from Pump #LV-36
14:33	Removed Sample from Pump #LV-32
14:35	Repair Man finishes fixing broken down Excavator
14:40	EQM using Water Truck to clean off Long Reach tracks of mud and dirt
14:40	Removed Sample from Pump #HV-22
14:43	Removed Sample from Pump #HV-52
14:47	Removed Sample from Pump #HV-33
14:51	Left to read area and personal air samples
15:30	Left worksite
16:30	Completed documentation & end of work shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/03/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

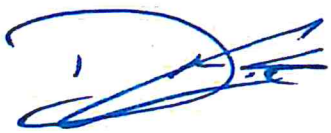
Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-32 & LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 53° F, 65% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:23	Began setting pumps for personal and area monitoring
07:24	Placed Sample on Pump #LV-32 on Misty Klampe
07:26	Placed Sample on Pump #LV-36 on Tommy Smith
07:30	Placed Sample on Pump #HV-22 at Northside of Regulated Area
07:32	Placed Sample on Pump #HV-52 at the End of Trestle 2
07:35	Placed Sample on Pump #HV-33 at Boat Ramp
07:36	PAS moving fencing over for access to worksite
07:54	Removed Sample from Pump #LV-32
07:55	Long Reach in Center Area begins processing debris
07:55	Placed Sample on Pump #LV-32 on Misty Klampe
07:56	PAS lines High Side Dumpster
07:56	Removed Sample from Pump #LV-36
07:57	Placed Sample on Pump #LV-36 on Tommy Smith
07:58	PAS gathers debris on beach to the Northside of Trestle
08:12	Long Reach beings peeling off decking in front of debris pile within the Center Area
08:26	Lined High Side Dumpster moves into place in Center Area to be loaded by Excavator
08:27	Excavator begins loading dumpster
08:41	PAS begins lining High Side Dumpster 2
09:00	PAS begins lining High Side Dumpster 3
09:15	High Side 2 is moved into place for loading of debris

Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

10:30	Crane moves down ramp of Trestle 1 to Southside area just beyond Trestle 1 ramp
11:00	Crane beings flying Trestle 1 sections to Center Area
11:15	PAS lines double dumpster with poly
11:20	PAS cuts deck sections off end of Trestle 2
12:00	Lunch Break
12:00	Removed Sample from Pump #LV-36
12:03	Removed Sample from Pump #LV-5
12:05	Removed Sample from Pump #HV-52
12:06	Placed Sample on Pump #HV-52 at Northside of Regulated Area
12:10	Removed Sample from Pump #LV-32
12:11	Removed Sample from Pump #HV-22
12:12	Placed Sample on Pump #HV-22 at the End of Trestle 2
12:30	Safety Meeting
12:30	Removed Sample from Pump #HV-33
12:31	Placed Sample on Pump #HV-33 at the end of Trestle 1/Boat Ramp
12:40	Placed Sample on Pump #LV-36 on Monica Gauthier
12:43	Placed Sample on Pump #LV-5 on Victor Hernandez
12:53	Crane continues to fly Trestle 1 mud matts to Center Area
13:04	Crane flies another mud matt section
13:17	Crane lifts mud matts onto awaiting flatbed truck
13:30	Truck drives mud matts away
13:45	Crane lifts more mud matts onto another truck
14:00	2 O'clock Meeting
14:35	Removed Sample from Pump #LV-36
14:38	Removed Sample from Pump #LV-5
14:40	Began collecting pumps and samples from today's monitoring
14:41	Removed Sample from Pump #HV-52
14:44	Removed Sample from Pump #HV-22
14:46	Removed Sample from Pump #HV-33
15:15	AAC continues to remove Trestle 1 sections
15:30	Left worksite
16:30	Completed documentation and end of work shift

Jibri Johnson
Sampling Technician

Time **Observations**

Total air sampled collected / analyzed=14
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-15:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/02/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

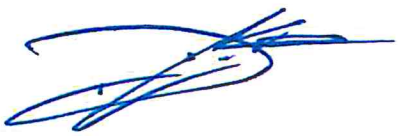
On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-32 & LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 50° F, 72% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	Began setting up pumps for area and personal air monitoring
07:24	Began placing pumps and samples
07:25	Placed Sample on Pump #LV-36 on Monica Gauthier
07:28	Placed Sample on Pump #LV-5 on Victor Hernandez
07:31	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
07:40	Placed Sample on Pump #HV-52 at Northside of Regulated Area
07:40	PAS lines double dumpster truck with poly
07:42	Placed Sample on Pump #HV-33 at the end of Trestle 1/Boat Ramp
07:44	Placed Sample on Pump #HV-22 at the End of Trestle 2
07:55	Removed Sample from Pump #LV-36
07:56	Placed Sample on Pump #LV-36 on Monica Gauthier
07:58	Removed Sample from Pump #LV-5
07:59	Placed Sample on Pump #LV-5 on Victor Hernandez
08:01	Removed Sample from Pump #LV-32
08:02	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
08:29	Crane flies piling to Center Area from Trestle 2
08:41	Crane & Petti Bone work in unison to stack lifted piling against Petti Bone to jar dirt from inside piling
08:55	Crane flies another piling from Trestle 1section to Center Area
09:15	Forklift & Petti bone takes piling to AAC Staging Area
09:27	Crane flies hydraulic hammer from end of Trestle 2 to Center Area
09:45	Double Dumpster Truck moves into place
09:47	Excavator fills dumpsters
10:10	Dumpster Truck drives away



Advantage Environmental

Daily Project Log

Time	Observations
09:15	Another Double Truck moves into position
09:17	Excavator fills Double Truck
09:40	Double Truck drives away
09:43	Another Double Truck moves into position
10:00	Crane flies deck section
10:30	Crane flies another deck section
10:55	Crane flies steel beam of Trestle 1 Section
11:25	Crane flies another steel beam
11:40	Crane lifts beams onto flatbed Truck
11:52	Removed Sample from Pump #LV-32
11:56	Removed Sample from Pump #LV-36
12:00	Removed Sample from Pump #LV-5
12:00	Lunch
12:04	Removed Sample from Pump #HV-52
12:05	Placed Sample on Pump #HV-52 at the End of Trestle 1
12:07	Removed Sample from Pump #HV-22
12:08	Placed Sample on Pump #HV-22 at the End of Trestle 2
12:10	Removed Sample from pump #HV-33
12:11	Placed Sample on Pump #HV-33 at the Northside of Regulated Area
12:30	Began analyzing samples from earlier in the day including Start samples
12:31	Placed Sample on Pump #LV-32 on Mark Jeffers
12:34	Placed Sample on Pump #LV-36 on Brent Hardinger
12:37	Placed Sample on Pump #LV-5 on Ever Bonilla
13:00	Excavator processing debris in Center Area
13:30	PAS continuing to cut and remove sections of decking
14:00	2 O'clock Meeting
14:35	Removed Sample from Pump #LV-32
14:38	Removed Sample from Pump #LV-36
14:40	Began collecting pumps and air samples
14:43	Removed Sample from Pump #LV-5
14:45	Removed Sample from Pump #HV-52
14:48	Removed Sample from pump #HV-22
14:52	Removed Sample from Pump #HV-33
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:30-16:30-less 30-minute lunch

Total Technician Hours: **7.5**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00

Total Senior Project Manager Hours: **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 02/01/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-32 & LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 48° F, 83% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Began prepping pumps for today's sampling after observing pontoons are fully functional in the water
07:22	Placed Sample on Pump #HV-52 at the End of Trestle 1
07:30	First Truck getting lined with poly
07:30	Placed Sample on Pump #HV-33 at the Northside of Regulated Area
07:35	Placed Sample on Pump #LV-5 on Ever Bonilla
07:40	Placed Sample on Pump #LV-32 on Mark Jeffers
07:45	Placed Sample on Pump #LV-36 on Brent Hardinger
08:00	First Section of Decking lifted out by crane and moved into Staging Area for processing
08:05	Removed Sample from Pump #LV-5
08:06	Placed Sample on Pump #LV-5 on Ever Bonilla
08:10	Removed Sample from Pump #LV-32
08:11	Placed Sample on Pump #LV-32 on Mark Jeffers
08:15	Second Section of decking lifted out by crane and moved into Staging Area for processing
08:15	Removed Sample from Pump #LV-36
08:16	Placed Sample on Pump #LV-36 on Brent Hardinger
08:30	Placed Sample on Pump #HV-22 at the End of Trestle 2
08:35	3 Section of decking lifted out by crane and moved into Staging Area for processing
08:45	Double Dumpster ruck gets filled by excavator
09:10	Double Dumpster Truck drives away

Sidney Carter / Jibri Johnson
Sampling Technician

USEPA

DateShipped: 1/31/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206.920.1739

No: PDX-155

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	17120040	AS24	Asbestos PCM	Air	MCE Cassette	12/13/2017				Liters					L/min
	18010122	AS24	Asbestos PCM	Air	MCE Cassette	1/30/2018	9.9344	10.14	3262.09	Liters	7:53:00 AM	1:18:00 PM	325	10.0372	L/min
	18010123	AS26	Asbestos PCM	Air	MCE Cassette	1/30/2018	10.022	10.239	3211.37	Liters	8:11:00 AM	1:28:00 PM	317	10.1305	L/min
	18010124	AS15	Asbestos PCM	Air	MCE Cassette	1/30/2018	9.9331	10.164	3285.89	Liters	8:07:00 AM	1:34:00 PM	327	10.0486	L/min
	18010125	Blank 1	Asbestos PCM	Air	MCE Cassette	1/30/2018				Liters	7:30:00 AM	1:35:00 PM			L/min
	18010126	Blank 2	Asbestos PCM	Air	MCE Cassette	1/30/2018				Liters	7:31:00 AM	1:36:00 PM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	EHE/START	1-30-18/1355	Sidney Carter AEI	1/31/18 7:08	Good

ADVANTAGE Environmental INC.

Clean your world.

February 2, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 1/31/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 1/31/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 1/31/2018
DATE RECEIVED 2/1/2018
DATE ANALYZED 2/1/2018
DATE REPORTED 2/2/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18010130	2011801	0.5	100	0.5/100
18010131	2011802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18010127	2011803	Area	AS24	7:55 AM	1:25 PM	9.8104	9.9727
18010128	2011804	Area	AS26	8:01 AM	1:32 PM	9.9485	10.178
18010129	2011805	Area	AS15	8:08 AM	1:36 PM	9.9097	10.075

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18010127	2011803	330	9.8916	3264.23	7	100	0.005	0.0650	8.280	0.0010	1.785	<0.0017	N/A
18010128	2011804	331	10.0633	3330.95	8.5	100	0.005	0.0800	10.191	0.0012	1.720	<0.0020	N/A
18010129	2011805	328	9.9924	3277.51	6	100	0.005	0.0550	7.006	0.0008	1.839	<0.0015	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/1/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206.920.1739

No: PDX-156

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18010127	AS24	Asbestos PCM	Air	MCE Cassette	1/31/2018	9.8104	9.9727	3264.23	Liters	7:55:00 AM	1:25:00 PM	330	9.8916	L/min
	18010128	AS26	Asbestos PCM	Air	MCE Cassette	1/31/2018	9.9485	10.178	3330.95	Liters	8:01:00 AM	1:32:00 PM	331	10.0633	L/min
	18010129	AS15	Asbestos PCM	Air	MCE Cassette	1/31/2018	9.9097	10.075	3277.51	Liters	8:08:00 AM	1:36:00 PM	328	9.9924	L/min
	18010130	Blank 2	Asbestos PCM	Air	MCE Cassette	1/31/2018				Liters					L/min
	18010131	Blank1	Asbestos PCM	Air	MCE Cassette	1/31/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analyses	[signature] ETE/START	1-31-18/1400	[signature] ACE	12:01 2/1/18	good

ADVANTAGE Environmental INC.

Clean your world.

February 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/01/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/01/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/1/2018
DATE RECEIVED 2/2/2018
DATE ANALYZED 2/2/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020001	2021801	0	100	0/100
18020002	2021802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020003	2021803	Area	AS24	7:55 AM	1:14 PM	9.884	9.8012
18020004	2021804	Area	AS26	8:08 AM	1:20 PM	9.9182	9.9853
18020005	2021805	Area	AS15	8:38 AM	1:26 PM	9.9167	10.013

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020003	2021803	319	9.8426	3139.79	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0019	N/A
18020004	2021804	312	9.9518	3104.96	5.5	100	0.0025	0.0525	6.688	< LOD	1.871	<1.8705	N/A
18020005	2021805	288	9.9649	2869.89	9	100	0.0025	0.0875	11.146	0.0015	1.705	<0.0025	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/2/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-157

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020001	Blank 1	Asbestos PCM	Blank	MCE Cassette	2/1/2018	0	0	0	Liters	7:15:00 AM		-435	0	L/min
	18020002	Blank 2	Asbestos PCM	Blank	MCE Cassette	2/1/2018	0	0	0	Liters	7:20:00 AM		-440	0	L/min
	18020003	AS24	Asbestos PCM	Air	MCE Cassette	2/1/2018	9.884	9.8012	3139.79	Liters	7:55:00 AM	1:14:00 PM	319	9.8426	L/min
	18020004	AS26	Asbestos PCM	Air	MCE Cassette	2/1/2018	9.9182	9.9853	3104.96	Liters	8:08:00 AM	1:20:00 PM	312	9.9518	L/min
	18020005	AS15	Asbestos PCM	Air	MCE Cassette	2/1/2018	9.9167	10.013	2869.89	Liters	8:38:00 AM	1:26:00 PM	288	9.9649	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/ Analysis	(START E+E)	2/1/18 1342			
Samples	START	07:16 2/2/18		7:16 1/2/18	good

ADVANTAGE Environmental INC.

Clean your world.

February 5, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/02/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/02/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/2/2018
DATE RECEIVED 2/3/2018
DATE ANALYZED 2/3/2018
DATE REPORTED 2/5/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020009	2031801	0.5	100	0.5/100
18020010	2031802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020006	2031803	Area	AS24	9:04 AM	2:04 PM	9.9603	9.9371
18020007	2031804	Area	AS26	8:37 AM	1:58 PM	10.04	10.014
18020008	2031805	Area	AS15	9:40 AM	2:18 PM	9.9389	9.9782

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020006	2031803	300	9.9487	2984.61	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0020	N/A
18020007	2031804	321	10.0270	3218.67	5.5	100	0.0025	0.0525	6.688	< LOD	1.871	<1.8705	N/A
18020008	2031805	278	9.9586	2768.49	6.5	100	0.0025	0.0625	7.962	0.0011	1.810	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/3/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-158

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020006	AS24	Asbestos PCM	Air	MCE Cassette	2/2/2018	9.9603	9.9371	2984.61	Liters	9:04:00 AM	2:04:00 PM	300	9.9487	L/min
	18020007	AS26	Asbestos PCM	Air	MCE Cassette	2/2/2018	10.04	10.014	3218.67	Liters	8:37:00 AM	1:58:00 PM	321	10.027	L/min
	18020008	AS15	Asbestos PCM	Air	MCE Cassette	2/2/2018	9.9389	9.9782	2768.49	Liters	9:40:00 AM	2:18:00 PM	278	9.9586	L/min
	18020009	Blank 1	Asbestos PCM	Air	MCE Cassette	2/2/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020010	Blank 2	Asbestos PCM	Air	MCE Cassette	2/2/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight		14:51 2/2/18	AEI	2/3/18 12:04	good
Samples		12:03 2/3/18			

ADVANTAGE Environmental INC.

Clean your world.

February 6, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/03/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/03/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/3/2018
DATE RECEIVED 2/5/2018
DATE ANALYZED 2/5/2018
DATE REPORTED 2/6/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020017	2051801	0.5	100	0.5/100
18020018	2051802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020014	2051803	Area	AS24	8:16 AM	1:44 PM	9.9441	9.8787
18020015	2051804	Area	AS26	8:26 AM	1:31 PM	10.025	10.128
18020016	2051805	Area	AS15	8:44 AM	1:53 PM	9.9751	10.09

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020014	2051803	328	9.9114	3250.94	6	100	0.005	0.0550	7.006	0.0008	1.839	<0.0015	N/A
18020015	2051804	305	10.0765	3073.33	8.5	100	0.005	0.0800	10.191	0.0013	1.720	<0.0022	N/A
18020016	2051805	309	10.0326	3100.07	9	100	0.005	0.0850	10.828	0.0013	1.705	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/5/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-161

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020014	AS24	Asbestos PCM	Air	MCE Cassette	2/3/2018	9.9441	9.8787	3250.94	Liters	8:16:00 AM	1:44:00 PM	328	9.9114	L/min
	18020015	AS26	Asbestos PCM	Air	MCE Cassette	2/3/2018	10.025	10.128	3073.33	Liters	8:26:00 AM	1:31:00 PM	305	10.0765	L/min
	18020016	AS15	Asbestos PCM	Air	MCE Cassette	2/3/2018	9.9751	10.09	3100.07	Liters	8:44:00 AM	1:53:00 PM	309	10.0326	L/min
	18020017	Blank 1	Asbestos PCM	Air	MCE Cassette	2/3/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020018	Blank 2	Asbestos PCM	Air	MCE Cassette	2/3/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight	START	14:39 2/3/18	Sidney Carter AEL	2/5/18 710	Good

ADVANTAGE Environmental INC.

Clean your world.

February 7, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/05/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/05/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/5/2018
DATE RECEIVED 2/6/2018
DATE ANALYZED 2/6/2018
DATE REPORTED 2/7/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020022	2061801	0.5	100	0.5/100
18020023	2061802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020019	2061803	Area	AS24	8:20 AM	1:27 PM	9.9682	9.9305
18020020	2061804	Area	AS26	8:39 AM	1:35 PM	9.9242	10.068
18020021	2061805	Area	AS15	8:52 AM	1:49 PM	9.8722	10.027

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020019	2061803	307	9.9494	3054.47	5.5	100	0.0025	0.0525	6.688	< LOD	1.871	<1.8705	N/A
18020020	2061804	296	9.9961	2958.85	7	100	0.0025	0.0675	8.599	0.0011	1.785	<0.0020	N/A
18020021	2061805	297	9.9496	2955.03	6	100	0.0025	0.0575	7.325	0.0010	1.839	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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USEPA

DateShipped: 2/6/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-162

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020019	AS24	Asbestos PCM	Air	MCE Cassette	2/5/2018	9.9682	9.9305	3054.47	Liters	8:20:00 AM	1:27:00 PM	307	9.9494	L/min
	18020020	AS26	Asbestos PCM	Air	MCE Cassette	2/5/2018	9.9242	10.068	2958.85	Liters	8:39:00 AM	1:35:00 PM	296	9.9961	L/min
	18020021	AS15	Asbestos PCM	Air	MCE Cassette	2/5/2018	9.8722	10.027	2955.03	Liters	8:52:00 AM	1:49:00 PM	297	9.9496	L/min
	18020022	Blank 1	Asbestos PCM	Air	MCE Cassette	2/5/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020023	Blank 2	Asbestos PCM	Air	MCE Cassette	2/5/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples overnight		15:14 2/5/18	ACCI	2/6/18 9:57	awesome ☺

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/22/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS = David Nelson, Jacob Johnson, Jim Boyce, Robert Burton

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-31, LV-41 HV Pumps HV-20, HV-201

Daily Weather: 53° F-58° F, 96% Humidity

Time	Observations
07:00	Had morning meeting, concerns brought up about cars not stopping for flaggers, be aware of traffic
07:35	Set Pump LV-31 on Jacob Johnson
07:36	Robert started moving material and debris from away from opening
07:40	Set Pump LV-41 on Jim Boyce
07:42	Set Pump HV-20 on Northside of regulated area
07:44	Excavator started moving material and debris
07:45	Set Pump HV-201 on Southside of regulated area
08:05	Pulled Pump LV-31 and set new sample on Jacob Johnson
08:06	Set Pump LV-31 on Jacob Johnson
08:11	Pulled Pump LV-41 and set new sample on Jim Boyce
08:12	Set Pump LV-41 on Jim Boyce
08:30	Crew continues to clean area of debris using excavator and bobcat
09:30	Crew started cleaning excavator to be removed from site
10:30	Crew does final cleaning of area
11:12	Pulled Pump LV-41
11:13	Pulled Pump LV-31
11:15	Lunch
11:17	Pulled Pump HV-20
11:18	Pulled Pump HV-201
12:15	Onsite
13:30	Crew started covering debris pile with 6-mil poly and demarcation top
13:30	Crew is cleaning area under where the deck was removed
14:00	New excavator arrived onsite
14:25	Set Pump LV-31 on Jacob Johnson
14:30	Work resumed with removing the deck
15:15	Requested PAS to wet the ground that the skidder is running on. PAS immediately wetted all areas
16:00	Removed Pump LV-31
17:00	Completed paperwork

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30-minute lunch = 9.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/21/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS=Jim Boyse, Robert Barton, Jacob Johnson and David Nelson

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5, LV 21 and HV-20

Daily Weather: 49-50 degrees, 99% Humidity

Time	Observations
07:00	Morning safety meeting with EQM, PAS, EPA, Start and AEI
07:25	Set pump LV-21 on Jim Boyse operating excavator
07:30	Set Pump LV-5 on Robert Barton (clean-up, labor, operating water hose)
07:31	Crew started on deck, Jacob Johnson operating skid steer.
07:40	Set Pump HV-20 @ 9.76 on SE Corner of regulated area
07:59	Pulled pump LV-21
08:00	Pulled pump LV-5
08:01	Set Pump LV-21 on Jim Boyse
08:02	Set Pump LV-5 on Robert Barton
08:05	PAS having meeting about removal of deck and boat debris
08:10	PAS has person in lift wetting material during removal
09:45	Work stopped for a break due to management meeting for EQM
11:35	Crew began working again
12:15	Excavator completed removing structure at South end of deck and now moving debris to staging area at South end
12:25	Pulled Pump HV-20
12:30	Set Pump HV-20 SE corner
13:12	Pulled LV-21
13:14	Pulled LV-5
13:30	Crew is cleaning area under where the deck was removed
14:10	Crew broke for lunch
14:50	Set Pump LV-5
14:55	Set Pump LV-21
15:00	Crew started back-up & continuing to clean pit under where deck was removed, I work on air sample analysis.
15:15	Work is stopped so the pit could be inspected
15:30	Pulled Pump HV-20 SE Corner
16:00	Pulled LV-21
16:01	Pulled LV-5
17:00	Completed air sample analysis documentation and end of work shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30 minute lunch =9.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS=Jim Boyse, Jacob Johnson and the David Nelson

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5 and LV 21

Daily Weather: 52 degrees, 90% humidity

Time	Observations
09:00	Arrived at the site with Vinson White of AEI.
09:30	I walked the site with Vinson to go over the scope and safety issues.
10:00	PAS has begun moving fencing away from the deck approximately 6 feet from the rail lines.
10:30	Meeting with Jerry of EQM and Dave Nelson to cover options on the trestle workers.
11:30	PAS crew break for lunch
12:00	Return from lunch break
12:40	Meeting with Jerry of EQM, and EPA rep to discuss trestle, workers and concerns.
13:25	Set up personal air sampling pump LV-5 on Jacob Johnson
13:28	Set up personal air sampling pump LV-21 on Jim Boyse.
13:35	Excavator starts breaking up sections of the deck to be removed.
13:55	I stopped the sample on pump LV-5 due to the lightning storm.
13:58	I stopped the sample on pump LV-21 due to the lightning storm.
14:30	Stopped remaining person air sampling pumps, the site is shutting down for the day.
15:30	Completed analysis of air samples and daily documentation. End of shift

Total air sampled collected / analyzed=4
Total blank air samples analyzed=2
No injuries reported

Shift 09:00 to 15:30, less 30 minute lunch =5.5 hours

Sidney Carter
Sampling Technician

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 2
PAGE 1 **OF** 1

DATE COLLECTED 9/21/2017
DATE RECEIVED 9/21/2017
DATE ANALYZED 9/21/2017
DATE REPORTED 9/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9211701	0	100	0/100
B2	9211702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92101	9201703	STEL	Jim Boyse-Burn cell-Running excavator-Pump LV-21	7:25 AM	7:59 AM	2.06	2.06
92102	9201704	STEL	Robert Barton-Burn cell-Hose operator & ground support-Pump LV-5	7:30 AM	8:00 AM	2.06	2.06
92103	9201705	Area	NE corner of regulated area-Pump HV-20	7:40 AM	12:25 PM	9.76	9.76
92104	9201706	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	8:01 AM	1:12 PM	2.06	2
92105	9201707	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	8:02 AM	1:14 PM	2.06	2.06
92106	9201708	Area	NE Corner of regulated area-Pump HV-20	12:30 PM	3:30 PM	9.76	9.76
92107	9201709	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	2:55 PM	4:00 PM	2.06	2.06
92108	9201710	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	2:50 PM	4:01 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
92101	9201703	34	2.06	70.04	5.5	100	0	0.055	7.006	0.0385	1.871	<0.0720	0.0099
92102	9201704	30	2.06	61.8	6	100	0	0.060	7.643	0.0476	1.839	<0.0876	0.0095
92103	9201705	285	9.76	2781.6	12	100	0	0.120	15.287	0.0021	1.620	<0.0034	N/A
92104	9201706	311	2.03	631.33	8.5	100	0	0.085	10.828	0.0066	1.720	<0.0114	0.0099
92105	9201707	312	2.06	642.72	6	100	0	0.060	7.643	0.0017	1.839	<0.0031	0.0095
92106	9201708	180	9.76	1756.8	8.5	100	0	0.085	10.828	0.0024	1.720	<0.0041	N/A
92107	9201709	65	2.06	133.9	6	100	0	0.060	7.643	0.0220	1.839	<0.0404	0.0099
92108	9201710	71	2.06	146.26	11	100	0	0.110	14.013	0.0369	1.655	<0.0610	0.0095

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 3
PAGE 1 **OF** 1

DATE COLLECTED 9/22/2017
DATE RECEIVED 9/22/2017
DATE ANALYZED 9/22/2017
DATE REPORTED 9/25/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9221701	0	100	0/100
B2	9221702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92201	9221703	STEL	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	7:35 AM	8:05 AM	1.93	1.93
92202	9221704	STEL	Jim Boyce-Burn cell-Excavator-moving/removing debris-Pump LV-41	7:40 AM	8:11 AM	2.06	2.06
92203	9221705	Area	Northside of regulated area-Pump HV-20	7:42 AM	11:17 AM	9.76	9.76
93304	9221706	Area	Southside of regulated area-Pump HV-201	7:45 AM	11:18 AM	9.76	9.76
92205	9221707	Personal	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	8:06 AM	11:13 AM	1.93	1.93
92206	9221708	Personal	Jim Boyce-Burn cell-Excavator-moving/removing debris-Pump LV-41	8:12 AM	11:12 AM	2.06	2.06
92207	9221709	Personal	Jacob Johnson-Burn cell-skid-steer-removing debris-Pump LV-31	2:25 PM	4:00 PM	1.93	1.93

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	
92201	9221703	30	1.93	57.9	5.5	100	0	0.055	7.006	0.0466	1.871	<0.0871	0.0102
92202	9221704	31	2.06	63.86	6	100	0	0.060	7.643	0.0461	1.839	<0.0847	0.0594
92203	9221705	215	9.76	2098.4	16	100	0	0.160	20.382	0.0037	1.550	<0.0058	N/A
93304	9221706	213	9.76	2078.88	9.5	100	0	0.095	12.102	0.0022	1.690	<0.0038	N/A
92205	9221707	187	1.93	360.91	7	100	0	0.070	8.917	0.0093	1.785	<0.0165	0.0102
92206	9221708	180	2.06	370.8	6	100	0	0.060	7.643	0.0079	1.839	<0.0146	0.0594
92207	9221709	95	1.93	183.35	7	100	0	0.070	8.917	0.0187	1.785	<0.0334	0.0102

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

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ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Environmental Quality Management
ATTENTION Jerry Wade
CONTRACTOR Performance Abatement Services
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225
CLIENT PROJECT # 30309.0047
REPORT # 2
PAGE 1 **OF** 1

DATE COLLECTED 9/21/2017
DATE RECEIVED 9/21/2017
DATE ANALYZED 9/21/2017
DATE REPORTED 9/22/2017

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
B1	9211701	0	100	0/100
B2	9211702	0	100	0/100

SAMPLES COLLECTED BY: Sidney Carter

SAMPLES ANALYZED BY: Sidney Carter

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
92101	9201703	STEL	Jim Boyse-Burn cell-Running excavator-Pump LV-21	7:25 AM	7:59 AM	2.06	2.06
92102	9201704	STEL	Robert Barton-Burn cell-Hose operator & ground support-Pump LV-5	7:30 AM	8:00 AM	2.06	2.06
92103	9201705	Area	NE corner of regulated area-Pump HV-20	7:40 AM	12:25 PM	9.76	9.76
92104	9201706	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	8:01 AM	1:12 PM	2.06	2
92105	9201707	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	8:02 AM	1:14 PM	2.06	2.06
92106	9201708	Area	NE Corner of regulated area-Pump HV-20	12:30 PM	3:30 PM	9.76	9.76
92107	9201709	Personal	Jim Boyse-Burn cell-Running excavator-Pump LV-21	2:55 PM	4:00 PM	2.06	2.06
92108	9201710	Personal	Robert Barton-Burn cell-Ground work-Pump LV-5	2:50 PM	4:01 PM	2.06	2.06

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
92101	9201703	34	2.06	70.04	5.5	100	0	0.055	7.006	0.0385	1.871	<0.0720	0.0099
92102	9201704	30	2.06	61.8	6	100	0	0.060	7.643	0.0476	1.839	<0.0876	0.0095
92103	9201705	285	9.76	2781.6	12	100	0	0.120	15.287	0.0021	1.620	<0.0034	N/A
92104	9201706	311	2.03	631.33	8.5	100	0	0.085	10.828	0.0066	1.720	<0.0114	0.0099
92105	9201707	312	2.06	642.72	6	100	0	0.060	7.643	0.0017	1.839	<0.0031	0.0095
92106	9201708	180	9.76	1756.8	8.5	100	0	0.085	10.828	0.0024	1.720	<0.0041	N/A
92107	9201709	65	2.06	133.9	6	100	0	0.060	7.643	0.0220	1.839	<0.0404	0.0099
92108	9201710	71	2.06	146.26	11	100	0	0.110	14.013	0.0369	1.655	<0.0610	0.0095

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

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Advantage Environmental

Daily Project Log

Time	Observations
12:30	PAS & EQM return from lunchbreak
12:30	Placed Sample on Pump #LV-5 on Luis Penarah
12:31	Removed Sample from Pump #LV-1
12:32	Placed Sample on Pump #LV-1 on Mark Conway
12:37	Long Reach moves to ramp of Trestle 2 to be refueled
12:38	Excavator returns to move asphalt and debris at Northside of worksite from atop Trestle 2
12:48	Long Reach moves back to the middle of Trestle 2 then begins moving asphalt from center decking area to pit on Northside of Trestle 2
12:58	PAS in boom lift driving to Northside of Trestle 2 and beyond fence line to begin pulling wood planks from deck
13:11	PAS wetting down debris on northside of Trestle 2 from atop Trestle 2
13:30	Went to EQM trailer to analyze air samples
14:00	2 o'clock meeting
14:30	Meeting ended, returned to worksite
14:30	Removed Sample from Pump #HV-33
14:33	Removed Sample from Pump #HV-8
14:34	Removed Sample from Pump #LV-5
14:36	Removed Sample from Pump #LV-1
15:15	Finished analyzing samples and collected scope
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:05-15:30-less 30 minute lunch **Total Technician Hours:** **5.92**

Senior Project Manager:
Sidney Carter: 06:30-09:15 **Total Senior Project Manager Hours:** **2.75**

Sidney Carter / Pete Coleman
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/12/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM =** Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 32° F, 71% Humidity

Time	Observations
06:30	Morning Safety Meeting with all work crews and equipment operators
06:45	Began preparing pumps for air sampling
06:50	Placed Sample on Pump #HV-33 at Center Loading Area
06:51	Placed Sample on Pump #HV-8 on Ramp of Trestle 2
06:54	Placed Sample on Pump #LV-1 on Ever Bonilla
07:00	Placed Sample on Pump #LV-5 on Brent Hardinger
07:10	Observed pontoons are fully functional
07:12	Long Reach begins removing asphalt from decking while atop Trestle 1
07:13	Skid Steer brings over plywood sheets to ramp of Trestle 2
07:14	EQM begins laying out plywood in front of ramp to Trestle 2
07:20	Long Reach driving to end of Trestle 2 ramp and begins to be cleaned of mud and dirt
07:23	PAS wets down debris from Trestle 1
07:24	Removed Sample from Pump #LV-1
07:25	Placed Sample on Pump #LV-1 on Ever Bonilla
07:30	Removed Sample from Pump #LV-5
07:30	Long Reach drives off Trestle 2 to Southeast corner of Trestle 1
07:31	Placed Sample on Pump #LV-5 on Brent Hardinger
07:50	Excavator in Center Loading Area begins moving debris
08:00	PAS begins cleaning debris from water
08:42	Water truck drives onto Trestle 2
08:44	Long Reach moves debris while atop Trestle 2
08:45	PAS sprays water on debris with firehose atop Trestle 2
09:50	Forklift brings over empty dumpster to Center Loading Area before being lined with poly for loading of debris
09:52	Excavator begins loading empty poly-lined dumpster
10:00	Forklift removes poly-secured and debris filled dumpster from Center Loading Area
10:05	Excavator drives from Center Loading Area to Northeast side of worksite

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:25	Skid Steer sweeping N River St in order to maintain dust control
10:40	Departed worksite for EQM trailer to read samples
11:57	Removed Sample from Pump #LV-1
12:00	PAS & EQM break for lunchbreak
12:00	Removed Sample from Pump #LV-5
12:01	Removed Sample from Pump #HV-8
12:02	Placed Sample on Pump #HV-8 on Ramp of Trestle 2
12:03	Removed Sample from Pump #HV-33
12:04	Placed Sample on Pump #HV-33 at Center Loading Area
12:35	Placed Sample on Pump #LV-1 on Ever Bonilla
12:40	PAS & EQM return from lunchbreak
12:40	Placed Sample on Pump #LV-5 on Brent Hardinger
12:43	Excavator on NE side of worksite returns to crushing wood and putting it in pile
12:44	PAS returns to wetting down debris from atop Trestle 2 while excavator scoops debris into piles across deck
12:45	Long Reach atop Trestle 2 returns to moving wood debris from decking over to excavator at Northeast corner of worksite to breakup into piles
13:02	Water truck drives off of Trestle 2
13:03	Long Reach rives to ramp of Trestle 2 and begins getting refueled by F150 fuel-truck
13:10	Long Reach finishes refueling and drives back to middle-point of Trestle 2
13:30	PAS continues to shovel debris from decking by hand into poly-bags
14:00	PAS cuts decking using long chainsaw
14:15	Long Reach pulls up cut deck portion
14:30	2 o'clock meeting
14:50	Removed Sample from Pump #HV-33
14:51	Removed Sample from Pump #HV-8
14:51	PAS cutting more decking with chainsaw
14:53	Removed Sample from Pump #LV-5
14:54	Removed Sample from Pump #LV-1
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 06:30-16:30less 30-minute lunch **Total Technician Hours:** **9-5**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/13/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 28° F to 47° F, 99% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:45	Started preparing pumps for area and personal air monitoring
06:58	Placed Sample on Pump #HV-33 on Trestle 2
07:00	Moved the Loading Area generator and air pump to Northside of Regulated Area
07:05	EQM moved water truck to base of ramp at Trestle 2 and staged for todays work
07:08	Placed Sample on Pump #HV-8 on Northside of Worksite
07:15	PAS sending men down to water edge to clean debris and move 2 men onto deck
07:18	Placed Sample on Pump #LV-1 on Luis Peneda
07:22	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
07:30	PAS continuing to remove debris from water within the pontoon area
07:48	Removed Sample from Pump #LV-1
07:49	Placed Sample on Pump #LV-1 on Luis Peneda
07:50	Approximately 90% of all debris has been removed form the water over the last 2 days
07:52	Removed Sample from Pump #LV-5
07:53	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
08:15	PAS removing wood decking on Northside of deck
10:50	PAS continues to cut deck
10:57	PAS spraying water on decking from Trestle 1
11:00	Long Reach moves debris from deck on Northside of decking while atop Trestle 2
11:30	PAS continuing to cut and remove sections of decking
12:00	Removed Sample from Pump #HV-8
12:01	Placed Sample on Pump #HV-8 on Northside of Worksite
12:03	Removed Sample from Pump #HV-33
12:04	Placed Sample on Pump #HV-33 on Trestle 2
12:10	Removed Sample from Pump #LV-5
12:16	Excavator removing debris while atop Trestle 1
12:39	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
12:40	Removed Sample from Pump #LV-1

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:41	Placed Sample on Pump #LV-1 on Luis Peneda
13:30	Went to EQM trailer to analyze samples and prep for meeting
14:00	2 O'clock meeting
14:30	Long Reach pulls up and removing cut-up sections of decking with a chain affixed to Long Reach
14:30	Removed Sample from Pump #LV-1
14:35	Removed Sample from Pump #LV-5
14:42	Removed Sample from Pump #HV-8
14:47	Removed Sample from Pump #HV-33
15:30	Left worksite
16:30	Completed documentation & end of shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-15:30less 30-minute lunch **Total Technician Hours:** **6.75**

Senior Project Manager:
Sidney Carter: 06:30-09:00 **Total Senior Project Manager Hours:** **2.5**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/14/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 28° F to 45° F, 99% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and equipment operators
07:18	Prepared pumps for daily sampling & monitoring
07:20	EQM Mark is using Long Reach on Trestle 2 moving debris from deckin
07:25	Placed Sample on Pump #HV-08 at the East End of Trestle 2
07:28	Placed Sample on Pump #HV-33 at Northwest Corner of Worksite
07:30	PAS on Boom Lift beginning to make cuts on deck
07:33	Placed Sample on Pump #LV-5 on Gary Reynolds
07:37	Placed Sample on Pump #LV-1 on Mark Conway
08:03	Removed Sample from Pump #LV-5
08:04	Placed Sample on Pump #LV-5 on Gary Reynolds
08:07	Removed Sample from Pump #LV-1
08:08	Placed Sample on Pump #LV-1 on Mark Conway
08:20	PAS finishing first section of deck, made suggestions to crew of laying out plywood and working on plywood to cut out deck & order to speed-up production instead of working in basket
08:36	EQM brought in more plywood
08:45	First section of deck removed today
08:55	PAS cutting next section
09:15	EQM processing debris
09:35	EQM removed 2nd section of deck
10:00	PAS cutting next section of deck
10:30	EQM moved more plywood onto trestle to be used on deck with PAS
11:00	EQM removed 2 more sections of decking
11:19	EQM moved excavator back into processing pit
11:40	EQM cleaning up debris from deck
12:00	All crews break for lunch
12:30	All crews returned from lunch
12:32	Removed Sample from Pump #LV-5
12:33	Placed Sample on Pump #LV-5 on Gary Reynolds

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:38	Removed Sample from Pump #LV-1
12:39	Placed Sample on Pump #LV-1 on Mark Conway
12:40	Removed Sample from Pump #HV-33
12:40	Removed pump from Northside of stie due to PAS needing the generator on the other side of worksite
12:48	Removed Sample from Pump #HV-08
12:49	Placed Sample on Pump #HV-08 at the East End of Trestle 2
12:55	EQM processing material in pit, PAS crew 7 on deck cutting crew 2 on Southside cutting stringers
13:00	Analyzed cassettes
13:40	EQM beginning work on excavator on Southeast corner of worksite
14:00	EPA Meeting
14:30	EQM woring on deck at Southeast corner
14:40	PAS continues to cut deck
14:45	Checked pontoons & observed fully operational
14:59	Removed Sample from Pump #LV-5
15:04	Removed Sample from Pump #LV-1
15:06	Removed Sample from Pump #HV-08
15:10	Analyzed cassettes
16:30	Completed documentation & end of shift

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson:

Total Technician Hours: **0.00**

Senior Project Manager:
Sidney Carter: 07:00-16:30-less 30 minute lunch

Total Senior Project Manager Hours: **9**

Sidney Carte
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/15/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM =** Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 37° F, 78% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews & equipment operators
07:20	Setting high-flow & personal pumps for air monitoring & sampling
07:20	Placed Sample on Pump #LV-1 on Brent Hardinger
07:22	Placed Sample on Pump #LV-5 on Luis Penarah
07:24	Placed Sample on Pump #HV-33 on Trestle 2 Ramp
07:26	Placed Sample on Pump #HV-8 at Northwest Corner of worksite
07:30	Excavator begins moving debris on deck from Trestle 2
07:40	Long Reach drives from Trestle 2 to Trestle 1
07:50	Long Reach atop Trestle 2 begins moving debris from the center of the deck between Trestle 1 and Trestle 2
07:50	Removed Sample from Pump #LV-1.
07:51	Placed Sample on Pump #LV-1 on Brent Hardinger
07:52	Removed Sample from Pump #LV-5
07:53	Placed Sample on Pump #LV-5 on Luis Penarah
08:02	Water Truck backs-up to Trestle 2
08:28	PAS gets in Boom Reach and moves out on deck to begin cutting and removing sections of decking
09:18	Excavator begins moving debris that Long Reach has moved over the into reach of Excavator
09:30	PAS is spraying water on debris from atop Trestle 1 in order to maintain dust control
10:30	Left worksite for EQM Trailer to analyze samples
11:59	Excavator atop Trestle 2 pulls up large cut section of decking from Northside of Trestle 2/decking
12:00	Long Reach atop Trestle 1 continues moving debris on Southside of Trestle 1/middle point between Trestle 1 and trestle 2
12:00	Removed Sample from Pump #HV-33
12:01	Placed Sample on Pump #HV-33 on Trestle 2 Ramp
12:02	Removed Sample from Pump #HV-8
12:03	Placed Sample on Pump #HV-8 at Northwest Corner of worksite

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:05	Removed Sample from Pump #LV-1
12:10	PAS continues cutting deck at northside of Trestle 2 from Boom Reach
12:20	EQM & PAS break for lunch
12:20	Removed Sample from Pump #LV-5
12:45	Placed Sample on Pump #LV-1 on Brent Hardinger
12:50	Placed Sample on Pump #LV-5 on Luis Penarah
12:52	PAS returns from lunchbreak, suits up and goes down into pit at Northeast side where decking has been removed in order to collect fallen debris by hand that has fallen on the ground
13:23	Long Reach returns to moving debris on Southside of Trestle 1 from atop Trestle 1
13:40	Left worksite for EQM Trailer to analyze samples
14:00	No 2 o'clock meeting
14:30	Removed Sample from Pump #LV-1
14:31	Removed Sample from Pump #LV-5
14:33	Removed Sample from Pump #HV-33
14:35	Removed Sample from Pump #HV-8
14:36	Analyzed samples
15:30	Finished analyzing samples and left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 07:00-7:45 **Total Senior Project Manager Hours:** **.75**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/16/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-30 – HV Pumps: HV-8 & HV-33

Daily Weather: 42° F, 90% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:04	Placed Sample on Pump #LV-30 on Brent Hardinger
07:06	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
07:10	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:15	Placed Sample on Pump #HV-33 at the end of Trestle 1
07:20	Observed pontoons are fully functional in the water
07:34	Removed Sample from Pump #LV-30
07:36	Removed Sample from Pump #LV-1
07:37	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
07:40	Skid Steer drives to Center Loading Area
07:41	Placed Sample on Pump #LV-30 on Brent Hardinger
07:47	Skid Steer takes steel pieces to Staging Area on Northside of Trestle 2 beyond fence line
07:49	Excavator drives from Trestle 2 Ramp to Southside of Trestle 2 beyond fence line
07:51	Long Reach atop Trestle 1 begins moving debris from decking on Southside of Trestle 1
07:55	Excavator begins moving debris on Northwest side of deck
08:15	PAS begins cutting and removing sections of decking on Southside of Trestle 1
08:36	Forklift removes wood posts from center area and takes them onto Trestle 2
08:38	Water Truck drives to Northside of Trestle 2 ramp
08:51	PAS begins spraying water and wetting debris at the Northwest side of deck in order to maintain dust control
09:17	PAS is still removing planks and cutting sections of decking at the Southside of Trestle 1 from Boom Lift
09:27	Excavator driving from Northwest side of Trestle 1 to Northside of Trestle 2 area

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:40	Excavator begins crushing wood debris at North side of Trestle 2 area
10:30	Went to EQM trailer to analyze samples
11:30	Long Reach forklift tandem begins lifting cut-up sections of deck on Southside of Trestle 1
12:00	Removed Sample from Pump #LV-1
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:15	Removed Sample from Pump #HV-33
12:16	Placed Sample on Pump #HV-33 at the end of Trestle 1
12:00	Work crews break for lunch
12:20	Removed Sample from Pump #LV-30
12:30	Excavator returns to moving and crushing deck debris
12:40	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
12:45	PAS goes back to cutting and removing sections of decking
12:50	Placed Sample on Pump #LV-30 on Brent Hardinger
14:35	Removed Sample from Pump #LV-30
14:37	Removed Sample from Pump #LV-1
14:41	Removed Sample from Pump #HV-8
14:42	Removed Sample from Pump #HV-33
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-15:30-less 30-minute lunch **Total Technician Hours:** **8**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/18/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-32, LV-38 – HV Pumps: HV-08 & HV-33

Daily Weather: 40° F, 82% Humidity

Time	Observations
07:00	Morning safety meeting with work crews and operators
07:18	Prepared pumps for air sampling
07:25	PAS begins poly-linig first dumpster
07:25	Placed Sample on Pump #HV-08 at end of Trestle 2
07:30	Placed Sample on Pump #HV-33 at mid-span of Trestle 1
07:30	AAC moved crane to Eastside of Trestle 1 in order to change out clamshell to new clamshell
07:35	Observed pontoons are fully operational in the water
07:40	Noticed asphalt company on Southside creating large amounts of dust while processing asphalt
07:44	Placed Sample on Pump #LV-38 on Mark Jeffers
07:47	Placed Sample on Pump #LV-32 on Brent Hardinger
07:49	Placed Sample on Pump #LV-1 on Travis Harrison
08:00	EQM Brent preparing material for loading into dumpsters
08:05	First truck is lined and stating to be loaded
08:14	Removed Sample from Pump #LV-38
08:15	Placed Sample on Pump #LV-38 on Mark Jeffers
08:17	Removed Sample from Pump #LV-32
08:18	Placed Sample on Pump #LV-32 on Brent Hardinger
08:19	Removed Sample from Pump #LV-1
08:20	Placed Sample on Pump #LV-1 on Travis Harrison
08:44	AAC hooks up toothed clamshell to crane
09:04	Crane begins moving debris from decking while atop Trestle 1
09:25	PAS beginning to wrap dumpster that is filled to capacity with debris
09:54	Filled and poly-wrapped dumpster is hauled away

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:58	Second poly-lined empty dumpster is brought to Southeast side of ramp to Trestle 1 in order to be filled
10:01	Excavator begins filling dumpster
10:12	PAS poly-secures dumpster that is filled to capacity
10:47	Second wrapped low-side is hauled away
10:50	3rd low-side dumpster is brought to Loading Area in order to be filled with debris
10:51	Excavator beginning to fill 3rd dumpster
11:00	Left worksite to go to EQM trailer to analyze samples
12:00	All work crews and operators break for lunch
12:01	Removed Sample from Pump #LV-38
12:03	Removed Sample from Pump #LV-32
12:04	Removed Sample from Pump #LV-1
12:10	Removed Sample from Pump #HV-08
12:11	Placed Sample on Pump #HV-08 at end of Trestle 2
12:12	Removed Sample from Pump #HV-33
12:13	Placed Sample on Pump #HV-33 at mid-span of Trestle 1
12:30	All work crews and operators return from lunchbreak
12:40	4th poly-lined dumpster brought to Loading Area
12:41	Placed Sample on Pump #LV-32 on Brent Hardinger
12:45	Placed Sample on Pump #LV-1 on Travis Harrison
12:45	Excavator begins filling poly-lined dumpster
13:10	PAS begins securing dumpster filled to capacity with poly-vinyl
13:10	Placed Sample on Pump #LV-38 on Mark Jeffers
13:35	Left worksite for EQM trailer to analyze samples
14:00	2 O'clock safety meeting
14:46	Removed Sample from Pump #LV-38
14:48	Removed Sample from Pump #LV-32
14:50	Removed Sample from Pump #LV-1
14:52	Removed Sample from Pump #HV-08
14:55	Removed Sample from Pump #HV-33
15:00	Left worksite for EQM trailer to analyze samples
15:30	Finished reading samples, left EQM Trailer and worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:15-15:30-less 30-minute lunch **Total Technician Hours:** **6.75**

Senior Project Manager:
Sidney Carter: 07:00-08:30 **Total Senior Project Manager Hours:** **1.5**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/19/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM =** Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-32, LV-38, LV-34 – HV Pumps: HV-8 & HV-33

Daily Weather: 43° F, 89% Humidity

Time	Observations
07:00	Morning Safety meeting with all work crews and operators
07:20	Long Reach begins moving debris
07:23	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
07:25	Placed Sample on Pump #LV-34 on Mark Jeffers
07:27	Placed Sample on Pump #LV-38 on Mark Conway
07:30	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
07:30	Low Side brought over
07:35	PAS begins to line Low Side
07:35	Placed Sample on Pump #HV-33 at the End of Trestle 2
07:50	AAC begins putting on the clamshell to the crane
07:53	Removed Sample from Pump #LV-32
07:54	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
07:55	Removed Sample from Pump #LV-34
07:56	Placed Sample on Pump #LV-34 on Mark Jeffers
07:57	Removed Sample from Pump #LV-38
07:58	Placed Sample on Pump #LV-38 on Mark Conway
08:10	Excavator fills Low Side with debris
08:16	Low Side moved to be wrapped in poly by PAS
08:23	PAS spraying water from atop Trestle 1 onto debris in middle of deck to maintain dust control
08:27	Crane begins removing debris from deck with clamshell
09:03	Excavator moves to Center Loading Area to being moving and crushing wood debris
09:20	Excavator moves to Southside of Trestle 1
09:30	Second Low Side is brought to Southside of Trestle 1

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:31	PAS lines 3rd Low Side
09:52	PAS begins wrapping 2nd Low Side
10:10	2nd Low Side secured in poly, filled to capacity with debris and hauled away from worksite
10:13	3rd poly-lined Low Side is brought to Center Loading Area to be filled
10:15	Excavator begins filling poly-lined 3rd Low Side
10:33	PAS secures filled to capacity 3rd Low Side with poly and stages for removal from worksite
11:50	AAC, EQM & PAS break for lunch
11:50	Removed Sample from Pump #LV-32
11:55	Removed Sample from Pump #LV-38
12:00	Removed Sample from Pump #LV-34
12:02	Removed Sample from Pump #HV-8
12:03	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at the End of Trestle 2
12:20	Crews return from lunchbreak
12:23	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
12:35	Placed Sample on Pump #LV-38 on Mark Conway
12:40	Placed Sample on Pump #LV-34 on Mark Jeffers
13:30	Excavator moved to Center Loading Area changed buckets & then begins moving moving & crushing debris
13:55	Excavator moves from Center Loading Area to Northeast Side of worksite before beginning to move and crush wood debris for loading into poly-lined Low Side
14:00	2 O'clock Meeting
14:30	Meeting adjourned, returned to worksite to collect samples
14:35	Removed Sample from Pump #LV-32
14:38	Removed Sample from Pump #LV-38
14:40	Removed Sample from Pump #LV-34
14:45	Removed Sample from Pump #HV-8
14:47	Removed Sample from Pump #HV-33
14:55	Returned to EQM Trailer to read samples
15:15	6 Total Low Sides are filled and secured with poly to be hauled offsite today
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-30, LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 43° F, 89% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and equipment operators
07:10	Received samples from Start
07:18	Prepared pumps for air monitoring
07:20	PAS begins lining first dumpster with poly
07:20	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 2/NW Corner beyond fence of worksite
07:25	Placed Sample on Pump #HV-33 at the End of Trestle 2
07:30	EQM Brent moved excavator to Loading Area in SE Corner
07:31	Placed Sample on Pump #LV-30 on Mark Jeffers
07:36	Placed Sample on Pump #LV-1 on Brent Hardinger
07:40	Inspected pontoons and observed that all are functional, large amount of debris in netting which PAS is to remove from a skiff
07:40	Placed Sample on Pump #LV-5 on Ever Bonilla
07:50	First truck is being loaded into poly lined Low Side
08:01	Removed Sample from Pump #LV-30
08:02	Placed Sample on Pump #LV-30 on Mark Jeffers
08:06	Removed Sample from Pump #LV-1
08:07	Placed Sample on Pump #LV-1 on Brent Hardinger
08:10	First truck is loaded & being poly-sealed
08:10	Removed Sample from Pump #LV-5
08:11	Placed Sample on Pump #LV-5 on Ever Bonilla
08:15	Second truck is being lined with poly
08:35	Second truck is being loaded, AAC is removing section of decking in the SE corner of worksite with crane

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:45	Second Low Side is secured with poly and hauled away
09:15	3rd Low Side brought in
09:16	PAS begins lining 3rd Low Side with poly
09:30	Crane moves to Ramp of Trestle 1
09:35	Excavator begins filling 3rd poly-lined Low Side
09:39	PAS lines 4th Low Side with poly and stages to be loaded
09:45	PAS wraps 3rd Low Side in poly to be hauled away
10:05	3rd Low Side is wrapped and secured in poly before being hauled away
10:06	4th Low Side is poly-lined and staged for being loaded with debris
10:10	Excavator begins filling poly-lined 4th Low Side with debris
10:19	Skid Steer is bringing planks to ramp of Trestle 1 for Crane to drive on
10:20	Skid Steer continues moving planks to crane
10:26	PAS wraps 4th Low Side in poly to be loaded with debris
10:34	Crane begins moving down Trestle 1 Ramp onto planks that were brought over & set into place by Skid Steer
10:39	PAS finishes wrapping 4th Low Side in poly
10:41	4th Low-side is poly-secured and filled to capacity before driving away
10:57	Long Reach drives onto Trestle 1 after relocating from Trestle 2
11:10	Long Reach continues moving debris from Trestle 1
11:20	Excavator from Southside of Trestle 1 begins moving debris
11:25	Crane makes it to the end of Trestle 2 and begins moving debris
11:55	Removed Sample from Pump #LV-30
11:58	Removed Sample from Pump #LV-1
12:00	Work crews break for lunch
12:00	Removed Sample from Pump #LV-5
12:01	Removed Sample from Pump #HV-8
12:02	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 2/NW Corner beyond fence of worksite
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at the End of Trestle 2
12:30	Placed Sample on Pump #LV-30 on Mark Jeffers
12:31	Placed Sample on Pump #LV-1 on Brent Hardinger
12:33	Placed Sample on Pump #LV-5 on Ever Bonilla
13:00	5th Low Side brought over to be poly-lined
13:10	PAS begins lining 5th Low Side with poly
13:12	PAS sprays water on deck from Trestle 1 to maintain dust control while crane removes debris
13:25	Excavator begins filling 5th Low Side
13:26	PAS begins lining 6th Low Side with poly that is awaiting to be filled with debris
13:43	PAS wraps 5th Low Side in poly
13:50	Poly-wrapped and secured 5th Low Side is hauled away
13:53	Poly-lined 6th Low Side moves into position to be loaded
14:00	2 O'clock meeting
14:30	Returned to worksite to gather pumps and analyze samples
14:35	Removed Sample from Pump #LV-30
14:37	Removed Sample from Pump #LV-1
14:40	Removed Sample from Pump #LV-5
14:45	Removed Sample from Pump #HV-8

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
14:48	Removed Sample from Pump #HV-33
14:58	Returned to EQM trailer to analyze samples
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00-09:00 **Total Senior Project Manager Hours:** **2**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/21/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM =** Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-30 – HV Pumps: HV-08, HV-33 & HV-51

Daily Weather: 29° F-39° F, 99% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:15	Headed to worksite and observed pontoons as fully operational
07:20	Prepped pumps for daily air monitoring
07:21	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:25	Placed Sample on Pump #HV-08 at North Side of deck
07:30	Placed Sample on Pump #LV-1 on Ryan Okada
07:25	AAC begins removing deck with crane at NW corner of Trestle 2
07:28	PAS begins lining first truck
07:32	EQM begins loading first dumpster at NE corner of worksite
07:35	Placed Sample on Pump #LV-5 on Little Steward
07:38	Placed Sample on Pump #HV-51 at Southeast Loading Area
07:40	First dumpster filled to capacity and secured in poly before being staged for removal from worksite
07:41	Placed Sample on Pump #LV-30 on Gary Reynolds
07:46	2nd Poly-lined Low Side staged into place
08:00	PAS continues poly-lining dumpsters for debris to be loaded into
08:00	Removed Sample from Pump #LV-1
08:01	Placed Sample on Pump #LV-1 on Ryan Okada
08:05	Removed Sample from Pump #LV-5
08:06	Placed Sample on Pump #LV-5 on Little Steward
08:10	First truck being loaded with debris
08:11	Removed Sample from Pump #LV-30
08:12	Placed Sample on Pump #LV-30 on Gary Reynolds
08:20	First truck is filled to capacity with debris & poly-secure

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:43	First truck loaded truck departs worksite to offload debris
08:48	Next truck is being lined with poly by PAS for loading of debris to ensue
09:11	@nd Low Side gets wrapped in poly by PAS
09:29	Second Low Side poly-secured is hauled away to offload debris
09:30	3rd Low Side is staged into place for being lined with poly & loaded with debris
09:32	PAS begins poly-lining 3rd Low Side for debris to be loaded into
09:49	Excavator begins loading 3rd poly-lined Low Side
10:00	Excavator and 3d Low Side move to the Northside of Trestle 2
10:05	Excavator fills poly-lined Low Side to capacity from Northside of Ramp to Trestle 2
10:14	PAS beginning to poly-line 3rd Low Side
10:26	Forklift brings dumpster to Center Loading Area
10:30	3rd Low Side poly-secured is hauled away offsite for offloading
10:35	Excavator drives to Center Loading Area
10:39	Excavator begins filling first dumpster
10:50	Forklift removes dumpster from Center Loading Area and stages in Center Loading Area to be poly-secured and removed from worksite
10:55	PAS begins poly-lining dumpster
10:59	Forklift brings 2nd dumpster over to Center Loading Area
12:00	Removed Sample from Pump #HV-51
12:01	Placed Sample on Pump #HV-51 at Southeast Loading Area
12:02	Removed Sample from Pump #HV-33
12:03	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:04	Removed Sample from Pump #HV-08
12:05	Placed Sample on Pump #HV-08 at North Side of deck
12:06	Removed Sample from Pump #LV-30
12:07	Removed Sample from Pump #LV-5
12:10	Removed Sample from Pump #LV-1
12:11	PAS poly-lines 4th Low Side
12:13	PAS poly-lines 3rd dumpster
12:30	Placed Sample on Pump #LV-30 on Gary Reynolds
12:40	Placed Sample on Pump #LV-5 on Little Steward
12:44	Forklift brings over 3rd dumpster
12:45	Excavator begins filling 3rd poly-lined dumpster
12:45	Placed Sample on Pump #LV-1 on Ryan Okada
13:03	Forklift removes 3rd poly-secured dumpster
13:10	Forklift brings over 4th dumpster to Center Loading Area
13:34	5th Low Side brought over to the NE corner of Ramp to Trestle 2
14:00	2 O'clock meeting
14:20	Meeting adjourned, headed back to worksite
14:33	Removed Sample from Pump #HV-51
14:35	Removed Sample from Pump #LV-1
14:38	Removed Sample from Pump #LV-5
14:40	Removed Sample from Pump #LV-30
14:48	Removed Sample from Pump #HV-33
14:50	Removed Sample from Pump #HV-08
15:15	Left worksite

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/11/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5 – HV Pumps: HV-8 & HV-33

Daily Weather: 25° F-46° F, 99% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews & operators
06:45	Prepared pumps for air sampling for the day
07:00	EQM Mark began removing asphalt with excavator from atop Trestle 2
07:12	Placed Sample on Pump #HV-8 on Ramp of Trestle 2
07:18	Placed Sample on Pump #HV-33 at Center Loading Area
07:20	EQM Brent began moving debris in Northeast corner of worksite/pit
07:20	Placed Sample on Pump #LV-1 on Mark Conway
07:24	Placed Sample on Pump #LV-5 on Luis Penarah
07:30	EQM Gary filling water trucks
07:35	PAS went into pit to lay Geotech Cloth
07:50	Removed Sample from Pump #LV-1
07:51	Placed Sample on Pump #LV-1 on Mark Conway
07:54	Removed Sample from Pump #LV-5
07:55	Placed Sample on Pump #LV-5 on Luis Penarah
08:00	PAS completed laying Geotech Cloth
08:10	EQM Brent moved into pit and began moving debris
08:20	PAS went down to begin moving debris out of water
08:35	EQM Mark began moving asphalt into pit at Northeast side of worksite
08:48	PAS continues to remove debris from water
11:15	EQM continues moving asphalt from deck using Long Reach from atop Trestle 2
11:15	PAS continues to spray down asphalt from atop Trestle 1 while Long Reach moves it in tandem
12:00	PAS & EQM break for lunch
12:00	Removed Sample from Pump #HV-33
12:01	Placed Sample on Pump #HV-33 at Center Loading Area
12:02	Removed Sample from Pump #HV-8
12:03	Placed Sample on Pump #HV-8 on Ramp of Trestle 2
12:07	Removed Sample from Pump #LV-5

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:25	Small excavator at NE corner continuing to scoop debris into large pile as firehose wets debris down in order to maintain dust control
11:30	AAC crane has been stored at the End of Trestle 1 with clamshell still attached
11:48	Long Reach on Trestle 2 is being inspected by Dave and Brent
11:51	Long Reach on Trestle 2 is moving to the end of Trestle 2 onto ramp in order to be refueled
11:55	Small excavator at NE corner of worksite continuing to scoop debris into piles while being wetted with water to maintain dust control
12:01	Removed Sample from Pump #HV-33
12:06	Long Reach on Trestle 2 returns to breaking up asphalt after being been refueled
12:07	Small excavator continuing to scoop debris into piles at NE corner of worksite at NE corner of Trestle 2
12:07	Removed Sample from Pump #HV-31
12:09	Small excavator stops at NE corner of worksite
12:10	Water truck being refilled with water that was wetting down debris for small excavator
12:12	Advised by Jerry that work will be done for the day at 12:30
12:20	Removed Sample from Pump #LV-1
12:28	Removed Sample from Pump #LV-5
12:33	Departed worksite for office
13:33	Completed documentation and end of shift

Total air sampled collected / analyzed=6
Total blank air samples analyzed=2
No injuries reported

Technician:
Pete Coleman: 11:00-13:33

Total Technician Hours: **2.50**

Senior Project Manager:
Sidney Carter: 07:20-11:00

Total Senior Project Manager Hours: **3.5**

Sidney Carter / Pete Coleman
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/09/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, – HV Pumps: HV-31 & HV-33

Daily Weather: 42° F, 61% Humidity

Time	Observations
07:20	Arrived at worksite
07:25	EQM begins removing asphalt from decking on Trestle 2
07:25	Placed Sample on Pump #HV-31 at East-end of Ramp on Trestle 2
07:28	Placed Sample on Pump #HV-33 at Center Loading Area between Trestle 1 & Trestle 2
07:30	EQM moved water truck up & onto Trestle 2
07:37	Placed Sample on Pump #LV-1 on Ever Bonilla
07:40	Placed Sample on Pump #LV-5 on Brent Hardinger
07:50	EQM began moving another excavator at NE Corner of decking to remove decking & pilings
08:07	Removed Sample from Pump #LV-1
08:08	Placed Sample on Pump #LV-1
08:10	Removed Sample from Pump #LV-5
08:11	Placed Sample on Pump #LV-5 on Brent Hardinger
08:15	Inspected pontoons & found timbers laying on two areas and larve amounts of debris. Spoke with Jerry and he has Global coming today to remove debris and repair pontoons
08:45	EQM finished removing deck at Northeast corner, PAS is going down in that area to install Geotech Cloth and load debris on top of the cloth
09:00	EQM continues to remove asphalt from decking while atop Trestle 2
09:20	PAS completed installation of Geotech cloth. EQM starting processing debris.
09:45	EQM continues to process material at NE corner and removing asphalt while atop Trestle 2
11:00	Firehose operator wetting decking from Trestle 1, spraying water onto middle point of deck between trestles while long reach scoops debris from atop Trestle 2
11:01	Jerry surveying worksite progress and meeting with Dave from PAS well as multiple other people with AAC, EQM & EPA
11:05	2 Laborers from PAS are loading debris by hand into poly bags on NE side of deck to that been broken-up by small excavator
11:20	Small excavator at NE corner of worksite begins scooping debris from broken-up decking into a pile while firehose operator wets debris pile down in order to maintain dust control

Sidney Carter / Pete Coleman
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:51	Crane stops in the middle point of Trestle 1
10:00	Long Reach drives onto Trestle 2 and begins moving debris from Northside of decking
10:33	Crane drives to the end of Trestle 1 and lowers hook down to Trestle 1
10:35	AAC attaches clamshell to crane hook
10:40	PAS continues wetting down debris from Northside of work area while Long Reach atop Trestle 2 scoops debris
10:41	AAC continues using clamshell on hook of crane atop Trestle 1 to remove debris piles from deck
10:45	Departed worksite for EQM trailer to read air samples
11:27	Finished reading samples and returned to worksite
12:00	AAC, EQM & PAS break for lunch
12:00	Removed Sample from Pump #LV-2
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at end of Trestle 2
12:07	Removed Sample from Pump #HV-8
12:08	Placed Sample on Pump #HV-8 at Center Loading Area
12:30	EQM & PAS return from lunchbreak
12:30	Placed Sample on Pump #LV-2 on Gary Reynolds
12:02	Removed Sample from Pump #LV-1
12:03	Removed Sample from Pump #LV-30
12:35	Placed Sample on Pump #LV-1 on Ever Bonilla
12:45	Placed Sample on Pump #LV-30 on Mark Jeffers
12:45	AAC returns from lunchbreak
12:50	Crane returns to moving debris
13:07	Received call from Project Manager that all debris is less than 1% mastic below asphalt
13:07	Skid Steer begins sweeping street in order to maintain dust control
13:08	Excavator moves down N River St to Northside of Trestle 2
14:00	Removed Sample from Pump #LV-30
14:38	Removed Sample from Pump #LV-1
14:45	Removed Sample from Pump #LV-2
14:52	Removed Sample from Pump #HV-33
14:54	Removed Sample from Pump #HV-8
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 06:30-16:30-less 30-minute lunch **Total Technician Hours:** **9.5**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/08/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-2, & LV-30 – HV Pumps: HV-8 & HV-33

Daily Weather: 34° F, 56% Humidity

Time	Observations
06:30	Safety meeting with all work crews and operators
06:50	Inspected pontoons and observed fully functional
07:00	PAS begins wetting down debris on the deck in order to maintain dust control
07:00	Placed Sample on Pump #LV-1 on Ever Bonilla
07:05	Placed Sample on Pump #LV-30 on Mark Jeffers
07:07	Placed Sample on Pump #LV-2 on Gary Reynolds
07:08	Long Reach begins moving debris from decking while atop Trestle 1
07:12	Placed Sample on Pump #HV-33 at end of Trestle 2
07:14	Placed Sample on Pump #HV-8 at Center Loading Area
07:23	EQM brings over 4'x6' beams to Center Loading Area between Trestle 1 & Trestle 2
07:30	Removed Sample from Pump #LV-1
07:31	Placed Sample on Pump #LV-1 on Ever Bonilla
07:35	Removed Sample from Pump #LV-30
07:36	Placed Sample on Pump #LV-30 on Mark Jeffers
07:37	Removed Sample from Pump #LV-2
07:38	Placed Sample on Pump #LV-2 on Gary Reynolds
07:43	PAS digs mud & dirt from excavator tracks in Center Loading Area
07:45	PAS makes a pathway from plywood on decking from Trestle 2 towards the West-end of the deck
07:52	EQM brings over more 4'x6' posts
07:54	Excavator begins moving debris from Center Loading Area
08:24	Crane begins driving off of Trestle 2 & stops at end of ramp/in front of N River St
08:26	Skid Steer begins laying 4'x6' post slats and setting them on the ground for the crane to drive on
08:53	Crane begins driving down the ramp of Trestle 2 onto 4'x6' planks then stop moving where they end in order to have planks moved to front of crane and continuation of crane movement to ensue
08:55	Skid Steer continues loading & unloading 4'x6' planks for crane to move over
09:20	Skid Steer begins picking up 4'x6' planks that the crane has passed over and continues moving them to the frontside of crane tracks in order to transport crane over train tracks and N River St
09:30	PAS sweeps up wood debris left over from crane moving across N River St
09:46	Crane begins driving up Trestle 1

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:11	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:11	Removed Sample from Pump #LV-30
12:13	Removed Sample from Pump #LV-1
12:33	Placed Sample on Pump #LV-5 on Ever Bonilla
12:45	Placed Sample on Pump #LV-30 on Mark Conway
12:45	AAC, EQM & PAS return from lunch break
12:47	Placed Sample on Pump #LV-1 on Justin Scott
13:00	Long reach returns to removing asphalt from Trestle 1
13:02	PAS is wetting debris with firehose as piles are being moved by long reach into order to maintain dust control
13:05	Crane with clamshell returns to removing asphalt from decking atop Trestle 2
13:23	Excavator in Center Loading Area beginning to break up and move debris from decking
13:45	Left for 2 o'clock meeting
14:25	Meeting is over, returning to worksite
14:30	Removed Sample from Pump #LV-5
14:35	Removed Sample from Pump #LV-30
14:37	Removed Sample from Pump #LV-1
14:40	Removed Sample from Pump #HV-33
14:42	Removed Sample from Pump #HV-08
14:50	Returned to EQM trailer to read samples
15:15	Finished reading samples and left worksite
16:15	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:15-less 30-minute lunch **Total Technician Hours:** **7**

Senior Project Manager:
Sidney Carter: 06:30-09:30 **Total Senior Project Manager Hours:** **3**

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/07/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, & LV-30 – HV Pumps: HV-8 & HV-33

Daily Weather: 32°-50° F, 98% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews & operators
06:50	Began prepping pumps for area and personal sampling
06:55	Placed Sample on Pump #HV-33 at the end of Trestle 2
06:58	Placed Sample on Pump #HV-08 at Center Loading Area between Trestles
07:15	EQM began moving asphalt on Trestle 1
07:15	Placed Sample on Pump #LV-1 on Justin Scott
07:20	AAC making final adjustments to clamshell
07:23	Placed Sample on Pump #LV-5 on Ever Bonilla
07:29	Placed Sample on Pump #LV-30 on Mark Conway
07:30	PAS doing clean-up on ground within the Northside of decking. Spoke with Dave with PAS and he said that he is finding roofing debris below the soil embankment which appears to have been there since before the fire
07:45	Removed Sample from Pump #LV-1
07:46	Placed Sample on Pump #LV-1 on Justin Scott
07:53	Removed Sample from Pump #LV-5
07:54	Placed Sample on Pump #LV-5 on Ever Bonilla
07:59	Removed Sample from Pump # LV-30
08:00	Placed Sample on Pump #LV-30 on Mark Conway
10:00	Clamshell still moving debris
10:00	Long reach still breaking-up asphalt on deck from end of Trestle 1
10:15	PAS wetting down debris in center area of deck while excavator moves it into piles before placement into poly-lined dumpsters
11:30	Forklift driving on Trestle 2 and removing big wood block at the Northside of Trestle 2
12:00	Removed Sample from Pump #LV-5
12:00	AAC, EQM & PAS breaks for lunch
12:05	Removed Sample from Pump #HV-08
12:06	Placed Sample on Pump #HV-08 at Center Loading Area between Trestles
12:10	Removed Sample from Pump #HV-33

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:53	AAC is still working on crane
12:00	AAC, EQM & PAS break for lunch
12:00	Removed Sample from Pump #LV-30
12:01	Placed Sample on Pump #LV-30 on Brent Hardinger
12:03	Removed Sample from Pump #HV-33
12:04	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:07	Removed Sample from Pump #HV-8
12:08	Placed Sample on Pump #HV-8 at the center Loading Area between Trestles
12:10	Removed Sample from Pump #LV-1
12:11	Placed Sample on Pump #LV-1 on Gary Reynolds
12:16	Removed Sample from Pump #LV-5
12:17	Placed Sample on Pump #LV-5 on Mark Jeffers
12:34	Removed Sample from Pump #LV-30
13:00	AAC finishes working on crane
13:30	Went back to EQM trailer to analyze cassettes
14:00	2 o'clock meeting
14:30	Meeting adjourned and returning to worksite
14:35	Removed Sample from Pump #HV-33
14:37	Removed Sample from Pump #HV-8
14:39	Removed Sample from Pump #LV-5
14:40	Removed Sample from Pump #LV-1
15:20	Finished analyzing samples
15:30	Left worksite
16:30	Finished documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.75**

Senior Project Manager:
Sidney Carter: 06:30-09:00 **Total Senior Project Manager Hours:** **2.50**

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/06/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, & LV-30 – HV Pumps: HV-8 & HV-33

Daily Weather: 32°-49° F, 99% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:45	Prepped pumps for area and personal sampling
06:55	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:00	Placed Sample on Pump #HV-8 at the center Loading Area between Trestles
07:00	EQM began moving debris at the end of Trestle 1
07:06	Placed Sample on Pump #LV-30 on Brent Hardinger
07:10	Placed Sample on Pump #LV-5 on Mark Jeffers
07:12	Placed Sample on Pump #LV-1 on Gary Reynolds
07:15	EQM began moving debris at Loading Area
07:20	AAC is loading out equipment that isn't needed for Phase 3
07:30	Inspect pontoons and observed all are functional
07:36	Removed Sample from Pump #LV-30
07:37	Placed Sample on Pump #LV-30 on Brent Hardinger
07:40	Removed Sample from Pump #LV-5
07:41	Placed Sample on Pump #LV-5 on Mark Jeffers
07:42	Removed Sample from Pump #LV-1
07:43	Placed Sample on Pump #LV-1 on Gary Reynolds
07:45	PAS is cleaning debris on bank of Northside of decking
08:15	EQM is removing deck between Trestles
09:03	Crane lifting long reach from end of Trestle 2 to front of Trestle 2 so it can drive off of it
09:12	Long reach drives off Trestle 2 to the Southeast side of Trestle 1
09:21	Water truck wetting roadway in order to maintain dust control
09:30	Skid steer with sweeping attachment is cleaning the street in order to maintain dust control
09:40	Excavator moving dirt around in the center Loading Area
10:00	Long reach drives onto Trestle 1 & begins moving debris
10:30	Went to EQM trailer to analyze cassettes
11:16	White pickup truck drives onto Trestle 2 next to crane
11:52	Refueling excavator in Center Loading Area

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:13	Trailer in center area is attached to excavator and swinging over to the Southside of Trestle 1 in order to be hosed off with water
10:22	Forklift moves trailer to the Southside of Trestle 1
10:33	Skid-steer with sweeping attachment begins sweeping street in order to maintain dust control
10:36	Long reaches on Trestle 2 and outside of gate finishing demoing wall & structure on the Northwest ide of the deck
11:34	AAC is finished for their workday
11:40	Removed Sample from Pump #LV-1
12:00	PAS & EQM break for lunch
12:00	Removed Sample from Pump #LV-30
12:03	Removed Sample from Pump #HV-705
12:04	Placed Sample on Pump #HV-705 at the end of Trestle 2
12:06	Removed Sample from Pump #HV-706
12:07	Placed Sample on Pump #HV-706 at the center of Loading Area
12:08	Removed Sample from Pump #LV-5
12:09	Placed Sample on Pump #LV-5 on Ever Bonilla
12:30	PAS & EQM return from lunch
12:35	EQM continues to move debris from deck to Center Loading Area next to Trestle 1
12:31	Placed Sample on Pump #LV-30 on Mark Conway
13:00	Long reach continues to move debris from Northside of deck to center where second long reach moves it to the Southeast corner of Trestle 1
13:25	PAS continues to wet debris with water
13:50	Left for meeting at 14:00
14:00	Meeting commences
15:00	Meeting ends, work crews have left for end of shift
15:00	Removed Sample from Pump #LV-30
15:01	Removed Sample from Pump #LV-5
15:10	Removed Sample from Pump #HV-705
15:12	Removed Sample from Pump #HV-706
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 06:30-16:30-less 30-minute lunch **Total Technician Hours:** **9.5**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0.00**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/05/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, & LV-30 – HV Pumps: HV-705 & HV-706

Daily Weather: 36° F, 90% Humidity

Time	Observations
06:30	Morning safety meeting with work crews and operators
06:54	Observed pontoons and floats as fully functional in water
06:56	Began prepping pumps for area and personal monitoring
06:57	Placed Sample on Pump #HV-705 at the end of Trestle 2
07:00	Placed Sample on pump #HV-706 at the center of Loading Area
07:09	Placed Sample on Pump #LV-30 on Mark Conway
07:12	Placed Sample on Pump #LV-1 on Mark Jeffers
07:15	Placed Sample on Pump #LV-5 on Ever Bonilla
07:26	PAS laying plywood for pathway to NW corner of decking in order to remove compressor and other valuables that remain sanding on small structure
07:39	Removed Sample from Pump #LV-30
07:40	Placed Sample on Pump #LV-30 on Mark Conway
07:42	Removed Sample from Pump #LV-1
07:43	Placed Sample on Pump #LV-1 on Mark Jeffers
07:45	Removed Sample from Pump #LV-5
07:46	Placed Sample on Pump #LV-5 on Ever Bonilla
07:47	Firehose operator begins wetting down debris in Northwest corner while long reach removes it
08:00	Brought 2nd long reach to Northside of worksite, beyond fencing
08:10	2nd Long reach begins moving debris from decking and putting into poly-lined dumpster
08:16	Crane lifts destroyed tractor to Center Loading Area
08:22	Forklift picks-up tractor and moves it to the Southwest side of Trestle 1
08:36	Crane lifts out destroyed trailer to Center Loading Area
08:51	Crane lifts out destroyed wood chipper to Center Loading Area
08:57	Forklift picks-up chipper & moves it to Southeast end of Trestle 1
09:35	PAS begins working on damaged trailer in Center Loading Area
09:53	Crane attaches clamshell
10:00	Crane detaches clamshell

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:13	Brought boom lift to Northside of Trestle 2
10:15	AAC began putting mud matts into place
10:31	Crane moves another load of mud matts onto the end of Trestle 2
11:00	Went to trailer to analyze morning samples
12:00	AAC places final mud matt into place
12:01	Removed Sample from Pump #LV-5
12:02	Placed Sample on Pump #LV-5 on Jacob Johnson
12:03	Removed Sample from Pump #LV-30
12:05	Removed Sample from Pump #HV-33
12:05	AAC goes to lunch
12:06	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:08	Removed Sample from Pump #HV-8
12:09	Placed Sample on Pump #HV-8 at Loading Area between Trestles
12:15	Removed Sample from Pump #LV-1
12:45	Removed Sample from Pump #LV-5
12:47	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
13:06	Crane moves vibratory hammer onto flatbed semi-truck to be removed from worksite
13:26	Placed Sample on Pump #LV-1 on Kent Parker
13:48	PAS poly-lining empty dumpster
14:35	Removed Sample from Pump #LV-30
14:37	Removed Sample from Pump #LV-1
14:40	Removed Sample from Pump #HV-33
14:42	Removed Sample from Pump #HV-8
15:00	Crane lifting long reach to end of Trestle 2
15:30	Left worksite
16:30	Finished documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-16:30-less 30-minute lunch **Total Technician Hours:** **7**

Senior Project Manager:
Sidney Carter: 06:30-09:15 **Total Senior Project Manager Hours:** **2.75**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/04/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, & LV-30 – HV Pumps: HV-8 & HV-33

Daily Weather: 42° F, 91% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:50	Prepared pumps for area and personal monitoring
06:55	Placed Sample on Pump #HV-33 at the end of Trestle 2
06:59	Placed Sample on Pump #HV-8 at Loading Area between Trestles
07:01	Placed Sample on Pump #LV-1 on Kent Parker
07:05	Placed Sample on Pump #LV-5 on Jacob Johnson
07:14	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
07:15	EQM began moving debris at Loading Area in preparation of loading dumpsters
07:20	AAC began moving mud matts into place on Trestle 2
07:30	PAS & EQM began lining first dumpster with poly
07:30	AAC had more mud matts delivered
07:31	Removed Sample on Pump #LV-1
07:32	Placed Sample on Pump #LV-1 on Kent Parker
07:35	Removed Sample from Pump #LV-5
07:36	Placed Sample on Pump #LV-5 on Jacob Johnson
07:44	Removed Sample from Pump #LV-30
07:45	Placed Sample on Pump#LV-30 on Eduardo Gonzalez
07:48	Inspected pontoons and observed that all are functional, free of lobs but some debris still remains at the North-end of netting
08:15	EQM began loading first poly-lined dumpster
08:30	AAC continues loading and installing mud matts on deck
08:45	First dumpster loaded and secured with poly then moved into Staging Area to be removed from worksite at a later time
09:00	EQM relocated to Northeast corner of deck and loaded a small amount of debris
09:39	EQM brings over water truck to Trestle 2
09:40	AAC gets load of mud matts to Trestle 2
09:41	AAC attached mud matts to crane
09:48	Crane moves mud matts to end of Trestle 2

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
07:54	Empty dumpster being placed into position beside the Southeast corner of the ramp to Trestle 1
07:56	Firehose operator wetting debris as small excavator scoops debris, both working in tandem to maintain dust control
07:58	AAC moving disel hammer into position for driving pilings to extend Trestle 2
08:00	PAS poly-lining empty dumpster in front of Trestle 1 at Southeast corner of staging area
08:03	AAC connected diesel hammer onto first piling at end of Trestle 2
08:21	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
08:24	Placed Sample on Pump #LV-1 on Mark Conway
08:26	Diesel hammer begins hammering pylons
08:29	Poly-lined dumpster begins being filled
08:38	Filled dumpster is moved to the Southeast corner of Loading Area
08:39	Diesel hammer begins hammer another pylon
08:50	Diesel hammer is detached from crane by AAC
08:51	Removed Sample from Pump #LV-30
08:52	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
08:54	Removed Sample from Pump #LV-1
08:55	Placed Sample on Pump #LV-1 on Mark Conway
09:25	Cap is attached to crane then moved to the end of Trestle 2
10:00	Removed Sample from Pump #LV-30
11:00	Cap brought to the front of Trestle 2
12:08	Removed Sample from Pump #HV-706
12:09	Placed Sample on Pump #HV-706 at Loading area between Trestle 1 & Trestle 2
12:10	Removed Sample from Pump #LV-1
12:11	Placed Sample on Pump #LV-1 on Mark Conway
12:13	Removed Sample from Pump #HV-705
12:14	Placed Sample on Pump #HV-705 at the end of Trestle 2
12:30	Crane moves steel beam to end of Trestle 2
12:50	Crane moves a second steel beam to end of Trestle 2
13:00	PAS on boom lift from Trestle 1 out and over deck clearing debris
13:01	Crane moves another steem beam to end of Trestle 2
14:15	Removed Sample from Pump #LV-1
14:17	Removed Sample from Pump #HV-706
14:18	Removed Sample from Pump #HV-705
15:00	Left worksite
16:00	Finished documentation and end of shift

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Technician:

Jibri Johnson: 08:45-16:00-less 30-minute lunch — **Total Technician Hours:** **6.75**
Pete Coleman: 06:30-08:30 — **Total Technician Hours:** **2.00**

Senior Project Manager:

Sidney Carter: 13:30-14:00 — **Total Senior Project Manager Hours:** **.5**

Sidney Carter / Pete Coleman / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

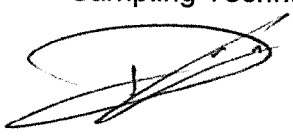
Time	Observations
16:15	Completed documentation, end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-16:15-less 30-minute lunch **Total Technician Hours:** **6.65**

Senior Project Manager:
Sidney Carter: 07:00-09:30 **Total Senior Project Manager Hours:** **2.5**

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/22/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5, LV-36, LV-38 – HV Pumps: HV-8, HV-33, HV-51

Daily Weather: 40° F, 88% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and equipment operators
07:20	Inspected pontoons and observed that all were fully functional
07:30	Placed Sample on Pump #LV-5 on Gary Reynolds
07:32	Placed Sample on Pump #HV-51 at Southeast side of Trestle 1
07:35	Placed Sample on Pump #LV-36 on Mark Conway
07:36	Placed Sample on Pump #HV-8 at End of Trestle 2
07:37	Placed Sample on Pump #LV-38 on Mark Jeffers
07:39	Placed Sample on Pump #HV-33 at NW Corner of worksite, beyond fence
08:00	Crane begins moving debris off decking from atop Trestle 2
08:00	Removed Sample from Pump #LV-5
08:01	Placed Sample on Pump #LV-5 on Gary Reynolds
08:05	Removed Sample from Pump #LV-36
08:06	Placed Sample on Pump #LV-36 on Mark Conway
08:07	Removed Sample from Pump #LV-38
08:08	Placed Sample on Pump #LV-38 on Mark Jeffers
08:10	Excavator crunches wood debris from Center Loading Area
08:11	AAC goes in water on boat to gather debris from pontoons and netting
08:12	PAS sprays water on debris from atop Trestle 1 in order to maintain dust control
09:00	Excavator continues to crush debris
09:10	Crane continues to move debris from decking
09:30	PAS collects debris by hand and loads into poly bags down in pit below where decking use to be on the NW Side of Regulated Area
10:30	Poly-lined dumpster brought into Center Loading Area to be loaded with debris

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:55	Excavator begins filling poly-lined dumpster
11:00	Poly-lined and secured dumpster is hauled away
11:13	Another poly-lined dumpster is brought into Center Loading Area
11:15	Excavator begins filling dumpster
11:20	Poly-lined and secured dumpster is hauled away offsite to have contents disposed of
11:29	Another poly-lined dumpster is brought into the Center Loading Area to be filled with debris
12:00	Removed Sample from Pump #LV-38
12:02	Removed Sample from Pump #HV-51
12:03	Placed Sample on Pump #HV-51 at Southeast side of Trestle 1
12:04	Removed Sample from Pump #HV-8
12:05	Removed Sample from Pump #LV-36
12:06	Placed Sample on Pump #HV-8 at End of Trestle 2
12:07	Removed Sample from Pump #LV-5
12:09	Removed Sample from Pump #HV-33
12:10	Placed Sample on Pump #HV-33 at NW Corner of worksite, beyond fence
12:34	Placed Sample on Pump #LV-36 on Mark Conway
12:35	Placed Sample on Pump #LV-5 on Gary Reynolds
12:40	Placed Sample on Pump #LV-38 on Mark Jeffers
13:29	PAS secures another dumpster with poly to be hauled offsite
13:40	Excavator continues filling poly-lined dumpster
14:00	2 O'clock meeting
14:29	Began collecting pumps and samples
14:30	Removed Sample from Pump #LV-5
14:35	Removed Sample from Pump #LV-36
14:40	Removed Sample on Pump #LV-38
14:43	Removed Sample from Pump #HV-51
14:45	Removed Sample from Pump #HV-33
14:50	Removed Sample from Pump #HV-8
15:30	Departed worksite
16:30	Finished documentation and end of shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/26/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM =** Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 – HV Pumps: HV-8, HV-33, HV-52

Daily Weather: 26° F, 90% Humidity

Time	Observations
07:00	Morning Safety Meeting with all work crews and operators
07:15	PAS begins poly-lining low side 1
07:25	Excavator drives to NE Corner of worksite/beside Trestle 2 ramp
07:30	Placed Sample on Pump #LV-1 on Ever Bonilla
07:32	Placed Sample on Pump #LV-5 on Mark Conway
07:35	Placed Sample on Pump #HV-52 at NW Corner of Regulated Area
07:37	Placed Sample on Pump #HV-8 at SE Corner beside ramp to Trestle 1
07:39	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:50	Excavator begins filling low side 1
08:00	Removed Sample from Pump #LV-1
08:01	Placed Sample on Pump #LV-1 on Ever Bonilla
08:02	Removed Sample from Pump #LV-5
08:03	Placed Sample on Pump #LV-5 on Mark Conway
08:10	PAS secures low side 1 in poly for removal from worksite to commence
08:15	Inspected pontoons and all are fully functional
08:30	Low side 1 drives away
08:35	Low side 2 moves into place on NE corner of worksite/beside ramp to Trestle 2
08:45	PAS begins poly-lining low side 2
08:55	Excavator begins filling low side 2
09:00	PAS begins poly securing filled low side 2
09:20	Low side 3 is backed into Center Loading Area
09:40	PAS poly-lines low side 3
09:50	Excavator begins filling poly-lined low side 3

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:05	PAS poly-secures low side 3 to be removed from worksite
10:06	PAS in boom lift from Trestle 1 pulling planks from center decking area
10:25	Poly secured low side 3 is filled to capacity with debris & removed from worksite
10:45	Forklift brings over dumpster for PAS to poly-line
10:48	PAS poly-lines dumpster 1
11:00	Forklift moves dumpster into place for poly-lining to commence
11:04	Forklift brings over poly-lined dumpster 2
11:15	PAS begins poly-lining dumpster 1
11:42	Forklift brings over dumpster 3 to Center Loading Area for poly-lining to commence
11:45	Excavator begins filling poly-lined dumpster 3
11:58	Removed Sample from Pump #LV-1
12:00	PAS & EQM break for lunch
12:00	Removed Sample from Pump #HV-52
12:01	Placed Sample on Pump #HV-52 at NW Corner of Regulated Area
12:03	Removed Sample from Pump #HV-8
12:04	Placed Sample on Pump #HV-8 at SE Corner beside ramp to Trestle 1
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:07	Removed Sample from Pump #LV-5
12:35	Placed Sample on Pump #LV-5 on Mark Conway
12:40	Placed Sample on Pump #LV-1 on Ever Bonilla
12:45	Left worksite for EQM trailer to read samples
13:30	PAS gathering debris from below decking/beach area
14:00	2 O'clock meeting
14:30	Returned to worksite to collect samples
14:35	Removed Sample from Pump #LV-5
14:41	Removed Sample from Pump #LV-1
14:42	Removed Sample from Pump #HV-8
14:44	Removed Sample from Pump #HV-33
14:47	Removed Sample from Pump #HV-52
15:30	Departed worksite
16:30	Finished documentation and end of work shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/27/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 – HV Pumps: HV-8, HV-33, HV-51

Daily Weather: 40° F, 90% Humidity

Time	Observations
07:00	Morning Safety Meeting with all work crews and equipment operators
07:20	Pick-up Start samples then began prepping pumps for today's work
07:25	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:30	Placed Sample on Pump #HV-8 on Northside of Regulated Area
07:30	Crews began warming up equipment AAC on stand-down due to close call of power line on Friday
07:35	Placed Sample on Pump #HV-51 on mid-span of Trestle 1
07:40	PAS began lining dumpsters
07:47	Placed Sample on Pump #LV-1 on Jacob Johnson
07:50	Placed Sample on Pump #LV-5 on Brent Hardinger
08:10	EQM Brent began processing materials
08:12	Observed pontoons are fully functional in water
08:17	Removed Sample from Pump #LV-1
08:18	Placed Sample on Pump #LV-1 on Jacob Johnson
08:20	Removed Sample from Pump #LV-5
08:21	Placed Sample on Pump #LV-5 on Brent Hardinger
08:30	First dumpster brought in and begins being loaded with debris
08:45	First dumpster is fully loaded, secured with poly and moved into staging area
09:00	Dumpster 2 filled to capacity with debris and taken away by forklift to Staging Area and secured with poly to be taken offsite
09:10	Dumpster 3 brought to Center Loading Area by forklift
09:15	Excavator begins filling poly-lined Dumpster 3
09:35	Dumpster 3 poly-secured and removed

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:40	Forklift brings over poly-lined Dumpster 4
09:42	Excavator begins filling Dumpster 4
10:00	Forklift removes Poly-secured Dumpster 4
10:30	PAS continues to wrap filled dumpsters
10:40	Excavator begins processing wood debris in Center Loading Area
11:15	Excavator moves to NE corner of worksite beside ramp to Trestle 2
11:16	Low side 1 moves into place beside excavator at NE corner of worksite beside ramp to Trestle 2
11:20	PAS poly-lines Low Side 1
11:35	Excavator begins filling Low Side 1
11:57	PAS poly-wraps Low Side 1
12:01	Removed Sample from Pump #LV-1
12:04	Removed Sample from Pump #HV-33
12:05	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:06	Removed Sample from Pump #HV-8
12:07	Placed Sample on Pump #HV-8 on Northside of Regulated Area
12:08	Removed Sample from Pump #HV-51
12:09	Placed Sample on Pump #HV-51 on mid-span of Trestle 1
12:10	Removed Sample from Pump #LV-5
12:15	PAS & EQM break for lunch
12:40	Placed Sample on Pump #LV-1 on Jacob Johnson
12:45	Safety Meeting concerning struck power line
12:45	Placed Sample on Pump #LV-5 on Brent Hardinger
14:41	Removed Sample from Pump #LV-1
14:45	Removed Sample from Pump #LV-5
14:47	Removed Sample from Pump #HV-33
14:50	Removed Sample from Pump #HV-8
14:53	Removed Sample from Pump #HV-51
13:00	Began analyzing samples
15:30	Left worksite
16:30	Finished documentation and end of shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-16:30-less 30-minute lunch **Total Technician Hours:** **7**

Senior Project Manager:
Sidney Carter: 07:00-09:00 **Total Senior Project Manager Hours:** **2**

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/28/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 – HV Pumps: HV-8, HV-33, HV-51

Daily Weather: 42° F, 86% Humidity

Time	Observations
07:00	Morning safety meeting; beginning today there will also be a 12:00 safety meeting daily
07:15	Picked-up samples from Start
07:30	Prepared pumps for today's work, AAC will have crane inspection beginning at approximately
09:30,	crane may not start-up until possibly after 12:00
07:45	EQM used Skid Steer to clean trestles of snow & ice
07:57	Placed Sample on Pump #HV-8 at the end of Trestle 2
08:00	PAS used Long Reach to go onto Southside of deck and begins making cuts
08:05	Placed Sample on Pump #HV-33 at mid-span of Trestle 1
08:07	Placed Sample on Pump #HV-51 at NW corner of Regulated Area
08:10	Placed Sample on Pump #LV-1 on Mark Conway
08:13	Placed Sample on Pump #LV-5 on Gary Reynolds
08:15	PAS is cleaning debris on Northside in water, observed that pontoons are fully functional
08:40	Removed Sample from Pump #LV-1
08:41	Placed Sample on Pump #LV-1 on Mark Conway
08:43	Removed Sample from Pump #LV-5
08:44	Placed Sample on Pump #LV-5 on Gary Reynolds
09:00	All work crews and equipment stop working
09:45	PAS continues to cut sections of decking
10:00	Crane begins using clamshell to retrieve debris from water
10:35	PAS continues to cut section of deck
11:00	Trucks beginning to drop-off empty dumpsters for poly-lining and loading of debris
11:01	Dumpsters are being drop-off at the Southeast corner of worksite, beside the ramp to Trestle 1
11:30	PAS begins poly-lining dumpsters

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	All work crews and operators break for lunch
12:00	Removed Sample from Pump #LV-1
12:05	Removed Sample from Pump #LV-5
12:07	Removed Sample from Pump #HV-33
12:08	Placed Sample on Pump #HV-33 at mid-span of Trestle 1
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:12	Removed Sample from Pump #HV-51
12:13	Placed Sample on Pump #HV-51 at NW corner of Regulated Area
12:34	Placed Sample on Pump #LV-1 on Mark Conway
12:39	Placed Sample on Pump #LV-5 on Gary Reynolds
12:45	Safety Meeting
12:55	Began reading samples from earlier air monitoring
13:50	Excavator moves to Center Loading Area
13:55	Excavator begins processing debris
14:13	Removed Sample from Pump #HV-8
14:35	Removed Sample from Pump #HV-33
14:40	Removed Sample from Pump #HV-51
14:42	Removed Sample from Pump #LV-1
14:45	Removed Sample from Pump #LV-5
14:50	Left worksite for EQM trailer to analyze samples
15:10	Excavator processing debris
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-16:30-less 30-minute lunch **Total Technician Hours:** **6.5**

Senior Project Manager:
Sidney Carter: 07:00-09:00 **Total Senior Project Manager Hours:** **2**

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 12/29/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds, Luis Penarah, Little Steward / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-30, LV-36 & LV-38 – HV Pumps: HV-8, HV-33, HV-51

Daily Weather: 54° F, 88% Humidity

Time	Observations
07:00	Morning Safety Meeting with all work crews and equipment operators
07:25	Observed pontoons are fully functional with debris hung-up within netting
07:30	Placed Sample on Pump #LV-30 on Mark Jeffers
07:35	Placed Sample on Pump #LV-38 on Jacob Johnson
07:38	Placed Sample on Pump #LV-36 on Brent Hardinger
07:40	Placed Sample on Pump #HV-33 at NW Corner of Worksite
07:43	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:45	Placed Sample on Pump #HV-51 at Mid-Span of Trestle 2
07:56	Long Reach drives from Trestle 2 to Center Loading Area
08:00	Crane picks-up boat slightly on Trestle 2 in order to remove water from inside of the boat
08:00	Removed Sample from Pump #LV-30
08:01	Placed Sample on Pump #LV-30 on Mark Jeffers
08:05	Removed Sample from Pump #LV-38
08:06	Placed Sample on Pump #LV-38 on Jacob Johnson
08:08	Removed Sample from Pump #LV-36
08:09	Placed Sample on Pump #LV-36 on Brent Hardinger
08:10	Using boom lift; PAS goes onto deck from Trestle 1 in order to begin cutting sections of deck
08:11	Long Reach drives to mid-point of Trestle 2
08:18	Long Reach begins moving debris from deck to Center Loading Area
08:19	Crane using clam shell to remove debris from water
08:49	PAS moves Boom Lift and deck cutting operator from Trestle 1 and places on Trestle 2
09:30	Long Reach continues to move debris
09:35	Excavator processes debris in Center Loading Area

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:30	PAS continues to work on deck
11:00	Long Reach drives from Trestle 2 into Center Loading Area
12:00	All crews break for lunch
12:00	Removed Sample from Pump #LV-30
12:02	Removed Sample from Pump #LV-38
12:04	Removed Sample from Pump #LV-36
12:06	Removed Sample from Pump #HV-33
12:07	Placed Sample on Pump #HV-33 at NW Corner of Worksite
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:13	Removed Sample from Pump #HV-51
12:15	Placed Sample on Pump #HV-51 at Mid-Span of Trestle 2
12:17	Left worksite for EQM trailer to analyze samples
12:45	Safety Meeting
12:45	Placed Sample on Pump #LV-30 on Mark Jeffers
12:47	Placed Sample on Pump #LV-38 on Jacob Johnson
12:50	Placed Sample on Pump #LV-36 on Brent Hardinger
13:00	Poly-lined dumpster brought to Center Loading Area
13:10	Excavator begins filling poly-lined dumpster
13:35	Dumpster 1 is secured with poly and removed by forklift to be hauled off worksite & contents disposed of
13:45	Poly-lined Dumpster 2 brought over in preparation to be loaded with debris
13:50	Excavator fills poly-lined Dumpster 2
14:00	2 O'clock meeting
14:30	Safety meeting finished & returned to worksite
14:40	Removed Sample from Pump #LV-30
14:45	Removed Sample from Pump #LV-38
14:50	Removed Sample from Pump #LV-36
14:51	Removed Sample from Pump #HV-33
14:55	Removed Sample from Pump #HV-8
14:57	Removed Sample from Pump #HV-51
15:00	Left for EQM trailer to analyze samples
15:10	PAS poly-securing dumpsters that are filled to capacity with debris
15:30	Left worksite
16:30	Completed documentation & end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 0:00-0:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/03/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 & LV-36 – HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 34°-46° F, 99% Humidity

Time	Observations
06:50	Picked-up Start samples
07:00	Morning Safety Meeting with all work crews and equipment operators
07:30	Prepped pumps for today's work
07:41	Placed Sample on Pump #HV-8 at the end of Trestle 1
7:50	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:50	EQM work begins, moving debris from atop Trestle 2
07:55	EQM Brent began oving debris from atop Trestle 1
07:55	Placed Sample on Pump #LV-1 on Jacob Johnson
08:00	Placed Sample on Pump #LV-5 on Mark Conway
08:05	Placed Sample on Pump #LV-36 on Kent Parker
08:05	PAS began cutting decking between Trestle 1 & Trestle 2
08:10	Placed Sample on Pump #HV-51 at the Northside of Regulated Area
08:15	AAC is moving material with crane on Trestle 2 over to Staging Area for EQM
08:25	Removed Sample from Pump #LV-1
08:26	Placed Sample on Pump #LV-1 on Jacob Johnson
08:30	Removed Sample from Pump #LV-5
08:31	Placed Sample on Pump #LV-5 on Mark Conway
08:35	Removed Sample from Pump #LV-36
08:36	Placed Sample on Pump #LV-36 on Kent Parker
09:14	Crane lifts cut section of decking to center area pile
09:45	Crane lifts another deck section
10:30	PAS & AAC continue to cut sections of deck
10:40	Observed pontoons fully functional with debris observed in netting

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:00	Crane lifts cut section of deck
11:30	Boat on water fishing debris from water
11:45	PAS cutting more sections of center deck between Trestle 1 & Trestle 2
11:50	Removed Sample from Pump #LV-1
12:00	All crews break for lunch
12:00	Removed Sample from Pump #LV-5
12:02	Removed Sample from Pump #LV-36
12:05	Removed Sample from Pump #HV-8
12:06	Placed Sample on Pump #HV-8 at the end of Trestle 1
12:08	Removed Sample from Pump #HV-33
12:09	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:11	Removed Sample from Pump #HV-51
12:12	Placed Sample on Pump #HV-51 at the Northside of Regulated Area
12:45	Safety meeting
12:48	Placed Sample on Pump #LV-1 on Jacob Johnson
12:50	Placed Sample on Pump #LV-5 on Mark Conway
12:52	Placed Sample on Pump #LV-36 on Kent Parker
13:00	PAS & AAC return to cutting sections of deck
13:15	AAC repairs new saw
13:45	PAS resumes cutting once saw fixed
14:00	2 O'clock meeting
14:45	Collected pumps & samples
14:46	Removed Sample from Pump #LV-1
14:50	Removed Sample from Pump #LV-5
14:52	Removed Sample from Pump #LV-36
14:55	Removed Sample from Pump #HV-8
15:08	Removed Sample from Pump #HV-33
15:10	Removed Sample from Pump #HV-51
15:11	Left worksite for EQM trailer to analyze samples
15:30	Left worksite
16:30	Completed documentation & end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00-09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/02/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 & LV-30 – HV Pumps: HV-8, HV-38

Daily Weather: 40° F, 59% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:20	Observed pontoons are fully functional
07:30	Placed Sample on Pump #HV-8 at end of Trestle 2
07:35	Placed Sample on Pump #HV-38 at Northwest corner of work site
07:40	In Boom Lift; PAS goes onto deck to cut decking from Trestle 1
07:40	Placed Sample on Pump #HV-51 at the end of Trestle 1
07:45	PAS beginning to poly-line dumpsters
07:42	Placed Sample on Pump #LV-1 on Mark Jeffers
07:44	Placed Sample on Pump #LV-30 on Brent Hardinger
07:47	Placed Sample on Pump #LV-5 on Richard Stuart
08:00	Crane begins moving debris from deck to reach of Long Reach
08:05	Long Reach moves debris from deck while atop Trestle 1 and into reach of 2nd Long Reach
08:12	Removed Sample from Pump #LV-1
08:13	Placed Sample on Pump #LV-1 on Mark Jeffers
08:14	Removed Sample from Pump #LV-30
08:15	Placed Sample on Pump #LV-30 on Brent Hardinger
08:16	Excavator begins processing debris
08:17	Removed Sample from Pump #LV-5
08:18	Placed Sample on Pump #LV-5 on Richard Stuart
09:30	Excavator continues to process debris from Center Loading Area
09:35	PAS continues to work on deck
09:37	Forklift brings over poly-lined Dumpster 1 to Center Loading Area
09:40	Excavator begins filling Dumpster 1

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:55	Dumpster 1 is secured with poly and hauled away for removal from worksite
10:05	Dumpster 2 is brought to Center Loading Area to be lined with poly before being loaded with debris
10:30	Dumpster 2 is filled to capacity debris, secured with poly and hauled away
11:00	AAC preparing new saw for cutting
11:45	AAC still preparing new saw
11:55	Removed Sample from Pump #LV-1
12:00	AAC cuts small line of deck to test saw before lunch break
12:00	Removed Sample from Pump #LV-30
12:05	Removed Sample from Pump #LV-5
12:08	Removed Sample from Pump #HV-8
12:09	Placed Sample on Pump #HV-8 at end of Trestle 2
12:10	Removed Sample from Pump #HV-38
12:11	Placed Sample on Pump #HV-38 at Northwest corner of work site
12:13	Removed Sample from Pump #HV-51
12:14	Placed Sample on Pump #HV-51 at the end of Trestle 1
12:35	Placed Sample on Pump #LV-1 on Mark Jeffers
12:40	Placed Sample on Pump #LV-30 on Brent Hardinger
12:41	Placed Sample on Pump #LV-5 on Richard Stuart
12:45	Safety meeting
13:05	AAC returns to cutting deck with new saw
13:45	Forklift brings plywood sheet to Trestle 2 for cutters on deck
14:00	2 O'clock safety meeting
14:15	Crane lifts off cut=-up sections of NW Corner of deck
14:30	Removed Sample from Pump #HV-8
14:33	Removed Sample from Pump #HV-38
14:35	Removed Sample from Pump #HV-51
14:38	Removed Sample from Pump #LV-5
14:40	Removed Sample from Pump #LV-1
14:45	Removed Sample from Pump #LV-30
15:10	Returned to EQM Trailer to analyze samples
15:30	Left worksite
16:30	Finished documentation and end of shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** 9

Senior Project Manager:
Sidney Carter: 0:00-0:00 **Total Senior Project Manager Hours:** 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/06/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-38 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 50° F, 74% Humidity

Time	Observations
07:00	Safety Meeting with all work crews and operators
07:25	Observed pontoons are fully functional
07:30	Began preparing pumps for area and personal air monitoring
07:30	Placed Sample on Pump #LV-5 on Jacob Johnson
07:32	Placed Sample on Pump #LV-38 on Brent Hardinger
07:34	Placed Sample on Pump #HV-8 at the end of Trestle 1
07:38	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:40	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
07:50	Long Reach is driving to center Loading Area from Trestle 1
08:00	Excavator moves from Center Loading Area to just E of Trestle 1 beginning the processing of debris
08:15	PAS goes out onto center deck & begins cutting
08:16	EQM wets down debris from atop Trestle 1
08:40	Long Reach drives onto Trestle 1
10:48	PAS continues to cut sections of deck
11:27	Removed Sample from Pump #LV-5
11:28	Placed Sample on Pump #LV-5 on Jacob Johnson
11:30	Removed Sample from Pump #LV-38
11:31	Placed Sample on Pump #LV-38 on Brent Hardinger
11:45	PAS continues to cut deck
11:58	Removed Sample from Pump #LV-5
11:59	Removed Sample from Pump #HV-8
12:00	Placed Sample on Pump #HV-8 at the end of Trestle 1

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	Crews break for lunch
12:30	Safety meeting
12:01	Removed Sample from Pump #LV-38
12:02	Removed Sample from Pump #HV-33
12:03	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:04	Removed Sample from Pump #HV-51
12:05	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
12:40	Placed Sample on Pump #LV-5 on Jacob Johnson
12:43	Placed Sample on Pump #LV-38 on Brent Hardinger
13:00	PAS continues cutting and removing sections of decking
14:30	Removed Sample from Pump #HV-8
14:32	Removed Sample from Pump #HV-33
14:35	Removed Sample from Pump #HV-51
14:40	Removed Sample from Pump #LV-5
14:45	Removed Sample from Pump #LV-38
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/05/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-36 & LV-38 – HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 40° F, 80% Humidity

Time	Observations
07:00	Safety Meeting with all work crews and equipment operators
07:25	Began preparing pumps for air sampling
07:26	Observed pontoons are fully operational
07:28	Placed Sample on Pump #LV-1 on Jacob Johnson
07:30	Placed Sample on Pump #LV-38 on Mark Conway
07:34	Placed Sample on Pump #LV-36 on Mark Jeffers
07:36	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:38	Placed Sample on Pump #HV-33 at the end of Trestle 1
07:40	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
07:45	Long Reach relocates to Trestle 1
07:58	Removed Sample from Pump #LV-1
07:59	Placed Sample on Pump #LV-1 on Jacob Johnson
08:00	Removed Sample from Pump #LV-38
08:01	Placed Sample on Pump #LV-38 on Mark Conway
08:04	Removed Sample from Pump #LV-36
08:05	Placed Sample on Pump #LV-36 on Mark Jeffers
08:10	Excavator begins processing debris in Center Loading Area
08:15	PAS goes onto deck
08:20	PAS begins moving plywood into position
08:40	Long Reach begins moving debris
08:55	Crane lifts section of cut decking to within reach of Long Reach
08:58	EQM sprays water from Trestle 1 onto debris processed by excavator in order to maintain dust control
09:27	Forklift brings plywood sheets to Trestle 2

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:29	Crane lifts another section of decking
10:00	Crane lifts another section of decking
10:30	Crane lifts another section of decking
10:43	Long Reach moves cut sections to within reach of smaller excavator
10:44	Excavator continues to process cut and removed sections of decking
11:00	Steel debris buckets brought to ramp of Trestle 2
11:10	Excavator moves to Trestle 2 ramp and using chains lifts buckets one by one then sets them to the Northside of Trestle 2
11:20	Excavator moves back to Center Loading Area to begin processing debris into poly-lined dumpsters
11:58	Removed Sample from Pump #LV-1
12:00	All work crews break for lunch
12:01	Removed Sample from Pump #LV-38
12:03	Removed Sample from Pump #LV-36
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:15	Removed Sample from Pump #HV-33
12:16	Placed Sample on Pump #HV-33 at the end of Trestle 1
12:17	Removed Sample from Pump #HV-51
12:18	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
12:30	Safety Meeting
12:38	Placed Sample on Pump #LV-38 on Mark Conway
12:40	Placed Sample on Pump #LV-1 on Jacob Johnson
12:43	Placed Sample on Pump #LV-36 on Mark Jeffers
13:10	Crane lifts another section of decking
13:15	Excavator processes deck section
13:45	Crane lifts another section of deck
14:00	2 O'clock Safety Meeting
14:30	Removed Sample from pump #HV-8
14:30	Began collecting pumps and samples for analyzing
14:35	Removed Sample from Pump #HV-33
14:37	Removed Sample from Pump #HV-51
14:40	Removed Sample from Pump #LV-1
14:43	Removed Sample from Pump #LV-38
14:45	Removed Sample from Pump #LV-36
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/04/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1, LV-5 & LV-38 – HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 35°-45° F, 98% Humidity

Time	Observations
07:00	Morning Safety Meeting with all work crews and equipment operators
07:10	Picked up Start samples
07:20	Prepped pumps for today's work
07:25	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
07:30	Crews began warming-up equipment
07:33	Placed Sample on Pump #HV-51 at the Northside of Regulated Area
07:43	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:45	Placed Sample on Pump #LV-5 on Justin Scott
07:50	EQM Mark began moving debris from atop Trestle 1
07:50	Placed Sample on Pump #LV-1 on Jacob Johnson
07:55	Placed Sample on Pump #LV-38 on Gary Reynolds
08:00	PAS went onto decking to begin making cuts in the center between Trestle 1 & Trestle 2
08:05	EQM Gary is assisting AAC by moving parts onto Trestle and to switch out bucket on crane
08:15	AAC began changing out parts on crane
08:15	Removed Sample from pump #LV-5
08:16	Placed Sample on Pump #LV-5 on Justin Scott
08:20	Removed Sample from Pump #LV-1
08:21	Placed Sample on Pump #LV-1 on Jacob Johnson
08:25	Removed Sample from Pump #LV-38
08:26	Placed Sample on Pump #LV-38 on Gary Reynolds
08:30	EQM moving equipment off Trestle 1 over to Trestle 2 to start moving material
08:55	AAC got crane switched over to hooks
09:15	EQM Brent is processing material at the Loading Area

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:45	EQM cleaning dirt from tracks in road
10:15	EQM completed processing material in Loading Area
10:30	Analyzed cassettes
11:00	PAS crew on Southside of Trestle 1 completed cutting deck
11:15	EQM Mark continues to move debris from Trestle 1
11:30	PAS crew started cutting at the end of Trestle 1
11:45	Inspected pontoons, all are functional
12:00	Crews break for lunch
12:00	Removed Sample from Pump #LV-38
12:01	Removed Sample from Pump #LV-1
12:02	Removed Sample from Pump #HV-33
12:03	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:05	Removed Sample from Pump #LV-5
12:05	Removed Sample from Pump #HV-8
12:06	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
12:30	Afternoon Safety Meeting
12:38	Removed Sample from Pump #HV-51
12:39	Placed Sample on pump #HV-51 at the Northside of Regulated Area
12:45	PAS went back onto deck to begin cutting deck
13:00	AAC removed deck saw to repair a broken part
13:00	Placed Sample on Pump #LV-1 on Jacob Johnson
13:05	Placed Sample on Pump #LV-5 on Justin Scott
13:20	AAC lowered saw back onto deck
13:35	PAS began cutting deck again
14:00	2 O'clock Safety Meeting
14:30	PAS continues to cut deck between Trestle 1 & Trestle 2
14:45	EQM processing material
15:15	Analyzed samples
14:50	Removed Sample from Pump #LV-1
14:55	Removed Sample from Pump #LV-5
15:00	Removed Sample from Pump #HV-8
15:05	Removed Sample from Pump #HV-51
15:08	Removed Sample from Pump #HV-33
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=14
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 00:00-00:00

Total Technician Hours: **0**

Senior Project Manager:
Sidney Carter: 07:00-16:30-less 30-minute lunch

Total Senior Project Manager Hours: **9**

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/08/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, ~~Mark Conway,~~ Brent Hardinger, ~~Gary Reynolds~~ / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-33 & LV-38 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 39° F-47° F, 99% Humidity

Time	Observations
06:50	Picked-up Start samples
07:00	Morning Safety Meeting
07:18	Prepped pumps for today's area and personal air monitoring
07:24	Placed Sample on Pump HV-33 mid-span of Trestle 1
07:29	Placed Sample on Pump #HV-8 at end of Trestle 2
07:30	Workers began warming up equipment
07:32	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:40	Placed Sample on Pump #LV-5 on Luis Guzman
07:43	Placed Sample on Pump #LV-36 on Mark Conway
07:45	Placed Sample on Pump #LV-38 on Justin Scott
07:45	EQM began moving cutting equipment to Trestle 1, PAS will work from that Trestle today to cut decking
08:10	Removed Sample from Pump #LV-5
08:11	Placed Sample on Pump #LV-5 on Luis Guzman
08:13	Removed Sample from Pump #LV-36
08:14	Placed Sample on Pump #LV-36 on Mark Conway
08:15	Removed Sample from Pump #LV-38
08:16	Placed Sample on Pump #LV-38 on Justin Scott
08:20	EQM completed moving equipment to Trestle 1

Sidney Carter/ Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

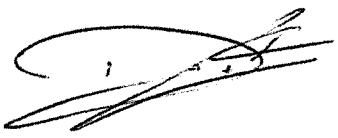
Time	Observations
08:30	Inspected pontoons; one section was hung-up on pilings and EQM repaired that section, pontoons are completely functional at this time
08:35	AAC is beginning ot set-up to remove panels
09:30	Crane lifts deck panel and it falls apart mid-air
09:45	PAS continues cutting deck
10:45	Fire Department Emergency Retrieval Team arrives onsite and tours location with Technician: Jibri Johnson, Start representative & Randy Mattis
11:30	Water sprayed on Center Loading Area to maintain dust control
11:39	Crane removes deck section
11:42	Long Reach moves deck section to within reach of excavator
11:45	Excavator begins processing deck sections
12:00	Work Crews break for lunch
12:02	Removed Sample from Pump #LV-5
12:04	Removed Sample from Pump #LV-38
12:05	Removed Sample from Pump #LV-36
12:10	Removed Sample from Pump #HV-33
12:11	Placed Sample on Pump HV-33 mid-span of Trestle 1
12:13	Removed Sampel from Pump #HV-8
12:14	Placed Sample on Pump #HV-8 at end of Trestle 2
12:16	Removed Sample from Pump #HV-51
12:17	Placed Sample on Pump #HV-51 at Northside of Regulated Area
12:30	Safety Meeting
12:33	Placed Sample on Pump #LV-5 on Luis Guzman
12:35	Placed Sample on Pump #LV-38 on Justin Scott
12:41	Placed Sample on Pump #LV-36 on Mark Conway
13:00	Crane removes another section of decking
13:15	Excavator processes deck section
13:30	PAS continues to cut deck
13:45	Left to EQM trailer to analyze samples
14:00	2 O'clock Safety Meeting
14:30	Returned to worksite to retrieve Pumps and Samples
14:35	Removed Sample from Pump #LV-5
14:40	Removed Sample from Pump #LV-38
14:42	Removed Sample from Pump #LV-36
14:46	Removed Sample from Pump #HV-33
14:48	Removed Sample from Pump #HV-8
14:55	Removed Sample from Pump #HV-51
15:30	Left worksite
16:30	Completed documentation & end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 06:00 to 09:00 **Total Senior Project Manager Hours:** **3**

Sidney Carter / Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/09/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS =** Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, ~~Mark Conway~~, Brent Hardinger, ~~Gary Reynolds~~ / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

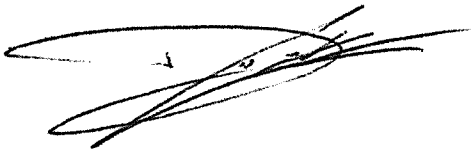
Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 48° F, 86% Humidity

Time	Observations
07:00	Morning Safety Meeting with all work crews & equipment operators
07L25	Observed Pontoons are fully functional in water
07:30	Placed Sample on Pump #HV-51 at Northwest Corner of Regulated Area
07:35	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
07:32	Placed Sample on Pump #HV-33 at the End of Trestle 2
07:39	Placed Sample on Pump #LV-1 on Ever Bonilla
07:41	Placed Sample on Pump #LV-32 on Mark Conway
08:00	Long Reach begins moving debris
08:05	PAS goes onto the deck to begin cutting & removing sections
08:09	Removed Sample from Pump #LV-1
08:10	Placed Sample on Pump #LV-1 on Ever Bonilla
08:11	Removed Sample from Pump #LV-32
08:12	Placed Sample on Pump #LV-32 on Mark Conway
08:15	Excavator begins processing debris
09:00	Long Reach pulls-up section of cut deck
09:15	Excavator processes deck section
10:10	Long Reach pulls another deck section up
10:30	Excavator processes deck section
11:00	Long Reach pulls deck section up
11:15	Excavator processes deck section
11:45	PAS continues cutting deck
12:00	All crews break for lunch, Mark with EQM is leaving worksite for the day
12:35	Safety Meeting

Jibri Johnson



Advantage Environmental

Daily Project Log

Sampling Technician

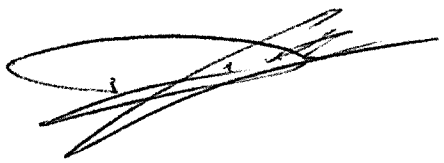
Time	Observations
11:58	Removed Sample from Pump #LV-1
12:03	Removed Sample from Pump #LV-32
12:05	Removed Sample from Pump #HV-51
12:06	Placed Sample on Pump #HV-51 at Northwest Corner of Regulated Area
12:08	Removed Sample from Pump #HV-33
12:09	Placed Sample on Pump #HV-33 at the End of Trestle 2
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
12:40	Placed Sample on Pump #LV-1 on Ever Bonilla
13:10	PAS returns to cutting deck
14:00	2 O'clock Safety meeting
14:35	Began to collect pumps & samples for the day
14:33	Removed Sample from Pump #LV-1
14:38	Removed Sample from Pump #HV-51
14:40	Removed Sample from Pump #HV-33
14:43	Removed Sample from Pump #HV-8
14:45	Went to EQM Trailer to begin reading samples
15:30	Left worksite
16:30	Completed documentation & end of workshift

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

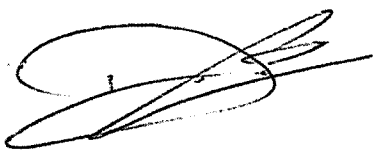
Jibri Johnson



Advantage Environmental

Daily Project Log

Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/10/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove, Ryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, ~~Mark Conway,~~ Brent Hardinger, ~~Gary Reynolds~~ / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 45° F, 75% Humidity

Time	Observations
07:00	Morning Safety Meeting.
07:15	Picked-up Start samples
07:20	Prepped pumps for today's work
07:30	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:34	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 2
07:40	Placed Sample on Pump #HV-33 at Mid=Span of Trestle 1
07:45	PAS went onto center deck to prepare for making cuts into decking
07:50	Placed Sample on Pump #LV-1 on Luis Penarah
07:58	Placed Sample on Pump #LV-32 on Brent Hardinger
08:00	PAS bins making cuts into deck
08:04	Placed Sample on Pump #LV-30 on Mark Conway
08:15	AAC removed unused deck saw from deck & EQM staged it to be removed
08:28	Removed Sample from Pump #LV-32
08:30	PAS continues to make holes in the deck at panel sides for removal of sections of deck
08:29	Placed Sample on Pump #LV-32 on Brent Hardinger
08:34	Removed Sample from Pump #LV-30
08:35	Placed Sample on Pump #LV-30 on Mark Conway
08:45	Observed pontoons are operational and in good working order
09:45	PAS continues to cut & make holes in the deck
10:45	PAS continues to cut deck
11:45	PAS continues to cut deck
12:00	Crews break for lunch

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

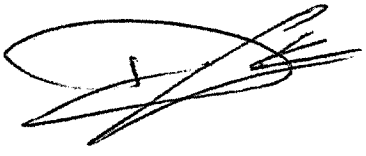
Time	Observations
12:00	Removed Sample from Pump #LV-13
12:02	Removed Sample from Pump #LV-32
12:06	Removed Sample from Pump #LV-30
12:08	Removed Sample from Pump #HV-33
12:09	Placed Sample on Pump #HV-33 at Mid-Span of Trestle 1
12:11	Removed Sample from Pump #HV-8
12:12	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 2
12:14	Removed Sample from Pump #HV-51
12:15	Placed Sample on Pum #HV-51 at Northside of Regulated Area
12:31	Placed Sample on Pump #LV-1 on Luis Penarah
12:35	Placed Sample on Pump #LV-32 on Brent Hardinger
12:35	Safety Meeting
12:38	Placed Sample on Pump #LV-30 on Mark Conway
13:00	Crane removes deck section
13:01	Removed Sample from pump #LV-1
13:02	Placed Sample on Pump #LV-1 on Luis Penarah
13:15	Excavator processes deck section
13:45	Crane ties deck section
14:00	2 O'clock Safety Meeting
14:30	Removed Sample from Pump #LV-1
14:33	Removed Sample from Pump #LV-32
14:35	Collected samples and pumps
14:38	Removed Sample from Pump #LV-30
14:39	Removed Sample from Pump #HV-33
14:40	Removed Sample from pump #HV-8
14:42	Removed Sample from Pump #HV-51
14:45	Went back to EQM trailer to analyze samples
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-15:30-less 30-minute lunch **Total Technician Hours:** 6

Senior Project Manager:
Sidney Carter: 06:00 to 09:00 **Total Senior Project Manager Hours:** 3

Sidney Carter/ Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/11/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, ~~Gary Reynolds~~ / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-5 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 56° F, 82% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Picked-up Start Samples
07:20	Prepped Pumps for today's personal & area sampling
07:40	EQM warming up equipment for today's work
07:50	Placed Sample on Pump #LV-1 on Daniel McConnell
07:55	Placed Sample on Pump #LV-5 on Bryan Okada
07:59	Placed Sample on Pump #LV-32 on Brent Hardinger
08:00	PAS went onto deck to begin cutting, two crews are working, one from Trestle 1 and one from Trestle 2
08:20	2 PAS crew members are working on the bank where decking has been removed, clearing debris
08:20	Removed Sample from Pump #LV-1
08:21	Placed Sample on Pump #LV-1 on Daniel McConnell
08:25	Removed Sample from Pump #LV-5
08:26	Placed Sample on Pump #LV-5 on Bryan Okada
08:29	Removed Sample from Pump #LV-32
08:30	Placed Sample on Pump #LV-32 on Brent Hardinger
08:30	EQM processing material in Loading Area
08:35	Observed pontoons are functional in the water
08:40	AAC Personal and 1 EQM working from boat clearing debris from water and maintaining Pontoons
09:30	PAS continues to cut sections of decking
09:35	Placed Sample on Pump #HV-33 at North end of Regulated Area
09:39	Placed Sample on Pump #HV-51 at mid-span of Trestle 2

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

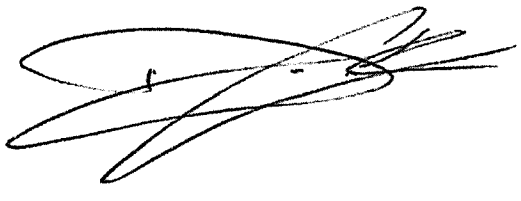
Time	Observations
09:45	Placed Sample on Pump #HV-8 at mid-span of Trestle 1
10:00	Excavator moves to Trestle 2 and moves over decking section
10:30	Excavator moves to Center Area and begins processing deck sections
11:15	Excavator continues to process debris
11:55	Removed Sample from Pump #LV-5
11:58	Removed Sample from Pump #LV-32
12:00	Lunchbreak for all crews
12:02	Removed Sample from Pump #LV-1
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at mid-span of Trestle 1
12:13	Removed Sample from Pump #HV-51
12:14	Placed Sample on Pump #HV-51 at mid-span of Trestle 2
12:15	Removed Sample from Pump #HV-33
12:16	Placed Sample on Pump #HV-33 at North-end of Regulated Area
12:30	Safety Meeting
12:48	Placed Sample on Pump #LV-1 on Daniel McConnell
12:50	Placed Sample on Pump #LV-5 on Bryan Okada
12:51	Placed Sample on Pump #LV-32 on Brent Hardinger
13:10	Extra absorbent boom installed
13:15	PAS clearing debris from North Beach
13:30	Excavator removes deck sections
14:00	Excavator processing debris
14:21	Removed Sample from Pump #LV-5
14:22	Removed Sample from Pump #LV1
14:25	Removed Sample from Pump #LV-32
14:30	Placed Sample on Pump #HV-8 at mid-span of Trestle 1
14:30	PAS continues cutting decking
14:32	Removed Sample from Pump #HV-33
14:34	Removed Sample from Pump #HV-51
15:00	Safety Meeting
15:45	Left worksite
16:45	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-15:30-less 30-minute lunch **Total Technician Hours:** **6.75**

Senior Project Manager:
Sidney Carter: 06:00 to 09:00 **Total Senior Project Manager Hours:** **3**

Sidney Carter/ Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/12/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gautier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, ~~Mark Conway~~, Brent Hardinger, ~~Gary Reynolds~~ / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-5 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 49° F, 86% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:25	Observed Pontoon are fully functional in the water
07:30	Placed Sample on Pump #LV-1 on Monica Gautier
07:33	Placed Sample on Pump #LV-5 on Ever Bonilla
07:35	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
07:40	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 2
07:42	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
07:44	Placed Sample on Pump #HV-51 at North Corner of Regulated Area
08:00	Removed Sample from Pump #LV-1
08:00	AAC begins removing Trestle 2 sections
08:01	Placed Sample on Pump #LV-1 on Monica Gautier
08:03	Removed Sample from Pump #LV-5
08:04	Placed Sample on Pump #LV-5 on Ever Bonilla
08:05	Removed Sample from Pump #LV-32
08:06	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
08:15	PAS goes onto deck at Southside of Trestle 1
08:16	Excavator drivers down ramp on Southside of Trestle 1 to pick-up cut sections of decking that PAS is preparing
09:00	PAS hooks deck section to steel square attached to excavator arm
09:20	Excavator lifts section
09:40	AAC continues to remove Trestle 2

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:30	Long Reach drives up on Trestle 1 to assist with section removal
11:00	AAC still removing Trestle 2 Mud Mats
11:40	Forklift drives up onto Trestle 2 Ramp
12:00	All work crews break for lunch
11:55	Removed Sample from Pump #LV-1
11:58	Removed Sample on Pump #LV-5
12:00	Removed Sample from Pump #LV-32
12:01	Removed Sample from Pump #HV-8
12:02	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 2
12:04	Removed Sample from Pump #HV-33
12:05	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
12:07	Removed Sample from Pump #HV-51
12:08	Placed Sample on Pump #HV-21 at North Corner of Regulated Area
12:30	Placed Sample on Pump #LV-1 on Monica Gautier
12:32	Placed Sample on Pump #LV-5 on Ever Bonilla
12:35	Placed Sample on Pump #LV-32 on Eduardo Gonzalez
13:10	Excavator returns to pulling sections
13:15	AAC returns to pulling Trestle 2 sections
14:00	2 O'clock Safety Meeting
14:30	Collected pumps and samples
14:33	Removed Sample from Pump #LV-1
14:36	Removed Sample from Pump #LV-5
14:37	Removed Sample from Pump #LV-32
14:42	Removed Sample from Pump #HV-8
14:44	Removed Sample from Pump #HV-33
14:46	Removed Sample from Pump #HV-45
14:48	Went to EQM Trailer to analyze samples
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/13/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gautier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, ~~Mark Conway~~, Brent Hardinger, ~~Gary Reynolds~~ / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 51° F, 76% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Observed Pontoons are fully functional in water
07:20	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
07:23	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:26	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
07:30	Placed Sample on Pump #LV-5 on Jacob Johnson
07:35	Placed Sample on Pump #LV-32 on Brent Hardinger
07:45	Excavator in center area processing area begins to process debris
07:50	PAS suits up and goes onto remaining deck at the Southside of Trestle 1
08:00	Removed Sample from Pump #LV-5
08:01	Placed Sample on Pump #LV-5 on Jacob Johnson
08:05	Removed Sample from Pump #LV-32
08:06	Placed Sample on Pump #LV-32 on Brent Hardinger
08:30	Excavator moves onto Trestle 1 & begins lifting remaining deck sections on the Southside of
Trestle	1
09:30	Excavator continues to lift off sections of decking
11:15	Excavator lifts last deck section from Southside of deck
11:38	Excavator returns to Center Loading Area & begins processing debris
11:55	Removed Sample from Pump #LV-5
11:58	Removed Sample from Pump #LV-32
12:00	Lunch

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

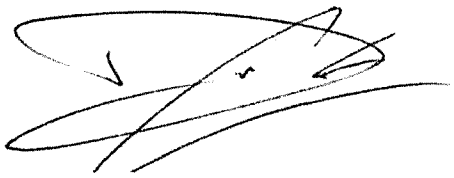
Time	Observations
12:00	Removed Sample from Pump #HV-51
12:01	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
12:03	Removed Sample from Pump #HV-8
12:04	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
12:32	Placed Sample on Pump #LV-5 on Jacob Johnson
12:36	Placed Sample on Pump #LV-32 on Brent Hardinger
13:00	Excavator returns to processing debris
13:05	PAS goes below removed decking area at Northside of Trestle 1 in order to collect debris that has fallen through
14:00	2 O'clock Meeting
14:30	Began collecting samples & pumps
14:30	Removed Sample from Pump #HV-51
14:33	Removed Sample from Pump #HV-8
14:35	Removed Sample from Pump #HV-33
14:43	Removed Sample from Pump #LV-5
14:46	Removed Sample from Pump #LV-32
13:00	Left worksite for the day
14:00	Completed sample analyzation and documentation before end of work shift

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-14:00-less 30-minute lunch **Total Technician Hours:** **6.5**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/15/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gautier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark Not here

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-5 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 40°-53° F, 97% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Picked-up Start samples
07:20	Began to prep pumps after observed Pontoons in water are fully functional
07:25	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
07:30	Placed Sample on Pump #HV-33 at Mid-Span of Trestle 2
07:30	Workers began to warm-up equipment
07:34	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:35	AAC & PAS employees are working boat to skim water of debris onto Beach
07:38	PAS went down onto beach head to begin cleaning debris
07:40	EQM moved excavator down to the end of Trestle 1 to start removing deck panels
07:40	Placed Sample on Pump #LV-1 on Edwin Villasenor
07:43	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
07:45	Placed Sample on Pump #LV-32 on Mark Jeffers
07:50	AAC had truck move into place to begin loading 1st section of Trestle 2 that was removed
08:00	AAC loaded out first skiff of debris from beach
08:10	Removed Sample from Pump #LV-1
08:11	Placed Sample on Pump #LV-1 on Edwin Villasenor
08:13	Removed Sample from Pump #LV-5
08:14	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
08:15	EQM has removed 2 panels next to Trestle 1
08:15	Removed Sample from Pump #LV-32

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:16	Placed Sample on Pump #LV-32 on Mark Jeffers
09:26	Crane lifts steel beam from removed Trestle 2 section to beginning of Trestle 2 ramp
09:34	Crane lifts beam onto awaiting trailer truck
10:30	Excavator from Trestle 1 moves debris from center deck down to Center Loading Area
11:19	Long Reach drives to Center Loading Area
11:21	Flatbed Truck drives to Trestle 2 ramp
11:28	Crane lifts steel beam onto flatbed truck
11:33	Crane lifts another beam onto top of first one on flatbed truck
12:00	Lunch
12:00	Removed Sample from Pump #LV-32
12:01	Removed Sample from Pump #LV-5
12:04	Removed Sample from Pump #LV-1
12:05	Removed Sample from Pump #HV-8
12:06	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
12:07	Removed Sample from Pump #HV-33
12:08	Placed Sample on Pump #HV-33 at Mid-Span of Trestle 2
12:09	Removed Sample from Pump #HV-51
12:10	Placed Sample on Pump #HV-51 at Northside of Regulated Area
12:30	Safety Meeting
12:40	Placed Sample on Pump #LV-32 on Mark Jeffers
12:42	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
12:45	Placed Sample on Pump #LV-1 on Edwin Villasenor
13:00	PAS continues collecting debris on beach
13:30	Long Reach drives onto Trestle 2 Ramp to be raised by crane to end of Trestle 2
14:00	2 O'clock meeting
14:30	Removed Sample from Pump #LV-32
14:31	Removed Sample from Pump #LV-5
14:35	Began to collect pumps and samples from personal & area monitoring
14:44	Removed Sample from Pump #LV-1
14:50	Removed Sample from Pump #HV-8
14:53	Removed Sample from Pump #HV-33 at Mid-Span of Trestle 2
14:53	Removed Sample from Pump #HV-51
15:30	Left worksite for the day
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 09:00-16:30-less 30-minute lunch **Total Technician Hours:** 7

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** 2

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/16/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gautier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark Not Here Not Here

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-5 & LV-30 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 52° F, 73% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
07:25	Placed Sample on Pump #LV-1 on Shelby Clark
07:28	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:30	Placed Sample on Pump #LV-5 on Jacob Johnson
07:30	Excavator begins removing asphalt & debris
07:30	Excavator begins removing asphalt & debris from deck while atop Trestle 2
07:31	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
07:35	Placed Sample on Pump #LV-30 on Mark Jeffers
07:40	Observed Pontoons are fully functional in the water
07:45	PAS goes onto NW Beach Head to put debris into waiting bin attached to crane
07:55	Removed Sample from Pump #LV-1
07:56	Placed Sample on Pump #LV-1 on Shelby Clark
08:00	Removed Sample from Pump #LV-5
08:01	Placed Sample on Pump #LV-5 on Jacob Johnson
08:05	Removed Sample from Pump #LV-30
08:06	Placed Sample on Pump #LV-30 on Mark Jeffers
08:30	Crane dumps filled bin onto debris pile in Center Loading Area
10:00	Crane lifts and moves Long Reach from end of Trestle 2 to ramp of Trestle 2
10:20	Long Reach drives onto Trestle 1
10:53	PAS continues to work on beach filling bin with debris

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:50	Crane lifts and moves vibratory hammer onto end of Trestle 2
12:10	Removed Sample from Pump #LV-30
12:00	Removed Sample from Pump #LV-5
12:02	Removed Sample from Pump #LV-1
12:45	Placed Sample on Pump #LV-30 on Mark Jeffers
12:50	Placed Sample on Pump #LV-1 on Shelby Clark
13:00	Removed Sample from Pump #HV-51 at NW Corner of Regulated Area
13:01	Placed Sample on Pump #HV-51 at NW Corner of Regulated Area
13:05	Removed Sample from Pump #HV-33
13:06	Placed Sample on Pump #HV-33 at Mid-Point of Trestle 1
13:08	Removed Sample from Pump #HV-8
13:09	Placed Sample on Pump #HV-8 at the end of Trestle 2
13:30	PAS personnel are removed from decking so crane can remove pilings with vibratory hammer
13:33	2 Crew members with PAS meet with Dave Nelson at the Center Loading Area before proceeding to equipment tent to remove tyveks
13:40	Forklift moves poly-lined dumpster I front of smaller excavator at the base of rock ramp on the Southside of Trestle 1 so smaller excavator can load debris into from the Beach Head
13:42	Smaller excavator begins loading pieces of debris into the poly-lined dumpster
13:43	AAC personnel remaining on deck just beyond Trestle 2 and prepping to remove piling with vibratory hammer
13:46	Smaller excavator removing debris from beach/below SW Quadrant of deck that fell through from removal of decking before
14:00	2 O'clock Safety meeting
15:05	Removed Sample from Pump #LV-1
15:07	Removed Sample from Pump #HV-8
15:13	Removed Sample from Pump #HV-33
15:15	Removed Sample from Pump #LV-30
15:20	Removed Sample from Pump #HV-51
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=14
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-12:15-less 30-minute lunch **Total Technician Hours:** **4.75**

Senior Project Manager:
Sidney Carter: 12:30 to 16:30 **Total Senior Project Manager Hours:** **4**

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/17/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 51° F, 80% Humidity

Time	Observations
06:50	Picked-up Start Samples
07:00	Morning Safety Meeting
07:20	Placed Sample on Pump #HV-33 at End of Trestle 2
07:24	Placed Sample on Pump #HV-8 at Center of Trestle 1
07:25	Employees began warming up equipment
07:28	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:30	Placed Sample on Pump #LV-1 on Ever Bonilla
07:34	Placed Sample on Pump #LV-32 on Tommy Smith
07:35	EQM Moved 2 loaded dumpsters from within Regulated Area to the South Staging Area
07:40	Placed Sample on Pump #LV-30 on Monica Gauthier
08:00	Removed Sample from ump #LV-1
08:01	Placed Sample on Pump #LV-1 on Ever Bonilla
08:04	Removed Sample from Pump #LV-32
08:05	Placed Sample on Pump #LV-32 on Tommy Smith
08:10	Removed Sample from Pump #LV-30
08:10	First piling pulled and staged at the end of ramp
08:11	Placed Sample on Pump #LV-30 on Monica Gauthier
08:20	2nd Piling pulled and staged at the end of ramp
08:45	EQM began processing material
08:50	PAS cut out 2 beams in center of deck for load out of material
09:00	AAC loaded out 2 skiffs of material

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

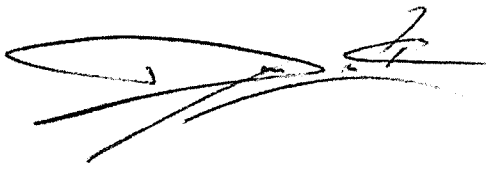
Time	Observations
09:30	AAC loaded equipment off the end of Trestle 2
09:45	EQM completed processing material at this time
10:00	Break for workers
10:20	AAC began removing mud matts from Trestle
11:00	AAC continues to load out matts
11:30	Pettibone & forklift lift staged piles and take away
11:53	Removed Sample from Pump #LV-32
11:57	Removed Sample from Pump #LV-30
12:00	Lunch
12:00	Removed Sample from Pump #LV-1
12:03	Removed Sample from Pump #HV-8
12:04	Placed Sample on Pump #HV-8 at Center of Trestle 1
12:06	Removed Sample from Pump #HV-33
12:07	Placed Sample on Pump #HV-33 at End of Trestle 2
12:10	Removed Sample from Pump #HV-51
12:11	Placed Sample on Pump #HV-51 at Northside of Regulated Area
12:35	Placed Sample on Pump #LV-1 on Ever Bonilla
12:36	Placed Sample on Pump #LV-32 on Tommy Smith
12:37	Placed Sample on Pump #LV-30 on Monica Gauthier
13:00	AAC returns to removing Trestle 2
13:05	PAS returns to collecting debris from beach
14:00	2 O'clock Meeting
14:30	Retrieved pumps and samples
14:32	Removed Sample from Pump #LV-1
14:35	Removed Sample from Pump #LV-32
14:40	Removed Sample from Pump #LV-30
14:44	Removed Sample from Pump #HV-8
14:48	Removed Sample from Pump #HV-33
14:52	Removed Sample from Pump #HV-51
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 11:15-16:30-less 30-minute lunch **Total Technician Hours:** **4.75**

Senior Project Manager:
Sidney Carter: 07:00 to 11:15 **Total Senior Project Manager Hours:** **4.25**

Jibri Johnson / Sidney Carter
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/18/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Not Used

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 45° F-54° F, 82% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:18	Picked-up Start Samples
07:22	Prepped pumps for today's work
07:28	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:30	Observed pontoons are fully functional
07:33	Placed Sample on Pump #HV-33 at End of Trestle 2
07:34	PAS went onto the Beach to begin cleaning debris that has fallen through the deck during removal of panels from previous days work
07:35	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
07:40	Placed Sample on Pump #LV-32 on Mark Jeffers
07:45	Placed Sample on Pump #LV-1 on Gary Brown
08:00	AAC moved first beam onto truck for removal
08:00	Placed Sample on Pump #LV-30 on Brent Hardinger
08:10	Removed Sample from Pump #LV-32
08:11	Placed Sample on Pump #LV-32 on Mark Jeffers
08:15	Removed Sample from Pump #LV-1
08:16	Placed Sample on Pump #LV-1 on Gary Brown
08:20	AAC loaded out 1st load of mud matts for Staging Area
08:30	PAS continues to clean debris from South-end below former decking
08:30	Removed Sample from Pump #LV-30
08:31	Placed Sample on Pump #LV-30 on Brent Hardinger

Jibri Johnson / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

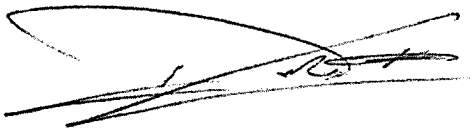
Time	Observations
08:35	2nd Load of mud matts moved offsite to Staging Area
09:16	Crane lifts 3 steel beams from Trestle 2 Ramp to awaiting flatbed truck
10:00	Crane lifts mud matts to Center Loading Area
10:30	Forklift comes and retrieves mud matts from Center Loading Area and takes them away
11:00	Crane lifts more mud matts to Center Loading Area
11:50	Crane lifts excavator from end of Trestle 2 to Trestle 2 Ramp
11:55	Removed Sample from Pump #LV-30
11:58	Removed Sample from Pump #LV-32
12:00	Removed Sample from Pump #LV-1
12:00	Lunch
12:02	Removed Sample from Pump #HV-8
12:03	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
12:04	Removed Sample from Pump #HV-33
12:05	Placed Sample on Pump #HV-33 at End of Trestle 2
12:08	Removed Sample from Pump #HV-51
12:09	Placed Sample on Pump #HV-51 at Northside of Regulated Area
12:30	Safety Meeting
12:35	Placed Sample on Pump #LV-30 on Brent Hardinger
12:36	Placed Sample on Pump #LV-1 on Gary Brown
12:40	Placed Sample on Pump #LV-32 on Mark Jeffers
13:00	Crane moves Vibratory Hammer to end of Trestle 2
13:30	AAC begins vibrating pylons from removed Trestle 2
14:00	2 O'clock Meeting
14:30	Began collecting pumps, personals & area samples
14:33	Removed Sample from Pump #LV-30
14:37	Removed Sample from Pump #LV-32
14:41	Removed Sample from Pump #HV-8
14:43	Removed Sample from Pump #HV-33
14:46	Removed Sample from Pump #HV-51
14:55	Removed Sample from Pump #LV-1
15:00	AAC continuing to remove pylons
15:30	Left worksite
16:30	Finished documentation & end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Jibri Johnson / Sidney Carter
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/19/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriquez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Not here

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 & LV-32 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 42° F, 86% Humidity

Time	Observations
07:00	Safety Meeting
07:15	Observed Pontoons are fully functional in water
07:20	Placed Sample on Pump #LV-1 on Ever Bonilla
07:22	Place Sample on Pump #LV-32 on Kent Parker
07:25	Placed Sample on Pump #LV-30 on Brent Hardinger
07:30	Crane moves Vibratory Hammer from the end of Trestle
07:30	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1
07:32	Placed Sample on Pump #HV-33 at the end of Trestle 2
07:35	Placed Sample on Pump #HV-51 at Northside of Regulated Area
07:50	Removed Sample from Pump #LV-1
07:51	Placed Sample on Pump #LV-1 on Ever Bonilla
07:52	Removed Sample from Pump #LV-32
07:53	Placed Sample on Pump #LV-32 on Kent Parker
07:55	Removed Sample from Pump #LV-30
07:56	Placed Sample on Pump #LV-30 on Brent Hardinger
08:40	Crane removes first pylon
08:45	Crane removes second pylon
09:30	PAS goes below removed decking in Center Area to begin gathering debris
10:30	Forklift begins bringing mud matts to Trestle 2 ramp for Crane
10:45	Crane drives down ramp of Trestle 2
12:40	Removed Sample from Pump #HV-8
12:41	Placed Sample on Pump #HV-8 at Mid-Point of Trestle 1

Jibri Johnson

Advantage Environmental

Daily Project Log

Sampling Technician

Time	Observations
12:43	Removed Sample from Pump #HV-8
12:44	Placed Sample on Pump #HV-33 at the end of Trestle 2
12:45	Crane makes it to the end of Trestle 1
12:46	Removed Sample from Pump #HV-51
12:47	Placed Sample on Pump #HV-51 at Northside of Regulated Area
13:00	Lunchbreak for all crews and operators
13:00	Removed Sample from Pump #LV-1
13:03	Removed Sample from Pump #LV-30
13:05	Removed Sample from Pump #LV-32
13:35	Placed Sample on Pump #LV-1 on Ever Bonilla
13:36	Placed Sample on Pump #LV-32 on Kent Parker
13:37	Placed Sample on Pump #LV-30 on Brent Hardinger
14:00	2 O'clock Meeting
14:30	Began collecting pumps and air samples
14:31	Removed Sample from Pump #LV-1
14:33	Removed Sample from Pump #LV-32
14:40	Removed Sample from Pump #LV-30
14:42	Removed Sample from Pump #HV-8 at Mid-Point of Trestle 1
14:45	Removed Sample from Pump #HV-33
14:50	Removed Sample from Pump #HV-51
15:10	Excavator from Trestle 2 moves debris
15:30	Left worksite for the day
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

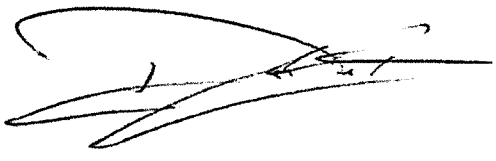
Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: 0

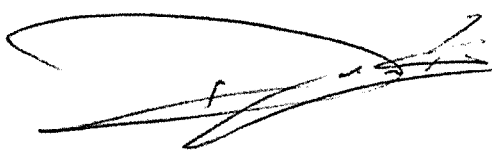
Jibri Johnson



Advantage Environmental

Daily Project Log

Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Mark Conway, Brent Hardinger, Gary Reynolds / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Not here

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 ~ HV Pumps: HV-8 & HV-33

Daily Weather: 47° F, 77% Humidity

Time	Observations
07:00	Safety Meeting
07:25	Observed Pontoons are fully functional
07:30	Placed Sample on Pump #HV-33 at the end of Trestle 1
07:32	Placed Sample on Pump #HV-8 at the end of Trestle 2
07:40	Placed Sample on Pump #LV-1 on Edwin Villasenor
07:43	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
08:10	Removed Sample from Pump #LV-1
08:11	Placed Sample on Pump #LV-1 on Edwin Villasenor
08:13	Removed Sample from Pump #LV-30
08:14	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
08:15	PAS goes onto deck at the end of Trestle 2 to begin marking sections for cutting and removal
08:45	EQM sprays water onto debris in Center Loading Area in order to maintain dust control
09:26	PAS continues to mark sections of decking
09:44	PAS begins cutting marked sections of decking
10:30	PAS continues to cut marked sections of decking
11:30	PAS continues to cut sections of marked decking
11:55	Removed Sample from Pump #LV-1
11:58	Removed Sample from Pump #LV-30
12:00	Removed Sample from Pump #HV-.33
12:00	Lunch
12:01	Placed Sample on Pump #HV-33 at the end of Trestle 1

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:05	Removed Sample from Pump #HV-8
12:06	Placed Sample on Pump #HV-8 at the end of Trestle 2
12:28	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
12:30	Safety Meeting
12:35	Placed Sample on Pump #LV-1 on Edwin Villasenor
13:00	PAS goes back to cutting sections of marked decking
13:28	PAS finishes with big saw & switches to hand power saw to begin cutting pigeon holes
13:30	AAC leaves for the day
14:00	2 O'clock Meeting
14:35	Removed Sample from Pump #HV-8
14:37	Removed Sample from Pump #HV-33
14:40	Removed Sample from Pump #LV-1
14:43	Removed Sample from Pump #LV-30
15:00	PAS begins cutting more pigeon holes
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch

Total Technician Hours: 9

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: 0

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/22/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-30 & LV-32 ~ HV Pumps: HV-8 & HV-33

Daily Weather: 48° F, 84% Humidity

Time	Observations
06:50	Picked-up samples from Start
07:00	Morning Safety Meeting
07:20	Observed Pontoons are fully functional in the water
07:25	Placed Sample on Pump #HV-8 at the end of Trestle 1
07:30	Placed Sample on Pump #HV-33 at the mid-point of Trestle 2
07:30	PAS went onto deck to begin cutting
07:35	Placed Sample on Pump #LV-1 on Ever Bonilla
07:40	Placed Sample on Pump #LV-30 on Mark Jeffers
07:44	Placed Sample on Pump #LV-32 on Brent Hardinger
07:45	EQM moved forklift in order to relocate equipment from Trestle 2
08:00	AAC removed one truss and 4 associated pilings
08:05	Removed Sample from Pump #LV-1
08:06	Placed Sample on Pump #LV-1 on Ever Bonilla
08:10	EQM began processing material
08:10	Removed Sample from Pump #LV-30
08:11	Placed Sample on Pump #LV-30 on Mark Jeffers
08:14	Removed Sample from Pump #LV-32
08:15	Placed Sample on Pump #LV-32 on Brent Hardinger
08:20	AAC removed 2nd truss and associated pilings
08:30	AAC removed another section of truss and associated pilings, log got hung-up and dropped pilings into the water

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:45	AAC now going in by goat to attach crane to pilings in the water
09:10	Crane lifted fallen truss & associated pilings into the Center Loading Area
09:30	Crane lifts more pilings
10:00	Excavator moves pilings onto piling pile to process more debris in Center Loading Area
10:30	Crane drops off another load
11:00	Crane drops another load of debris
11:30	Crane drops another load of debris
12:00	Lunch
12:00	Removed Sample from Pump #LV-1
12:04	Removed Sample from Pump #LV-32
12:07	Removed Sample from Pump #LV-30
12:10	Removed Sample from Pump #HV-8
12:11	Placed Sample on Pump #HV-8 at the end of Trestle 1
12:30	Placed Sample on Pump #LV-1 on Ever Bonilla
12:30	Safety Meeting
12:35	Placed Sample on Pump #LV-32 on Brent Hardinger
12:38	Placed Sample on Pump #LV-30 on Mark Jeffers
12:40	Removed Sample from Pump #HV-33
12:41	Placed Sample on Pump #HV-33 at the mid-point of Trestle 2
13:13	AAC begins removing sections of Trestle 1
13:15	Oil leaks from containers from business just West of worksite
13:20	EQM deploys absorbent material to contain leaking oil
13:25	Star & AAC go into boat to make sure oil hasn't reached the river
13:40	Observed no oil sheen within the river
13:45	Excavator continues to process debris in Center Loading Area
14:00	2 O'clock meeting
14:30	Noticed oil in river on the Northside coming from storm drain
14::31	Began collecting pumps & samples
14:37	Removed Sample from Pump #LV-30
14:40	Removed Sample from Pump #LV-1
14:42	Removed Sample from Pump #LV-32
14:45	Removed Sample from Pump #HV-8
14:47	Removed Sample from Pump #HV-33
15:30	Left worksite
16:30	Completed documentation & end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/23/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Bryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-32 & LV-33 ~ HV Pumps: HV-8 & HV-33

Daily Weather: 38° F, 90% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Observed Pontoons are fully functional in the water
07:20	Placed Sample on Pump #HV-8 at the End of Trestle 2
07:22	Placed Sample on Pump #HV-33 at the Mid-Point of Trestle 1
07:26	Placed Sample on Pump #LV-32 on Brent Hardinger
07:30	Placed Sample on Pump #LV-1 on Daniel McConnell
07:32	Placed Sample on Pump #LV-30 on Mark Jeffers
07:45	Forklift takes mud matts and removes them from Trestle 2 sections to AAC Staging Area, going West bound down N River St
07:55	Excavator moves from Trestle 2 ramp to the end of Trestle 2
07:56	Removed Sample from Pump #LV-32
07:57	Placed Sample on Pump #LV-32 on Brent Hardinger
08:00	Removed Sample from Pump #LV-1
08:01	Placed Sample on Pump #LV-1 on Daniel McConnell
08:02	Removed Sample from Pump #LV-30
08:03	Placed Sample on Pump #LV-30 on Mark Jeffers
08:10	PAS puts debris in excavator bucket
08:25	Excavator dumps load then swings back
08:40	Crane lifts big debris buckets from bench to Center Loading Area
08:50	Excavator moves to the ramp of Trestle 2
08:55	PAS goes back to cutting and removing sections of deck

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:10	Crane lifts more mud matt sections from Trestle 1
09:47	Crane lifts Long Reach to the end of Trestle 1
10:01	Long Reach begins moving debris from the end of Trestle 1 to the Center Loading Area
10:05	Left worksite to analyze cassettes at trailer
11:23	Crane dumps load into debris bin
11:45	Crane lifts Long Reach back form the end of Trestle 2 onto the ramp of Trestle 1
11:56	Removed Sample from Pump #LV-32
12:00	Removed Sample from Pump #LV-1
12:00	Lunch
12:05	Removed Sample from Pump #LV-30
12:07	Removed Sample from Pump #HV-8
12:08	Placed Sample on Pump #HV-8 at the End of Trestle 2
12:10	Removed Sample from Pump #HV-33
12:11	Placed Sample on Pump #HV-33 at the Mid-Point of Trestle 1
12:30	Safety Meeting
12:45	Placed Sample on Pump #LV-32 on Brent Hardinger
12:47	Placed Sample on Pump #LV-1 on Daniel McConnell
12:50	Placed Sample on Pump #LV-30 on Mark Jeffers
13:00	PAS returns to cutting & removing deck sections at the end of Trestle 1
13:15	Crane returns to lifting debris into bins at the Center Loading Area
13:40	Forklift brings over poly-lined dumpster to Center Loading Area for debris to be loaded into
14:00	2 O'clock Meeting
14:30	Began collecting pumps and samples
14:32	Removed Sample from Pump #LV-32
14:36	Removed Sample from Pump #LV-1
14:40	Removed Sample from Pump #LV-30
14:45	Removed Sample from Pump #HV-8 at the End of Trestle 2
14:48	Removed Sample from Pump #HV-33
14:55	3rd High-Side Dumpster removed from Northside of Trestle 2 Staging Area to Southside of Trestle 1
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/24/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-1 & LV-5 & LV-30 ~ HV Pumps: HV-8, HV-33 & HV-51

Daily Weather: 42°-48° F, 100% Humidity

Time	Observations
06:55	Picked-up Start samples
07:00	Morning Safety Meeting
07:15	Prepped pumps after observing that pontoons are fully functional in the water
07:22	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
07:25	Placed Sample on Pump #HV-33 at Mid-Span of Trestle 2
07:30	Placed Sample on Pump #HV-51 at the End of Trestle 2
07:35	PAS went onto the deck to begin cutting
07:37	Placed Sample on Pump #LV-5 on Ever Bonilla
07:40	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
07:45	Placed Sample on Pump #LV-30 on Ryan Okada
08:00	AAC prepared to begin removing piling
08:07	Removed Sample from Pump #LV-5
08:08	Placed Sample on Pump #LV-5 on Ever Bonilla
08:10	AAC removed first piling and put it in the Staging Area
08:10	Removed Sample from Pump #LV-1
08:11	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
08:15	Removed Sample from Pump #LV-30
08:16	Placed Sample on Pump #LV-30 on Ryan Okada
08:45	First piling removed from site
09:30	Piling removed by crane
10:15	Crane lifts mud matts from Trestle 1 to pile and end of Trestle 1 ramp

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:00	Pettibone puts mud matts onto flatbed truck
11:45	PAS continuing to cut deck
11:50	Removed Sample from Pump #LV-30
11:53	Removed Sample from Pump #LV-1
12:00	Lunch
12:00	Removed Sample from Pump #LV-5
12:03	Removed Sample from Pump #HV-8
12:04	Placed Sample on Pump #HV-8 at Mid-Span of Trestle 1
12:06	Removed Sample from Pump #HV-33
12:07	Placed Sample on Pump #HV-33 at Mid-Span of Trestle 2
12:08	Removed Sample from Pump #HV-51
12:09	Placed Sample on Pump #HV-51 at the End of Trestle 2
12:41	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
12:42	Placed Sample on Pump #LV-30 on Ryan Okada
12:45	Placed Sample on Pump #LV-5 on Ever Bonilla
13:00	AAC removes piling
13:00	PAS continues cutting deck
13:30	AAC removes another piling
14:00	2 O'clock Meeting
14:29	Began to collect pumps and air samples
14:30	Removed Sample from Pump #LV-5
14:35	Removed Sample from Pump #LV-30
14:36	Removed Sample from Pump #LV-1
14:50	Removed Sample from Pump #HV-8
14:55	Removed Sample from Pump #HV-33
14:57	Removed Sample from Pump #HV-51
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/25/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5 & LV-30 & LV-32 ~ HV Pumps: HV-33 & HV-51

Daily Weather: 41° F, 76% Humidity

Time	Observations
06:50	Picked-up Samples from Start
07:00	Morning Safety Meeting
07:15	Prepared pumps for todays work after observing Pontoons are fully operational in water
07:38	Placed Sample on Pump #LV-5 on Daniel McConnell
07:43	Placed Sample on Pump #LV-30 on Mark Jeffers
07:45	AAC began pulling pilings
07:50	Placed Sample on Pump #LV-32 on Brent Hardinger
07:55	Placed Sample on Pump #H-V33 at the End of Trestle 2
07:59	Placed Sample on Pump #HV-51 at the End of Trestle 1
08:00	EQM removes logs from water on Southside of Pontoons/Netting
08:08	Removed Sample from Pump #LV-5
08:09	Placed Sample on Pump #LV-5 on Daniel McConnell
08:13	Removed Sample from Pump #LV-30
08:14	Placed Sample on Pump #LV-30 on Mark Jeffers
08:15	EQM staged logs at Load Out
08:20	Removed Sample from Pump #LV-32
08:21	Placed Sample on Pump #LV-32 on Brent Hardinger
09:14	Crane pulls piling from End of Trestle 1
10:11	Forklift & Pettibone remove piling from center area down to AAC's Staging Area
10:16	Crane removes another piling to Center Area
11:45	Began collecting morning air samples

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:45	Removed Sample from Pump #LV-32
11:48	Removed Sample from Pump #LV-5
11:50	Removed Sample from Pump #LV-30
12:00	Lunch
12:00	Removed Sample from Pump #HV-33
12:01	Placed Sample on Pump #HV-33 at the End of Trestle 2
12:04	Removed Sample from Pump #HV-51
12:05	Placed Sample on Pump #HV-51 at the End of Trestle 1
12:30	Safety Meeting
12:45	Excavator moves debris
12:45	Placed Sample on Pump #LV-32 on Brent Hardinger
12:48	Placed Sample on Pump #LV-5 on Daniel McConnell
12:50	Placed Sample on Pump #LV-30 on Mark Jeffers
13:00	Crane pulls another piling
13:15	PAS wraps filled dumpsters with poly
13:30	Excavator fills poly-lined dumpster with debris
14:00	2 O'clock Safety Meeting
14:30	Began collecting pumps and air samples
14:40	Removed Sample from Pump #LV-32
14:42	Removed Sample from Pump #LV-5
14:45	Removed Sample from Pump #LV-30
14:53	Removed Sample from Pump #HV-33
14:56	Removed Sample from Pump #HV-51
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/26/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-30, LV-32 & LV-36 ~ HV Pumps: HV-33 & HV-51

Daily Weather: 47° F, 76% Humidity

Time	Observations
07:00	Safety Meeting
07:20	Began to set pumps
07:20	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
07:22	Placed Sample on Pump #LV-32 on Kent Parker
07:25	Placed Sample on Pump #LV-36 on Ever Bonilla
07:30	Placed Sample on Pump #HV-51 at the End of Trestle 2
07:34	Placed Sample on Pump #HV-33 at the End of Trestle 1
07:36	EQM & AAC move fencing in preparation of crane moving to Trestle 2
07:50	Removed Sample from Pump #LV-30
07:51	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
07:52	Removed Sample from Pump #LV-32
07:53	Placed Sample on Pump #LV-32 on Kent Parker
07:55	Removed Sample from Pump #LV-36
07:56	Placed Sample on Pump #LV-36 on Ever Bonilla
07:59	Skid Steer brings wood plans to ramp of Trestle 1 to begin laying them out for the crane to drive on
08:27	Mid-from Trestle 1 to Trestle 2, crane lifts hydraulic hammer from Trestle 1 ramp to Northside of Trestle 2 Ramp
08:35	Observed Pontoons are fully functional
08:41	Crane is now on Trestle 2
09:02	EQM using Skid Steer to clean street
09:10	Crane lowers steel square to end of Trestle 2 deck for PAS to attach to, cut and remove deck sections

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:39	Crane flies deck section to Center Area
09:42	Excavator processes deck section
10:33	Crane flies another deck section
11:15	PAS hooks another deck section to crane
11:20	Crane flies another deck section
11:35	Excavator processes deck section in Center Area
11:50	Removed Sample from Pump #LV-30
11:53	Removed Sample from Pump #LV-32
11:58	Removed Sample from Pump #LV-36
12:00	Lunch
12:00	Removed Sample from Pump #HV-51
12:01	Placed Sample on Pump #HV-51 at the End of Trestle 2
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at the End of Trestle 1
12:30	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
12:32	Placed Sample on Pump #LV-32 on Kent Parker
12:35	Placed Sample on Pump #LV-36 on Ever Bonilla
12:50	PAS hooks another deck section to crane square
13:00	Crane flies another deck section
13:44	Excavator processes another section
14:00	2 O'clock Meeting
14:40	Removed Sample from Pump #LV-30
14:41	Removed Sample from Pump #LV-32
14:44	Removed Sample from Pump #LV-36
14:50	Removed Sample from Pump #HV-51
14:53	Removed Sample from Pump #HV-33
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/27/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Pete Coleman

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-36 & LV-38 ~ HV Pumps: HV-33 & HV-51

Daily Weather: 47° F, 82% Humidity

Time	Observations
06:58	Collected Samples from Start
07:00	Morning Safety Meeting
07:15	Observed pontoons are fully functional
07:15	Placed Sample on Pump #LV-38 on Brent Hardinger
07:20	PAS meeting to discuss workplan for the day
07:34	Placed Sample on Pump #LV-36 on Eduardo Gonzalez
07:45	Removed Sample from Pump #LV-38
07:46	Placed Sample on Pump #LV-38 on Brent Hardinger
07:51	Placed Sample on Pump #HV-51 at the End of Trestle 1
08:04	Removed Sample from Pump #LV-36
08:05	Placed Sample on Pump #LV-36 on Eduardo Gonzalez
08:12	Placed Sample on Pump #HV-33 at the End of Trestle 2
08:15	EQM requested to move generator from Center Loading Area beside Trestle 1 Ramp that had air monitoring pump attached for more power to be run for PAS to remove decking sections
08:22	Forklift begins moving generator from Center Loading Area off Southside of Trestle 1
08:24	Forklift drives beside Excavator atop Trestle 1 and sets generator into place
08:29	Water truck (after being filled to capacity with water) parks at Northeast corner of worksite/outside of fence line of Regulated Area on tracks while Skid Steer with street sweeper runs over train tracks on N River Street

Pete Coleman
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:38	4 Man Work Crew for PAS removing sections of decking along center of deck by cutting and loading into shovel of Excavator
08:40	Skid Steer and Water Truck continue cleaning railroad tracks on N River St
08:44	PAS using air hammer to remove deck sections
08:45	Skid Steer and Water Truck going for another pass of cleaning rail track on N. River St
08:51	Clean Harbors onsite connecting truck to enclosed trailer that was stored overnight in parking lot adjacent to worksite on Eastside
09:06	Water Truck operator & hose operator moving along train track on N. River St cleaning tracks with water
09:09	PAS about to finish loading another bucket of decking debris and radioed out that they will be taking a break while excavator to begin loading dumpsters with debris at the NE Corner of Regulated Area
09:11	Spraying with water hose attached to moving Water Truck on N. River St ensues
09:15	Skid Steer with street sweeper going over tracks again on N. River St.
09:18	Excavator goes down ramp of Trestle 1 and onto Northside of Ramp to Trestle 2 at Northeast Corner of Regulated Area
09:23	Work crews take a break
09:24	Skid Steer continuing to sweep by hydrant on N. River St.
09:45	Work Crews return to work with PAS returning to removing decking off of Trestle 1
09:49	Long Reach goes onto Trestle 1 while smaller Excavator
09:53	Forklift moves poly-lined dumpster into Northeast Corner of Regulated Area
09:58	Smaller Excavator begins loading debris into dumpster at NE Corner of Regulated Area
10:05	Went to trailer to analyze samples
10:40	Returned to worksite and observed 3 poly-lined dumpsters loaded with debris and waiting to be wrapped in poly for later removal
10:43	Forklift takes another filled and poly-lined dumpster to Center Loading Area at Southside of Trestle 1
10:43	Removed Sample from Pump #HV-51
10:44	Placed Sample on Pump #HV-51 at the End of Trestle 1
10:48	Removed Sample from Pump #HV-33
10:49	Placed Sample on Pump #HV-33 at the End of Trestle 2
10:54	Poly-lined and filled dumpster taken to Center Loading Area after being filled to capacity with debris
10:59	Poly-lined empty dumpster moved into position at NE Corner of Regulated Area
11:00	Smaller excavator begins loading empty dumpster with debris from NE Corner of Worksite
11:01	Hose Operator wetting debris with firehose to maintain dust control
11:03	4-Person PAS Crew tethered to unmanned Long reach atop Trestle 1, removing decking by hand, saw and air hammer
11:08	Smaller Excavator traverses from NE Corner of Regulated Area over Trestle 2 Ramp and onto Trestle 1
11:09	Hose operator stops wetting debris in Center Area
11:10	Smaller Excavator has cleared a pathway within debris pile in Center of deck area to park on top of the debris pile and excavator exits cab of excavator leaving smaller excavator parked on debris pile
11:13	Water Truck driving off of Trestle 1
11:39	Water truck is refilled with water to full capacity and drives onto the ramp of Trestle 2
11:48	PAS worker securing poly-lined and loaded with debris dumpsters
11:53	PAS begins decon to break for lunch

Pete Coleman
Sampling Technician

Advantage Environmental

Daily Project Log

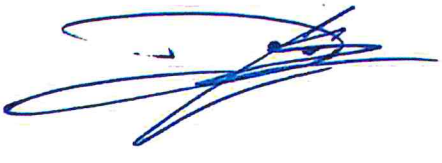
Time	Observations
12:42	PAS suits back up in tyveks and respirators to commence working on deck removal
12:50	Removed Sample from Pump #LV-38
12:51	Placed Sample on Pump #LV-38 on Brent Hardinger
12:52	Removed Sample from Pump #LV-36
12:53	Placed Sample on Pump #LV-36 on Eduardo Gonzalez
12:54	Smaller excavator returns to crunching an munching of debris from within debris pile in center area
12:56	Firehose being used from atop trestle 2 to wet debris and maintain dust control in pathway of smaller Excavator that is crunches and munches debris in center pile between Trestles
13:00	Water Truck drives off of Trestle 2 to Southside of Trestle 2 Ramp fore firehose to be used in wetting debris from atop gravel/wood small platform between Trestles ramps in Center Loading Area
13:03	Observed full poly-lined dumpster being secured for eventual removal from worksite
13:05	Went to trailer to analyze samples
13:10	Advised that power would be needed from trailer so won't be able to analyze until power restored
13:29	Excavator and firehose continue working in tandem to crush and crunch debris while maintaining dust control
13:31	Observed PAS 3 crew members cutting and removing decking while 3th member poly-secures dumpsters filled with debris
13:36	Returned to trailer to analyze samples
13:56	Radio broadcast that site would be shutting down by 15:45 for the day
14:00	2 O'clock Meeting
14:15	Covered in meeting plans to end workday for all Crews and Operators at 15:00
14:20	Returned to site to being retrieving cassettes and pumps
14:22	Removed Sample from Pump #LV-38
14:24	Removed Sample from Pump #LV-36
14:26	Removed Sample from Pump #HV-51
14:29	Removed Sample from Pump #HV-33
14:51	Smaller Excavator parked in Center Loading Area on Southside of Trestle 1
14:52	Long Reach removing decking and debris from center deck area while atop Trestle 2
14:53	PAS deconned
14:54	4 dumpsters are poly-lined and secured, filled with debris to be removed from worksite
15:00	Left worksite
16:00	Completed documentation and end of work shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Pete Coleman: 07:00-16:00-less 30-minute lunch **Total Technician Hours:** **8.5**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Pete Coleman
Sampling Technician



Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/29/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM** = Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-30 & LV-32 ~ HV Pumps: HV-51 & HV-53

Daily Weather: 51° F, 86% Humidity

Time	Observations
06:45	Picked-up Star samples
07:00	Morning Safety Meeting
07:15	Prepped pumps for today's work
07:20	Placed Sample on Pump HV-53 at Mid-Span of Trestle 1
07:25	PAS crew will be using scissor lifts are getting training
07:25	Placed Sample on Pump #HV-51 at the End of Trestle 2
07:30	Other half of PAS crew on deck off of Trestle 1 to start layout of cutting deck
07:35	Placed Sample on Pump #LV-5 on Victor Hernandez
07:38	Placed Sample on Pump #LV-32 on Brent Hardinger
07:41	Placed Sample on Pump #LV-30 on Justin Scott
08:00	AAC moved Clam Shell at base of Trestle 2 to attach it to the crane for use today cleaning bench
08:05	Removed Sample from Pump #LV-5
08:06	Placed Sample on Pump #LV-5 on Victor Hernandez
08:08	Removed Sample from Pump #LV-32
08:09	Placed Sample on Pump #LV-32 on Brent Hardinger
08:11	Removed Sample from Pump #LV-30
08:12	Placed Sample on Pump #LV-30 on Justin Scott
08:30	EQM lowered saw onto deck for PAS
08:40	Clamshell attached and being moved into place
08:45	EQM removing sections of deck from Trestle 2 with Long reach
09:04	Excavator processes deck section in Center Area

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:21	Clamshell drops off load of debris to Center Area
10:48	Excavator continues processing debris
10:49	Crane continues dropping off loads of debris to Center Area
11:20	Crane lifts debris from water to center area
11:50	Removed Sample from Pump #LV-5
11:55	Removed Sample from Pump #LV-30
11:58	Removed Sample from Pump #LV-32
12:00	Removed Sample from Pump #HV-53
12:01	Placed Sample on Pump #HV-53 at Mid-Span of Trestle 1
12:05	Removed Sample from Pump #HV-51
12:06	Placed Sample on Pump #HV-51 at the End of Trestle 2
12:00	Lunch
12:45	Excavator goes back to processing debris
12:45	Placed Sample on Pump #LV-5 on Victor Hernandez
12:48	Placed Sample on Pump #LV-30 on Justin Scott
12:52	Placed Sample on Pump #LV-32 on Brent Hardinger
13:00	Crane attaches bucket and puts in reach for PAS to fill with debris
13:20	Crane dumps bucket load in Center Area
13:50	Excavator blows a hydraulic line and leaks oil into debris pile
14:00	2 O'clock Meeting
14:35	Began collecting pumps and samples
14:35	Removed Sample from Pump #LV-5
14:38	Removed Sample from Pump #LV-30
14:43	Removed Sample from Pump #LV-32
14:45	Removed Sample from Pump #HV-53
14:50	Removed Sample from Pump #HV-51
15:30	Left for the day
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch **Total Technician Hours:** **7.25**

Senior Project Manager:
Sidney Carter: 07:00 to 09:00 **Total Senior Project Manager Hours:** **2**

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/30/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS =** Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian, Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-32 & LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 51° F, 61% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:20	Observed Pontoons are fully functional in water
07:30	Placed Sample on Pump #LV-32 on Brent Hardinger
07:33	Placed Sample on Pump #LV-36 on Mark Jeffers
07:36	Placed Sample on Pump #LV-5 on Jacob Johnson
07:38	Placed Sample on Pump #HV-52 at the End of Trestle 2
07:42	Placed Sample on Pump #HV-33 at the End of Trestle 1
07:46	Placed Sample on Pump #HV-22 at the Middle of Trestle 1
07:50	Excavator fills poly-lined Dumpster 1
08:00	Forklift removes filled poly-lined and secured dumpster
08:00	Removed Sample from Pump #LV-32
08:01	Placed Sample on Pump #LV-32 on Brent Hardinger
08:03	Removed Sample from Pump #LV-36
08:04	Placed Sample on Pump #LV-36 on Mark Jeffers
08:05	Forklift brings poly-lined Dumpster 2
08:06	Excavator fills poly-lined Dumpster 2
08:06	Removed Sample from Pump #LV-5
08:07	Placed Sample on Pump #LV-5 on Jacob Johnson
08:10	PAS goes onto decking off the end of Trestle 1
08:15	Forklift brings poly-lined Dumpster 3
08:17	Excavator fills poly-lined Dumpster 3

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
08:20	Left to read morning samples
10:45	AAC removing Trestle 2 sections and placing mud matts in Loading Area to the northside of Trestle 2 Ramp
10:48	PC HI bone picks-up stacked mud matts & takes them down to N River St into AAC Staging Area
11:36	Crane lifts steel beam from Trestle 2 Section onto awaiting flatbed truck in order for it to be hauled away
11:51	Removed Sample from Pump #LV-32
11:54	Removed Sample from Pump #LV-36
11:58	Removed Sample from Pump #LV-5
12:00	Removed Sample from Pump #HV-52
12:01	Placed Sample on Pump #HV-52 at the End of Trestle 2
12:05	Removed Sample from Pump #HV-33
12:06	Placed Sample on Pump #HV-33 at the End of Trestle 1
12:08	Removed Sample from Pump #HV-22
12:09	Placed Sample on Pump #HV-22 at the Middle of Trestle 1
12:30	Placed Sample on Pump #LV-32 on Brent Hardinger
12:33	Placed Sample on Pump #LV-36 on Mark Jeffers
12:36	Placed Sample on Pump #LV-5 on Jacob Johnson
14:00	2 O'clock Meeting
14:29	Removed Sample from Pump #LV-32
14:32	Removed Sample from Pump #LV-36
14:36	Removed Sample from Pump #LV-5
14:40	Removed Sample from Pump #HV-52
14:44	Removed Sample from Pump #HV33
14:45	Removed Sample from Pump #HV-22
15:30	Left worksite
16:30	Completed documentation and end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson: 07:00-16:30-less 30-minute lunch **Total Technician Hours:** **9**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00 **Total Senior Project Manager Hours:** **0**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 01/31/2018

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Travis Harrison, Luis Penarah, Little Steward, Richard Stuart, Jose Rodriguez, Luis Guzman, Daniel McConnell, Edwin Villasenor, Misty Klampe, Victor Hernandez, Lismar Matos Fuentes / **AAC =** Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt, Weisker, Brian Cosgrove, Ryan Okada, Monica Gauthier / **EQM =** Jerry Wade, Tommy Smith, Eduardo Gonzalez, Brent Hardinger / **START =** Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vests, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps: LV-5, LV-32 & LV-36 ~ HV Pumps: HV-22, HV-33 & HV-52

Daily Weather: 38°-46° F, 99% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:15	Picked-up Start Samples
07:20	Prepped pumps for air and personal monitoring
07:22	Placed Sample on Pump #HV-52 at the End of Trestle 1
07:26	Placed Sample on Pump #HV-33 at the End of Trestle 2
07:35	Placed Sample on Pump #LV-5 on Lismar Matos Fuentes
07:35	Moved 1 Generator to Northside for Area Monitoring
07:40	Placed Sample on Pump #LV-36 on Tommy Smith
07:42	Placed Sample on Pump #LV-32 on Monica Gauthier
07:45	PAS moved onto deck off Trestle 1 to begin cutting sections of decking for removal
07:50	Placed Sample on Pump #HV-22 at the Northside of Regulated Area
08:00	AAC moving 1st piling to Staging Area at the end of Trestle 2
08:05	Removed Sample from Pump #LV-5
08:06	Placed Sample on Pump #LV-5 on Lismar Matos Fuentes
08:10	Removed Sample from Pump #LV-36
08:11	Placed Sample on Pump #LV-36 on Tommy Smith
08:12	Removed Sample from Pump #LV-32
08:13	Placed Sample on Pump #LV-32 on Monica Gauthier
08:15	EQM began processing material
08:25	First truck arrived for waste and is being lined with poly
08:40	First truck for AAC arrived and is being loaded with Trestle Frames

Sidney Carter / Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:04	Flatbed Truck drives away with Steel Beams from Trestle 2
09:07	Crane flies piling to Center Area
09:33	Excavator fills truck with 2 dumpsters attached
09:38	Forklift & Pettibone haul piling away to AAC Staging Area
09:54	PAS wraps double dumpsters in poly
10:00	Skid Steer begins bringing over wood planks to ramp of Trestle 2 for crane to move them to Trestle 1
11:12	Crane makes it from Trestle 2 to Trestle 1 and drives up the ramp and onto the end of Trestle 1
11:20	Long Reach drives to the end of Trestle 2and begins removing asphalt
11:25	Crane lowers steel square to deck off Trestle 1 end for PAS to attach sections of cut decking
11:48	Crane flies deck section
11:51	Removed Sample from Pump #LV-36
11:54	Removed Sample from Pump #LV-5
11:59	Removed Sample from Pump #LV-32
12:00	Lunch
12:03	Removed Sample from Pump #HV-52
12:04	Placed Sample on Pump #HV-52 at the End of Trestle 1
12:06	Removed Sample from Pump #HV-33
12:07	Placed Sample on Pump #HV-33 at the End of Trestle 2
12:10	Removed Sample from Pump #HV-22
12:11	Placed Sample on Pump #HV-22 at the Northside of Regulated Area
12:40	Safety Meeting
12:45	Placed Sample on Pump #LV-36 on Tommy Smith
12:47	Placed Sample on Pump #LV-5 on Lismar Matos Fuentes
12:51	Placed Sample on Pump #LV-32 on Monica Gauthier
13:05	Analyzed samples
14:00	2 O'clock Meeting
14:30	Finished reading collected samples
14:35	Removed Sample from Pump #LV-36
14:38	Departed trailer to return and collect final Samples & Pumps
14:39	Removed Sample from Pump #LV-5
14:43	Removed Sample from Pump #LV-32 on Monica Gauthier
14:45	Removed Sample from Pump #HV-52
14:50	Removed Sample from Pump #HV-33
14:53	Removed Sample from Pump #HV-22
15:30	Left worksite
16:30	Finished documentation & end of work shift

Total air sampled collected / analyzed=15
Total blank air samples analyzed=2
No injuries reported

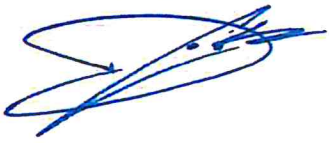
Technician:
Jibri Johnson: 08:45-16:30-less 30-minute lunch

Total Technician Hours: **7.25**

Senior Project Manager:
Sidney Carter: 00:00 to 00:00

Total Senior Project Manager Hours: **2**

Sidney Carter / Jibri Johnson
Sampling Technician



ADVANTAGE Environmental INC.

Clean your world.

February 8, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/06/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/06/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/6/2018
DATE RECEIVED 2/7/2018
DATE ANALYZED 2/7/2018
DATE REPORTED 2/8/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020027	2071801	1	100	1/100
18020028	2071802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020024	2071803	Area	AS24	8:32 AM	1:14 PM	10.027	9.945
18020025	2071804	Area	AS26	8:46 AM	1:19 PM	10.046	10.167
18020026	2071805	Area	AS15	9:14 AM	1:50 PM	9.975	10.101

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020024	2071803	282	9.9860	2816.05	7	100	0.005	0.065	8.280	0.0011	1.785	<0.0020	N/A
18020025	2071804	273	10.1065	2759.07	12	100	0.005	0.115	14.650	0.0020	1.620	<0.0033	N/A
18020026	2071805	276	10.0380	2770.49	6	100	0.005	0.055	7.006	0.0010	1.839	<0.0018	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/7/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-163

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020024	AS24	Asbestos PCM	Air	MCE Cassette	2/6/2018	10.027	9.945	2816.05	Liters	8:32:00 AM	1:14:00 PM	282	9.986	L/min
	18020025	AS26	Asbestos PCM	Air	MCE Cassette	2/6/2018	10.046	10.167	2759.07	Liters	8:46:00 AM	1:19:00 PM	273	10.1065	L/min
	18020026	AS15	Asbestos PCM	Air	MCE Cassette	2/6/2018	9.975	10.101	2770.49	Liters	9:14:00 AM	1:50:00 PM	276	10.038	L/min
	18020027	Blank 1	Asbestos PCM	Air	MCE Cassette	2/6/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020028	Blank 2	Asbestos PCM	Air	MCE Cassette	2/6/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples		15:30 2/6/18	AEI	2/7/18	Good

ADVANTAGE Environmental INC.

Clean your world.

February 9, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/07/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/07/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/7/2018
DATE RECEIVED 2/8/2018
DATE ANALYZED 2/8/2018
DATE REPORTED 2/9/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020032	2081801	0	100	0/100
18020033	2081802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020029	2081803	Area	AS24	8:50 AM	1:06 PM	10.022	10.056
18020030	2081804	Area	AS26	9:04 AM	12:59 PM	9.9087	10.055
18020031	2081805	Area	AS15	9:28 AM	1:13 PM	9.9898	10.133

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020029	2081803	256	10.0390	2569.98	6	100	0.0025	0.058	7.325	0.0011	1.839	<0.0020	N/A
18020030	2081804	235	9.9819	2345.73	6.5	100	0.0025	0.063	7.962	0.0013	1.810	<0.0024	N/A
18020031	2081805	225	10.0614	2263.82	7	100	0.0025	0.068	8.599	0.0015	1.785	<0.0026	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/8/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-165

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020029	AS24	Asbestos PCM	Air	MCE Cassette	2/7/2018	10.022	10.056	2569.98	Liters	8:50:00 AM	1:06:00 PM	256	10.039	L/min
	18020030	AS26	Asbestos PCM	Air	MCE Cassette	2/7/2018	9.9087	10.055	2345.75	Liters	9:04:00 AM	12:59:00 PM	235	9.9819	L/min
	18020031	AS15	Asbestos PCM	Air	MCE Cassette	2/7/2018	9.9898	10.133	2263.82	Liters	9:28:00 AM	1:13:00 PM	225	10.0614	L/min
	18020032	Blank 1	Asbestos PCM	Air	MCE Cassette	2/7/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020033	Blank 2	Asbestos PCM	Air	MCE Cassette	2/7/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] START	14:41 2/7/18	Sidney Carter AEI	2/8/18 705	Good

ADVANTAGE Environmental INC.

Clean your world.

February 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/08/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/08/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/8/2019
DATE RECEIVED 2/9/2018
DATE ANALYZED 2/9/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020038	2091801	0	100	0/100
18020039	2091802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020035	2091803	Area	AS24	8:26 AM	1:28 PM	9.989	9.8449
18020036	2091804	Area	AS26	8:37 AM	1:07 PM	9.9606	9.9222

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020035	2091803	302	9.9170	2994.93	7.5	100	0.0025	0.073	9.236	0.0012	1.775	<0.0021	N/A
18020036	2091804	270	9.9414	2684.18	6	100	0.0025	0.058	7.325	0.0011	1.839	<0.0019	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/9/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-166

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020035	AS24	Asbestos PCM	Air	MCE Cassette	2/8/2018	9.989	9.8449	2994.93	Liters	8:26:00 AM	1:28:00 PM	302	9.917	L/min
	18020036	AS26	Asbestos PCM	Air	MCE Cassette	2/8/2018	9.9606	9.9222	2684.18	Liters	8:37:00 AM	1:07:00 PM	270	9.9414	L/min
	18020038	Blank 1	Asbestos PCM	Air	MCE Cassette	2/8/2018				Liters	8:00:00 AM	8:00:00 AM			L/min
	18020039	Blank 2	Asbestos PCM	Air	MCE Cassette	2/8/2018				Liters	8:00:00 AM	8:00:00 AM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] START	14:05 2/8/18	[signature] ACT	7:18 2/9/18	Good

ADVANTAGE Environmental INC.

Clean your world.

February 12, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/09/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/09/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/9/2018
DATE RECEIVED 2/10/2018
DATE ANALYZED 2/10/2018
DATE REPORTED 2/12/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020043	2091801	1	100	1/100
18020044	2091802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020040	2091803	Area	AS24	8:46 AM	1:11 PM	10.144	9.983
18020041	2091804	Area	AS26	8:56 AM	1:28 PM	10.036	9.957
18020042	2091805	Area	AS15	9:15 AM	1:18 PM	10.058	9.998

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020040	2091803	265	10.0635	2666.83	6	100	0.005	0.055	7.006	0.0010	1.839	<0.0019	N/A
18020041	2091804	272	9.9965	2719.05	9	100	0.005	0.085	10.828	0.0015	1.705	<0.0026	N/A
18020042	2091805	243	10.0280	2436.8	7.5	100	0.005	0.070	8.917	0.0014	1.775	<0.0025	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/10/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-167

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020040	AS24	Asbestos PCM	Air	MCE Cassette	2/9/2018	10.144	9.983	2666.83	Liters	8:46:00 AM	1:11:00 PM	265	10.0635	L/min
	18020041	AS26	Asbestos PCM	Air	MCE Cassette	2/9/2018	10.036	9.957	2719.05	Liters	8:56:00 AM	1:28:00 PM	272	9.9965	L/min
	18020042	AS15	Asbestos PCM	Air	MCE Cassette	2/9/2018	10.058	9.998	2436.8	Liters	9:15:00 AM	1:18:00 PM	243	10.028	L/min
	18020043	Blank 1	Asbestos PCM	Air	MCE Cassette	2/9/2018				Liters					L/min
	18020044	Blank 2	Asbestos PCM	Air	MCE Cassette	2/9/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	[signature]	14:45 2/9/18	[signature] ACT	2/10/18 10:26	good

ADVANTAGE Environmental INC.

Clean your world.

February 15, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/12/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/12/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/12/2018
DATE RECEIVED 2/13/2018
DATE ANALYZED 2/13/2018
DATE REPORTED 2/14/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020053	2131801	0	100	0/100
18020054	2131802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020050	2131803	Area	AS24	8:04 AM	1:31 PM	9.8995	10.011
18020051	2131804	Area	AS26	8:11 AM	1:43 PM	9.9411	10.016
18020052	2131805	Area	AS15	8:20 AM	1:47 PM	9.9366	10.074

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020050	2131803	327	9.9553	3255.38	7	100	0.0025	0.068	8.599	0.0010	1.785	<0.0018	N/A
18020051	2131804	332	9.9786	3312.9	6.5	100	0.0025	0.063	7.962	0.0009	1.810	<0.0017	N/A
18020052	2131805	327	10.0053	3271.73	5.5	100	0.0025	0.053	6.688	0.0008	1.871	<0.0015	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/13/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206.920.1739

No: PDX-169

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020050	AS24	Asbestos PCM	Air	MCE Cassette	2/12/2018	9.8995	10.011	3255.38	Liters	8:04:00 AM	1:31:00 PM	327	9.9553	L/min
	18020051	AS26	Asbestos PCM	Air	MCE Cassette	2/12/2018	9.9411	10.016	3312.9	Liters	8:11:00 AM	1:43:00 PM	332	9.9786	L/min
	18020052	AS15	Asbestos PCM	Air	MCE Cassette	2/12/2018	9.9366	10.074	3271.73	Liters	8:20:00 AM	1:47:00 PM	327	10.0053	L/min
	18020053	Blank 1	Asbestos PCM	Air	MCE Cassette	2/12/2018				Liters					L/min
	18020054	Blank 2	Asbestos PCM	Air	MCE Cassette	2/12/2018				Liters					L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	[signature] E2E/START	2-12-18/1422	[signature]	2/13/18 745	good

ADVANTAGE Environmental INC.

Clean your world.

February 15, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/13/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/13/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/13/2018
DATE RECEIVED 2/14/2018
DATE ANALYZED 2/14/2018
DATE REPORTED 2/15/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020058	2141801	0.5	100	0.5/100
18020059	2141802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020055	2141803	Area	AS24	8:17 AM	1:31 PM	9.9391	10.313
18020056	2141804	Area	AS26	8:26 AM	1:37 PM	9.9696	10.239
18020057	2141805	Area	AS15	8:38 AM	1:43 PM	9.9134	10.202

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020055	2141803	314	10.1261	3179.6	6.5	100	0.005	0.060	7.643	0.0009	1.810	<0.0017	N/A
18020056	2141804	311	10.1043	3142.44	9	100	0.005	0.085	10.828	0.0013	1.705	<0.0023	N/A
18020057	2141805	305	10.0577	3067.6	6	100	0.005	0.055	7.006	0.0009	1.839	<0.0016	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 2/14/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206.920.1739

No: PDX-170
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020055	AS24	Asbestos PCM	Air	MCE Cassette	2/13/2018	9.9391	10.313	3179.6	Liters	8:17:00 AM	1:31:00 PM	314	10.1261	L/min
	18020056	AS26	Asbestos PCM	Air	MCE Cassette	2/13/2018	9.9696	10.239	3142.44	Liters	8:26:00 AM	1:37:00 PM	311	10.1043	L/min
	18020057	AS15	Asbestos PCM	Air	MCE Cassette	2/13/2018	9.9134	10.202	3067.6	Liters	8:38:00 AM	1:43:00 PM	305	10.0577	L/min
	18020058	Blank 1	Asbestos PCM	Air	MCE Cassette	2/13/2018				Liters	7:30:00 AM	2:00:00 PM			L/min
	18020059	Blank 2	Asbestos PCM	Air	MCE Cassette	2/13/2018				Liters	7:31:00 AM	2:00:00 PM			L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	By ETE START	2-13-18/14:04	AEI	2/14/18 0710	

ADVANTAGE Environmental INC.

Clean your world.

February 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/14/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/14/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/14/2018
DATE RECEIVED 2/15/2018
DATE ANALYZED 2/15/2018
DATE REPORTED 2/16/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020063	2151801	0.5	100	0.5/100
18020064	2151802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020060	2151803	Area	AS24	9:09 AM	1:29 PM	9.975	9.4098
18020061	2151804	Area	AS26	9:01 AM	1:40 PM	10.046	9.7625
18020062	2151805	Area	AS15	9:23 AM	1:48 PM	10.074	9.9309

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020060	2151803	260	9.6924	2520.02	7	100	0.0025	0.068	8.599	0.0013	1.785	<0.0023	N/A
18020061	2151804	279	9.9043	2763.3	6.5	100	0.0025	0.063	7.962	0.0011	1.810	<0.0020	N/A
18020062	2151805	265	10.0025	2650.66	6	100	0.0025	0.058	7.325	0.0011	1.839	<0.0020	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/14/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-171

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020060	AS24	Asbestos PCM	Air	MCE Cassette	2/14/2018	9.975	9.4098	2520.02	Liters	9:09:00 AM	1:29:00 PM	260	9.6924	L/min
	18020061	AS26	Asbestos PCM	Air	MCE Cassette	2/14/2018	10.046	9.7625	2763.3	Liters	9:01:00 AM	1:40:00 PM	279	9.9043	L/min
	18020062	AS15	Asbestos PCM	Air	MCE Cassette	2/14/2018	10.074	9.9309	2650.66	Liters	9:23:00 AM	1:48:00 PM	265	10.0025	L/min
	18020063	Blank 1	Asbestos PCM	Air	MCE Cassette	2/14/2018	0	0	0	Liters	8:00:00 AM	1:50:00 PM	350	0	L/min
	18020064	Blank 2	Asbestos PCM	Air	MCE Cassette	2/14/2018	0	0	0	Liters	8:00:00 AM	1:50:00 PM	350	0	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com. Fault on AS-24 pump for unknown duration between 10:41 and 12:55 due to generator stall.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL / over-night storage	Ryan Whitehead / START R10	Feb 14, 2018 / 1434	Dan M Dooley	2/15/2018 0710	

ADVANTAGE Environmental INC.

Clean your world.

February 19, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/15/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/15/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/15/2018
DATE RECEIVED 2/16/2018
DATE ANALYZED 2/16/2018
DATE REPORTED 2/19/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020065	2161801	0.5	100	0.5/100
18020066	2161802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020067	2161803	Area	AS24	8:01 AM	1:35 PM	9.7058	9.5926
18020068	2161804	Area	AS26	8:16 AM	1:44 PM	9.83	9.7495
18020069	2161805	Area	AS15	8:40 AM	1:57 PM	9.9003	9.995

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020067	2161803	334	9.6492	3222.83	7	100	0.0025	0.068	8.599	0.0010	1.785	<0.0018	N/A
18020068	2161804	328	9.7898	3208.3	6	100	0.0025	0.058	7.325	0.0009	1.839	<0.0016	N/A
18020069	2161805	317	9.9477	3153.42	6	100	0.0025	0.058	7.325	0.0009	1.839	<0.0016	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 2/15/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-172
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020065	Blank 1	Asbestos PCM	Blank	MCE Cassette	2/15/2018	0	0	0	Liters	7:20:00 AM	2:00:00 PM	400	0	L/min
	18020066	Blank 2	Asbestos PCM	Blank	MCE Cassette	2/15/2018	0	0	0	Liters	7:25:00 AM	2:05:00 PM	400	0	L/min
	18020067	AS24	Asbestos PCM	Air	MCE Cassette	2/15/2018	9.7058	9.5926	3222.83	Liters	8:01:00 AM	1:35:00 PM	334	9.6492	L/min
	18020068	AS26	Asbestos PCM	Air	MCE Cassette	2/15/2018	9.813	9.7495	3208.27	Liters	8:16:00 AM	1:44:00 PM	328	9.7813	L/min
	18020069	AS15	Asbestos PCM	Air	MCE Cassette	2/15/2018	9.9003	9.995	3153.42	Liters	8:40:00 AM	1:57:00 PM	317	9.9477	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
AM / overnight storage	Ryan Whitchurch START	Feb 15, 2018 / 15:06	ACT	7:41 2/16/18	good

ADVANTAGE Environmental INC.

Clean your world.

February 20, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/16/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/16/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/16/2018
DATE RECEIVED 2/19/2018
DATE ANALYZED 2/19/2018
DATE REPORTED 2/20/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020070	2191801	1	100	1/100
18020071	2191802	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020072	2191803	Area	AS24	7:52 AM	1:10 PM	9.8377	9.679
18020073	2191804	Area	AS26	8:09 AM	1:14 PM	9.8362	9.8264
18020074	2191805	Area	AS15	8:38 AM	1:31 PM	9.8034	9.8622

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020072	2191803	318	9.7584	3103.17	6.5	100	0.005	0.060	7.643	0.0009	1.810	<0.0017	N/A
18020073	2191804	305	9.8313	2998.55	7	100	0.005	0.065	8.280	0.0011	1.785	<0.0019	N/A
18020074	2191805	293	9.8328	2881.01	7.5	100	0.005	0.070	8.917	0.0012	1.775	<0.0021	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/16/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-173

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020070	Blank 1	Asbestos PCM	Blank	MCE Cassette	2/16/2018	0	0	0	Liters	7:15:00 AM	1:35:00 PM	380	0	L/min
	18020071	Blank 2	Asbestos PCM	Blank	MCE Cassette	2/16/2018	0	0	0	Liters	7:20:00 AM	1:40:00 PM	380	0	L/min
	18020072	AS24	Asbestos PCM	Air	MCE Cassette	2/16/2018	9.8377	9.679	3103.17	Liters	7:52:00 AM	1:10:00 PM	318	9.7584	L/min
	18020073	AS26	Asbestos PCM	Air	MCE Cassette	2/16/2018	9.8362	9.8264	2998.55	Liters	8:09:00 AM	1:14:00 PM	305	9.8313	L/min
	18020074	AS15	Asbestos PCM	Air	MCE Cassette	2/16/2018	9.8034	9.8622	2881.01	Liters	8:38:00 AM	1:31:00 PM	293	9.8328	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All - over-night storage	Ryan Whitehead START R10	Feb 16, 2018 15:03	Sidney Carter AEI	2/16/18 910	Good

ADVANTAGE Environmental INC.

Clean your world.

February 23, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/19/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/19/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/19/2018
DATE RECEIVED 2/22/2018
DATE ANALYZED 2/22/2018
DATE REPORTED 2/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020075	2221801	0.5	100	0.5/100
18020076	2221802	0.5	100	0.5/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020077	2221803	Area	AS24	8:14 AM	12:43 PM	9.928	9.981
18020078	2221804	Area	AS26	8:35 AM	1:05 PM	9.928	10.124
18020079	2221805	Area	AS15	8:24 AM	12:55 PM	9.885	10.026

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020077	2221803	269	9.9545	2677.76	8	100	0.005	0.075	9.554	0.0014	1.741	<0.0024	N/A
18020078	2221804	270	10.0260	2707.02	6	100	0.005	0.055	7.006	0.0010	1.839	<0.0018	N/A
18020079	2221805	271	9.9555	2697.94	7.5	100	0.005	0.070	8.917	0.0013	1.775	<0.0023	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA
DateShipped: 2/20/2018

CHAIN OF CUSTODY RECORD
Site #: 10QD
Contact Name: Steve Hall
Contact Phone: 206-920-1739

No: PDX-174
Lab: Advantage Environmental Inc.
Lab Phone: 503-522-1369
Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020075	Blank 1	Asbestos PCM	Blank	MCE Cassette	2/19/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18020076	Blank 2	Asbestos PCM	Blank	MCE Cassette	2/19/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18020077	AS24	Asbestos PCM	Air	MCE Cassette	2/19/2018	9.928	9.981	2677.76	Liters	8:14:00 AM	12:43:00 PM	269	9.9545	L/min
	18020078	AS26	Asbestos PCM	Air	MCE Cassette	2/19/2018	9.928	10.124	2707.02	Liters	8:35:00 AM	1:05:00 PM	270	10.026	L/min
	18020079	AS15	Asbestos PCM	Air	MCE Cassette	2/19/2018	9.885	10.026	2697.94	Liters	8:24:00 AM	12:55:00 PM	271	9.9555	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
all to lab	Mark Fulton (START)	2/19/18 13:45	Sidney Carter AEI	2/20/18 915	Good

ADVANTAGE Environmental INC.

Clean your world.

February 23, 2018

Environmental Quality Management
Jerry Wade
18939 120th Ave NE, Suite 103
Bothell, WA 98011

RE: 2/20/2018 START-Asbestos Air Sampling Results 1300 North River St. Portland, OR:

Personal &/or Area samples were collected utilizing 25mm mixed cellulose-ester filter cassettes with a 50mm extension cowl. Sampling pumps were calibrated to flow rates specified by OSHA 29 CFR Parts 1910 and 1926, Occupational Exposure to Asbestos. Final Rules dated June 29, 1995. All samples were analyzed utilizing the NIOSH 582 Method.

Personal samples were collected within the workers breathing zones, area samples were collected from specified areas with sampling cassettes at approximately 60" in elevation.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 0.1 fibers per cubic centimeter as an 8 hour time weighted average TWA.

The Oregon Administrative rules also state that workers shall not to be exposed to asbestos airborne concentrations of asbestos fibers in excess of 1.0 fibers per cubic centimeter as average over a sampling period of thirty (30) minutes.

Laboratory analysis of Personal samples (including STEL) short term excursion limit samples and/or Area samples collected on 2/20/2018 by Ecology & Environmental, Inc. (START) are below the permissible exposure limits (PELS) as specified in the Oregon Administrative Rules, Oregon Occupational Safety and Health 1926.1101.

Anomalies
No anomalies found in any air samples that were collected and analyzed for this day.

Air Data Results
Current air data for this day was below the PELS and acceptable limits.

Technician report
Unknown, see START

Respectfully,

Sidney Carter
Senior Project Manager/AHERA Project Designer

ADVANTAGE ENVIRONMENTAL, INC. AIR SAMPLE ANALYSIS REPORT

CLIENT Ecology and Environmental, Inc. (START)
ATTENTION Erin Lynch
CONTRACTOR Ecology and Environmental, Inc. (START)
PROJECT River Street Water Front Portland, OR

ADVANTAGE PROJECT # 17-225a
CLIENT PROJECT # 10QD
REPORT # 1
PAGE 1 **OF** 1

DATE COLLECTED 2/20/2018
DATE RECEIVED 2/22/2018
DATE ANALYZED 2/22/2018
DATE REPORTED 2/23/2018

BLANK INFORMATION

Sample ID	Lab ID #	fibers	fields	fibers/fields
18020080	2221806	0.5	100	0.5/100
18020081	2221807	0	100	0/100

SAMPLES COLLECTED BY: START

SAMPLES ANALYZED BY: Jibri Johnson

SAMPLE INFORMATION

Filter Information: MCE 0.8 um pore size.

Sample ID	Lab ID #	Type of Sample	Sample Location / Work Performed / Respiratory Protection	Time Started	Time Ended	Flow Rate Start	Flow Rate End
18020082	2221808	Area	AS24	7:35 AM	10:49 AM	9.9713	9.71
18020083	2221809	Area	AS26	7:50 AM	10:53 AM	9.8512	9.7542
18020084	2221810	Area	AS15	8:23 AM	11:32 AM	9.7507	9.724

ANALYTICAL INFORMATION

LOD = 5.5 Fibers

Graticule Field Area = 0.00785 mm^2

Sample ID	Lab ID#	Total Minutes Sampled	Average Flow Rate	Sample Volume	fibers	fields	Average Blank Count	Adjusted Fiber Count	fibers / mm^2	fibers/cc	Coefficient of Variation	95% UCL	8-hour TWA
18020082	2221808	194	9.8407	1909.1	7	100	0.0025	0.068	8.599	0.0017	1.785	<0.0031	N/A
18020083	2221809	183	9.8027	1793.89	6.5	100	0.0025	0.063	7.962	0.0017	1.810	<0.0031	N/A
18020084	2221810	189	9.7374	1840.37	5.5	100	0.0025	0.053	6.688	0.0014	1.871	<0.0026	N/A

Method of Analysis: NIOSH 7400 Issue 2, 8/15/94, or OSHA Reference Method 1926.1101 Appendix A. Working Range of NIOSH 7400 is 100 to 1,300 fibers/mm2. Limit of Quantitation (LOQ) = 100 fibers/mm2. Limit of Detection (LOD) = 7 fibers/mm2.

Abbreviations: **A**=Area, **AC**=Aggressive Clearance, **AD**=Area During Abatement, **AO**=Area Outside Work Area, **AP**=Area Prior to Abatement, **B**=Blank, **C**=Passive Clearance, **P**=Personal Breathing Zone, **PDU**=Pressure Differential Unit, **STEL**=Short Term Excursion Limit, **WLO**=Waste Load Out, **< LOD=** Below Laboratory Reporting Limit

WARRANTY: The information contained in this report is based on information furnished by the client and observations and test results provided by Advantage Environmental, Inc. (AEI). These observations are time dependent, are subject to changing site conditions, and revisions to Federal, state, and local regulations. AEI warrants that these findings have been promulgated after being prepared in accordance with generally accepted practices in the asbestos testing and abatement industry. No other warranties are implied or expressed.

USEPA

DateShipped: 2/21/2018

CHAIN OF CUSTODY RECORD

Site #: 10QD

Contact Name: Steve Hall

Contact Phone: 206-920-1739

No: PDX-175

Lab: Advantage Environmental Inc.

Lab Phone: 503-522-1369

Lab Address: P.O. Box 1026

Lab #	Sample #	Location	Analyses	Matrix	Sample Media	Collected	Start Flow Rate	Stop Flow Rate	Volume	Vol Units	Start_Time	Stop_Time	Total_Time	Avg_Flow	Flow_Units
	18020080	Blank 1	Asbestos PCM	Blank	MCE Cassette	2/20/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18020081	Blank 2	Asbestos PCM	Blank	MCE Cassette	2/20/2018	0		0	Liters	7:30:00 AM		380	0	L/min
	18020082	AS24	Asbestos PCM	Air	MCE Cassette	2/20/2018	9.9713	9.71	1909.1	Liters	7:35:00 AM	10:49:00 AM	194	9.8407	L/min
	18020083	AS26	Asbestos PCM	Air	MCE Cassette	2/20/2018	9.8512	9.7542	1793.89	Liters	7:50:00 AM	10:53:00 AM	183	9.8027	L/min
	18020084	AS15	Asbestos PCM	Air	MCE Cassette	2/20/2018	9.7507	9.724	1840.37	Liters	8:23:00 AM	11:32:00 AM	189	9.7374	L/min

Special Instructions: Please process air samples within 24 hrs. Please send results to sghall@ene.com, mwoodke@ene.com, elynch@ene.com and rlocke@ene.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All-overnight Storage	Ryan Whitehead START-R10	2/20/2018 12:19	Sidney Parker AEI	2/22/18 7:16	Good

APPENDIX K
Daily Logs

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS=Jim Boyse, Jacob Johnson and the David Nelson

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5 and LV 21

Daily Weather: 52 degrees, 90% humidity

Time	Observations
09:00	Arrived at the site with Vinson White of AEI.
09:30	I walked the site with Vinson to go over the scope and safety issues.
10:00	PAS has begun moving fencing away from the deck approximately 6 feet from the rail lines.
10:30	Meeting with Jerry of EQM and Dave Nelson to cover options on the trestle workers.
11:30	PAS crew break for lunch
12:00	Return from lunch break
12:40	Meeting with Jerry of EQM, and EPA rep to discuss trestle, workers and concerns.
13:25	Set up personal air sampling pump LV-5 on Jacob Johnson
13:28	Set up personal air sampling pump LV-21 on Jim Boyse.
13:35	Excavator starts breaking up sections of the deck to be removed.
13:55	I stopped the sample on pump LV-5 due to the lightning storm.
13:58	I stopped the sample on pump LV-21 due to the lightning storm.
14:30	Stopped remaining person air sampling pumps, the site is shutting down for the day.
15:30	Completed analysis of air samples and daily documentation. End of shift

Total air sampled collected / analyzed=4
Total blank air samples analyzed=2
No injuries reported

Shift 09:00 to 15:30, less 30 minute lunch =5.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/21/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS=Jim Boyse, Robert Barton, Jacob Johnson and David Nelson

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5, LV 21 and HV-20

Daily Weather: 49-50 degrees, 99% Humidity

Time	Observations
07:00	Morning safety meeting with EQM, PAS, EPA, Start and AEI
07:25	Set pump LV-21 on Jim Boyse operating excavator
07:30	Set Pump LV-5 on Robert Barton (clean-up, labor, operating water hose)
07:31	Crew started on deck, Jacob Johnson operating skid steer.
07:40	Set Pump HV-20 @ 9.76 on SE Corner of regulated area
07:59	Pulled pump LV-21
08:00	Pulled pump LV-5
08:01	Set Pump LV-21 on Jim Boyse
08:02	Set Pump LV-5 on Robert Barton
08:05	PAS having meeting about removal of deck and boat debris
08:10	PAS has person in lift wetting material during removal
09:45	Work stopped for a break due to management meeting for EQM
11:35	Crew began working again
12:15	Excavator completed removing structure at South end of deck and now moving debris to staging area at South end
12:25	Pulled Pump HV-20
12:30	Set Pump HV-20 SE corner
13:12	Pulled LV-21
13:14	Pulled LV-5
13:30	Crew is cleaning area under where the deck was removed
14:10	Crew broke for lunch
14:50	Set Pump LV-5
14:55	Set Pump LV-21
15:00	Crew started back-up & continuing to clean pit under where deck was removed, I work on air sample analysis.
15:15	Work is stopped so the pit could be inspected
15:30	Pulled Pump HV-20 SE Corner
16:00	Pulled LV-21
16:01	Pulled LV-5
17:00	Completed air sample analysis documentation and end of work shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30 minute lunch =9.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/22/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS = David Nelson, Jacob Johnson, Jim Boyce, Robert Burton

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-31, LV-41 HV Pumps HV-20, HV-201

Daily Weather: 53° F-58° F, 96% Humidity

Time	Observations
07:00	Had morning meeting, concerns brought up about cars not stopping for flaggers, be aware of traffic
07:35	Set Pump LV-31 on Jacob Johnson
07:36	Robert started moving material and debris from away from opening
07:40	Set Pump LV-41 on Jim Boyce
07:42	Set Pump HV-20 on Northside of regulated area
07:44	Excavator started moving material and debris
07:45	Set Pump HV-201 on Southside of regulated area
08:05	Pulled Pump LV-31 and set new sample on Jacob Johnson
08:06	Set Pump LV-31 on Jacob Johnson
08:11	Pulled Pump LV-41 and set new sample on Jim Boyce
08:12	Set Pump LV-41 on Jim Boyce
08:30	Crew continues to clean area of debris using excavator and bobcat
09:30	Crew started cleaning excavator to be removed from site
10:30	Crew does final cleaning of area
11:12	Pulled Pump LV-41
11:13	Pulled Pump LV-31
11:15	Lunch
11:17	Pulled Pump HV-20
11:18	Pulled Pump HV-201
12:15	Onsite
13:30	Crew started covering debris pile with 6-mil poly and demarcation top
13:30	Crew is cleaning area under where the deck was removed
14:00	New excavator arrived onsite
14:25	Set Pump LV-31 on Jacob Johnson
14:30	Work resumed with removing the deck
15:15	Requested PAS to wet the ground that the skidder is running on. PAS immediately wetted all areas
16:00	Removed Pump LV-31
17:00	Completed paperwork

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30-minute lunch = 9.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/25/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Gary Brown / EQM = Tommy Smith

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-41 and HV-20

Daily Weather: 58°-65°, 99% Humidity

Time	Observations
07:00	Morning safety meeting, talked about keeping dust down and cars not slowing through work area
07:20	PAS started moving equipment for staging
07:45	First dumpster arrived
08:10	Crew mobilizing equipment to North Side of regulated area to start new area
08:15	PAS Crew lining first box for ACM
08:30	Setting generators on North & South Side of regulated area to run samples when work starts
09:05	Second dumpster arrived and is staged at North-end outside of regulated area
09:32	Set Pump #LV-1 on Gary Brown
09:35	Set Pump #LV-41 on Robert Burton
09:36	Set Pump HV-20 at West end of worksite
09:50	Crew took break
10:04	Removed Pump #LV-1
10:05	Removed Pump #LV-41
10:06	Set Pump #LV-1 pm Gary Brown
10:07	Set Pump #LV-41 on Robert Burton
10:15	Crew started loading dumpster
11:55	Crew loaded first dumpster and on top tying it down seaming
11:55	Jerry, crew and myself had a safety meeting
11:57	Dave, Tom standing around and watching will crews on top of the pile
12:05	1st dumpster hauled away wrapped up in white plastic
12:50	A total of 3 dumpsters are on the job site
13:25	Removed Pump #LV-1
13:30	Removed Pump #LV-41
13:30	PAS Crew moving fence to another area onsite
13:50	Dave started moving burned cars from the worksite
13:53	Set Pump #LV-41 on Robert Barton
13:55	Set Pump #LV-1 on Gary Brown
13:59	Removed Pump #HV-20
14:00	Set Pump #HV-20 at West end of containment
14:10	Moved the 1st dumpster
14:30	Started analyzing cassettes
15:15	Analyzed samples from earlier in the day
15:45	Removed Pump #HV-20

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
15:46	Removed Pump #LV-1
15:47	Removed Pump #LV-41
17:00	Completed documentation

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30 minute lunch =9.5 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/26/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Gary Brown / EQM = Tommy Smith, Jerry Wade

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-3-1 and HV-20

Daily Weather: 58°-65°, 72% Humidity

Time	Observations

Vinson White
Sampling Technician

Page: 1 of 2

Time	Observations
07:00	Safety meeting with Jerry, Joe and work crew
07:45	Preparing personal pumps
07:55	Set Pump #LV-1 on Robert Barton
07:57	Set Pump #LV-3-1 on Jacob Johnson
08:25	Removed Pump #LV-1
08:28	Removed Pump #LV-3-1
08:31	Set Pump #LV-1 on Robert Barton
08:35	Set Pump #LV-3-1 on Jacob Johnson
08:40	Set Pump HV-20 at SE Corner of regulated area
08:55	Dave's on the giant forklift moving objects around
08:59	Hydraulic pump delivered to worksite
10:30	Removed Pump #LV-1
10:30	Crew returned form break
10:34	Set Pump #LV-1 on Robert Barton
10:35	PAS began moving burned out cars from North section of platform to Southside and prepped for loading out
10:36	Removed Pump #LV-3-1
10:38	Set Pump #LV3-1 on Jacob Johnson
10:38	AAC moved into pit for layout of pilings
11:20	AS pulled first loaded dumpster for the day
11:35	PAS brought in empty box for loading into the regulated area
11:45	Removed Pump HV-20
12:24	Removed Pump #LV-1
12:25	Removed Pump #LV-3-1
13:30	Set Pump #LV-1 on Robert Barton
13:33	Set Pump #LV-3-1 on Jacob Johnson
13:35	Pilings & decking arrive, PAS begins loading dumpster

Vinson White
Sampling Technician

Page: 1 of 2

Advantage Environmental

Daily Project Log

Time	Observations
13:40	Set Pump HV-20 in SW Area by portable toilets
14:01	Another dumpster is placed into containment
14:50	Jerry called me over to be part of conversation about building a side on the deck
16:30	Removed Pump #LV-1
16:31	Removed Pump #LV-3-1
16:40	Removed Pump HV-20
17:00	Finished analyzing and completed paperwork

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30 minute lunch =9.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/27/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Kent Parker / EQM = Jerry Wade

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-3-1 and HV-20

Daily Weather: 58°-80°, ~84% Humidity

Time	Observations
07:00	Attended morning crew safety meeting
08:15	Set Pump #HV-21 at Southeast End of regulated area
08:17	Dumpster dropped off at Southeast end of regulated area
08:20	2 Dumpsters are pulled
08:21	Dumpster is being picked-up off of deck
08:30	PAS is doing a layout on JLG
08:50	Spoke with PAS about continually wetting surface of site
09:05	Dumpster moved
10:05	AAC Down by deck (layout pile bucks) area marking the area for staying
10:10	Dave moved dumpster to Westside of regulated area
10:20	Pulled Pump #HV-21
10:40	Tommy is continuing to put water on work area
10:55	Set Pump #HV-21 at Northeast corner of pit
11:00	Set Pump #LV-1 on Kent Parker
11:03	Set Pump #LV-21 on Robert Barton
11:05	Set Pump #LV-4-1 on Jacob Johnson
11:15	Started driving first piling
11:25	Set Pump #HV-20 at Northeast corner of regulated area
11:32	Pulled Pump #LV-1
11:35	Pulled Pump #LV-21
11:36	Pulled Pump #LV-4-1
11:37	Set Pump #LV-21 on Robert Barton
11:38	Set Pump #LV-4-1 on Jacob Johnson
11:55	First section of piling is observed as being set in place and is very close to deck, crew is being cautious not to impact it
12:00	Set Pump #LV-1 on Kent Parker
12:05	AAC & PAS break for lunch
12:40	AAC begins working again
12:50	Second piling is coming in
13:00	PAS begins working again
13:30	EQM wetting NE corner of deck for removal
14:30	AAC welding rings into the pipe

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
14:31	PAS is preparing to work inside gates
14:40	Pulled Pump #LV-1
14:44	Pulled Pump #LV-21
14:45	Pulled Pump #LV-4-1
15:35	Pulled Pump #HV-21
15:45	Pulled Pump #HV-20
17:00	Finished daily documentation

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00hrs, less 30 minute lunch =9.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/28/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Mark Conway / EQM = Jerry Wade

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-41, LV-3-1 and HV-20

Daily Weather: 53°-85°, 91% Humidity

Time	Observations
07:00	Meeting with all crews, Jerry leading meeting
07:15	Preparing personal pumps
07:20	Work crew in pit drilling pipes in the ground, excavator arrived to worksite
07:55	Work crew finishes running pilons in ground
08:30	Mobile office arrives
09:10	PAS is preparing to wet down deck
09:30	Hammer for crane is on worksite to begin running pilons into ground
10:10	All asbestos signs have been removed
10:15	Set Pump #LV-41 on Jacob Johnson
10:25	Set Pump #LV-3-1 on Mark Conway
10:30	Set Pump # HV-20 on Southwest side of work area
10:40	JCB forklift arrives on worksite
10:45	Removed Pump #LV-41
10:50	Set Pump #LV-41 on Jacob Johnson
10:55	Removed Pump #LV-3-1
10:57	Set Pump #LV-3-1 on Mark Conway
11:05	Work stopped to refill water truck
11:18	Work begins again, material being moved to edge of regulated area at this time
11:20	Excavator now working in regulated area
12:00	Work crews break for lunch
12:00	Removed Pump #LV-3-1
12:01	Removed Pump #HV-20
12:05	Removed Pump #LV-41
12:25	Dumpster was removed from worksite
12:30	2nd Dumpster was removed from worksite
12:49	Dumpster brought into worksite by Dave Nelson with PAS
13:05	Set Pump #41 on Jacob Johnson
13:10	Set Pump #LV-3-1 on Mark Conway
13:20	Set Pump #HV-20 on Southwest side of work area
13:55	Jacob with PAS watering down SW side of regulated area from hydraulic crane with railed platform
14:10	AAC work crew is hammering pilons into the ground
15:00	Removed Pump #LV-3-1

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
15:05	Removed Pump #LV-41
15:15	Removed Pump #HV-20
15:16	Began analyzing cassettes
15:50	Began documentation
17:00	Finished analysis & documentation

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 17:00, less 30 minute lunch =9.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/29/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Mark Conway / EQM = Jerry Wade

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: NA

Daily Weather: 50°-60°, 93% Humidity

Time	Observations
07:00	Safety meeting with all crew members
07:30	Advanced American Construction , begins staging
08:05	Workers laying boards across tracks so won't damage them
08:20	Truck unloading dirt for pit
09:04	PAS lining dumpsters, PAS work on deck on holding waiting for excavator that is being used in pit
09:17	Next load of rock being delivered
10:00	PAS continuing to line dumpsters
11:10	New load of rock being delivered
12:00	Load of rock being delivered, Vinson White with AEI leaves the site
13:00	Load of rock being delivered, Sidney Carter with AEI takes over the shift
14:00	Load of rock continue being delivered
15:00	Load of rock continue being delivered
15:30	Finished paperwork, end of shift

Total air sampled collected / analyzed=0
Total blank air samples analyzed=0
No injuries reported

Shift
Vinson White 07:00 to 12:00, no lunch =5 hours
Sidney Carter 13:00 to 15:30= 2.5 hrs

Total hours 7.5
(not including time spend on negative exposure assessment)

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/29/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Mark Conway / EQM = Jerry Wade

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-41, LV-3-1 and HV-20

Daily Weather: 50°-60°, 93% Humidity

Time	Observations
07:00	Safety meeting with all crew members
07:30	Advanced American Construction , begins staging
08:05	Workers laying boards across tracks so won't damage them
08:20	Truck unloading dirt for pit
09:04	PAS lining dumpsters, PAS work on deck on holding waiting for excavator that is being used in pit
09:17	Next load of rock being delivered
10:00	PAS continuing to line dumpsters
11:10	New load of rock being delivered
12:00	Load of rocks being delivered, Finished paperwork, end of shift

Total air sampled collected / analyzed=0
Total blank air samples analyzed=0
No injuries reported

Shift 07:00 to 12:00, no lunch =5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 9/30/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Robert Barton, Jacob Johnson, Dave Nelson, Mark Conway, Gary Brown, Travis, Joe Ficek, / EQM = Jerry Wade, Tommy Smith

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5, LV-21, LV-31 and HV-20

Daily Weather: 50°-60°, 93% Humidity

Time	Observations
07:00	Safety meeting with Jerry, Dave, PAS Crew & Start
07:40	Set Pump #LV-5 on Jacob Johnson
07:42	Set Pump #LV-31 on Mark Conway
07:51	Jacob begins wetting down the site
07:55	Tommy is moving equipment
08:10	Removed sample from Pump #LV-5
08:08	Sid with AEI arrives onsite
08:12	Removed sample from Pump #LV-31
08:13	Set Pump #LV-5 on Jacob Johnson
08:14	Set Pump #LV-21 on Mark Conway
08:20	Set Pump #HV-20 at Northside of regulated area
08:40	Dave with PAS moves the dumpster
10:05	Removed sample from Pump #HV-20
10:08	Set sample on Pump #HV-20 on Northside of regulated area
10:11	Removed sample from Pump #LV-5
10:11	Set Pump #LV-5 on Jacob Johnson
10:13	Removed sample from Pump #LV-21
10:45	Mark is removing burned debris from deck
12:15	Removed Pump #LV-5
12:16	Set Pump #LV-21 on Mark Conway
12:31	Equipment being moved around
12:45	Equipment is being stored on Southwest side of regulated area for Monday
13:05	Back to work, Joe with EQM states we will shut down at 15:30 for end of shift
14:08	Removed sample from Pump #HV-20
14:10	Burned remnants of wood are being removed from Southwest side of regulated area
14:40	Began analyzing samples
14:42	Removed sample from Pump #LV-21
15:00	Finished analyzing samples
15:30	Completed paperwork

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift 07:00 to 15:30 less 30 minutes for lunch, = 8 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/02/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Mark Conway, Gary Brown, Kent Parker, / EQM = Jerry Wade, Joe Ficek

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV 5, LV-31, HV-200, HV-20

Daily Weather: 50°, 62% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:30	Sid is teaching Asbestos Awareness Class (EQM & AAC)
09:20	Set Pump #LV-5 on Kent Parker with AAC who will be driving pilings.
09:20	Set Pump #LV-31 on Mark Conway with EQM-whom is operating the excavator
09:45	Sid is back from teaching the asbestos awareness training class
09:50	Removed Samples from Pump #LV-31 & LV-5
09:51	Set Pump #LV-31 on Mark Conway
09:54	Set Pump # LV-5 on Kent Parker
09:55	Set pump #HV-200 at North corner of regulated area/center pit
09:58	Spoke with PAS about demolition tape on Southwest side of regulated area
10:35	Set Pump #LV-21 on Jacob Johnson (operating water hose) to keep material wet and dust down
10:45	Set Pump # HV-20 at Southwest side of regulated area
11:05	Removed Sample from Pump #LV-21
11:22	Mark stopped the equipment to speak with Dave
11:25	Mark started equipment back up and continued working
11:40	Set Pump #LV-21 on Jacob Johnson
11:45	Mark stopped equipment
12:20	AAC using crane to move objects around
12:30	Had meeting with EQM on how to access the decking for AAC. It will be required. PAS installed 8' wide plywood deck to de-regulate the area
12:40	Removed Sample from Pump #HV-200
13:10	AAC breaks for lunch
13:40	AAC back from lunch
14:20	Removed sample from Pump #LV-5
14:25	Removed Sample from Pump #HV-20
14:30	PAS installing plywood on deck for trestle layout
14:30	Set Pump #31 on Mark Conway
14:35	Removed Sample from Pump #LV-21
14:46	EQM watered deck where layout is to be done for trestle
15:45	Removed Sample from pump #LV-31
16:00	Finished paperwork and end of shift

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Shift

Air Sampling Technician		
Vinson White		
09:00 to 12:30	3.5	
15:00-16:00, no lunch	1	
Total=	**4.5**	**Vinson White**

Senior Project manager		
Sidney Carter		
07:00 to 07:30	0.5	
09:30 to 15:00 less 30 min lunch	5.5	
Total=	**6**	**Sidney Carter**

Vinson White / Sidney Carter

Advantage Environmental

Daily Project Log

Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/03/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 and HV-20

Daily Weather: 45°, 64% Humidity

Time	Observations
07:00	Morning safety meeting with PAS, EQM, AAC & START
07:20	Prepared personal samples
07:30	Set Pump #LV-5 on Kent Parker
07:30	Moved dumpster
07:45	Set Pump #LV-21 on Gary Brown
08:00	Removed Sample from Pump #LV-5
08:04	Moving dumpster
08:15	Removed Sample from Pump #LV-21
08:15	Moving dumpster
08:15	Set Pump #LV-5 on Kent Parker
08:16	Crews are still setting up for workday
08:20	Set Pump #LV-21 on Gary Brown
08:25	Set Pump #LV-1 on Mark Conway
08:45	Set Pump #HV-20 on Southwest side of working area
08:55	Removed Sample from Pump #LV-1
09:00	Set Pump #LV-1 on Mark Conway
09:45	Brittney handed me samples to analyze for START
10:00	Crews take a break
10:22	Removed Sample from Pump #LV-21
10:25	Removed Sample from Pump #LV-5
10:28	PAS is putting plastic liner around dumpster
11:00	Removed Sample from Pump #LV-1
11:00	Began analyzing cassettes
11:40	Finished analyzing cassettes
11:58	Filled dumpster removed from worksite
12:00	Removed Sample from Pump #HV-20
12:00	Crews break for lunch
12:45	New dumpster arrives to worksite
14:10	Dumpster is being relocated around worksite
15:50	I work on documentation
16:00	Finished documentation, end shift

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Shift
Vinson White 07:00 to 16:00 less 30-minute lunch break = 8.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/04/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-5 & HV-20

Daily Weather: 43°, 70% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	Dumpsters are being moved into regulated area, Sidney Carter with AEI arrives on site.
07:46	More dumpsters are being moved into and out of regulated area
08:03	Set Pump #LV-1 on Mark Conway
08:05	Set Pump #LV-5 on Kent Parker
08:15	Set Pump #HV-20 at Southwest side of regulated area
08:15	More dumpsters being moved in and out of regulated area
08:33	Removed sample from Pump #LV-1
08:35	Set Pump #LV-1 on Mark Conway
08:36	Removed sample from Pump #LV-5
08:36	Set Pump #LV-5 on Kent Parker
08:50	PAS has finished loading first dumpster and now the work crew has moved to the North side of the regulated area
08:55	Meeting with EQM & PAS to address debris on North side of platform. Debris is to be left until the end of the project. Also discussed section of boom that is hung-up and not in the water. Repairs are to ensue on boom.
09:05	Mechanic arrives onsite to repair excavator
10:30	PAS is sealing dumpsters to be taken offsite
10:55	PAS begins moving material on North side of regulated area for staging again
12:00	PAS breaks for lunch
12:00	Removed sample from Pump LV-1, LV-5 and HV-20
12:01	Begin analyzing air sample cassettes
12:10	Dumpsters moved to outside of regulated area for pickup and positioning
12:50	Set Pump #LV-1 on Mark Conway
13:00	Set Pump #HV-20 at Southwest side of regulated area
13:05	Set Pump #LV-5 on Kent Parker
13:55	Dumpsters being removed after filled to capacity with debris
14:00	Semi-truck arrives with flatbed full of large long logs to be used for installation of decking to move AAC crane into position for debris and decking removal at a later date
15:00	Debris has been removed in multiple areas and deck underneath is now visible

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
15:30	Removed sample from Pump #HV-20
15:22	Multiple dumpsters are being finish prepped for removal after having been loaded to capacity
15:30	Begin preparation for analyzing samples
15:40	Removed sample from Pump #LV-1
15:45	Removed sample from Pump #LV-5
15:50	Finish analyzing samples
15:51	AAC stops working for end of shift
16:00	Finished paperwork for end of shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:
Technician
Vinson White 07:00 to 16:00 less 30-minute lunch break = 8.5 hours

Senior Project Manager
Sidney Carter 07:30 to 12:30 pm = 5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/06/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert Barton / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-411, LV-5, HV-1, HV-20

Daily Weather: 41°-70°, 99% Humidity

Time	Observations
07:00	Morning safety meeting Sidney carter with AEI on site
07:20	Walked site with Pete with (AEI) to go over scope of project
07:35	Prepared samples for today
07:55	EQM began moving debris Northeast corner with excavator
08:00	Set Pump #LV-1 on Eduardo Gonzalez
08:03	EQM moved large excavator to pit
08:04	Set Pump #LV-32 on Kent Parker
08:10	Set Pump #LV-21 on Nick Arruda
08:12	Set Pump #HV-1 at South corner of pit
08:15	Set Pump #LV-5 on Robert Barton
08:15	Rock begins arriving to the pit
08:30	PAS started loading dumpster
08:32	Removed Sample from Pump #LV-1
08:32	Set Pump #LV-1 on Eduardo Gonzalez
08:36	Removed Sample from Pump #LV-32
08:36	Set Pump #LV-32 on Kent Parker
08:42	Removed Sample from Pump #LV-21
08:42	Set Pump #LV-21 on Nick Arruda
08:43	Set Pump #HV-20 at North side of Regulated Area
08:46	Removed Sample from Pump #LV-5
08:46	Set Pump #LV-5 on Robert Barton
09:00	Pete goes offsite
09:40	PAS to move to pit to remove more decking
09:48	I am having PAS regulate the area for deck removal
10:05	Vinson with AEI arrives on worksite and is brought up to speed by Sidney Carter. Vinson will be takin over the remainder of the shift for today.
10:06	Rock is being dumped in front of pit in order to form grade to platform
10:30	Sid departs worksite
11:20	More rock arrives to worksite
11:30	Rock continues to arrives at the worksite
11:45	Removed Sample from Pump #LV-32

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/07/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert Barton / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-411, LV-5, HV-1, HV-20

Daily Weather: 41°-70°, 99% Humidity

Time	Observations
07:00	Safety meeting with all work crews
07:45	Set sample on pump #HV-20 at center top of trestle in back area
07:57	Set sample on pump #LV-30 on Jacob Johnson
07:58	Set sample on pump #HV-21 on Northeast side of deck
08:03	Set sample on pump #LV-32 on Mark Conway
08:27	Removed Sample from Pump #LV-30
08:29	Set sample on pump #LV-30 on Jacob Johnson
08:34	Removed Sample from Pump #LV-32
08:35	Set sample on pump #LV-32 on Mark Conway
09:00	Noticing small amounts of dust. Addressed it with PAS and made engineering control changes
09:30	Setup analyzing equipment for cassettes under tent
11:00	Work is continuing outside and around the deck
11:05	Jacob continues wetting down debris and maintaining dust control
11:10	Jerry, Dave, Gary and Joe making arrangement to water left-side
11:59	Removed Sample from Pump #LV-32
12:00	Removed Sample from Pump #HV-20
12:00	Work crews break for lunch
12:02	Removed Sample from Pump #LV-30
12:03	Removed Sample from Pump #HV-21
12:45	Work crews return from lunch
12:45	Crew continues to move debris from front of trestle
13:45	Set sample on pump #LV-32 on Mark Conway
13:47	Set sample pump #LV-30 on Jacob Johnson
14:30	Begin analyzing personals from morning samples
14:45	Crew has debris moved from front of trestle and finalizing cleaning
15:00	Removed Sample from Pump #LV-32
15:00	Removed Sample from Pump #LV-30
15:00	Crew stop working for end of the shift

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:

Technician
Vinson White 07:00 to 15:00 less 30 minute lunch = 7.5 hours

Senior Project manager
Sidney Carter 07:00 am to 8:30 am = 1.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/02/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Mark Conway, Gary Brown, Kent Parker, / EQM = Jerry Wade, Joe Ficek

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: LV 5, LV-31, HV-200, HV-20

Daily Weather: 50°, 62% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:30	Sid is teaching Asbestos Awareness Class (EQM & AAC)
09:20	Set Pump #LV-5 on Kent Parker with AAC who will be driving pilings.
09:20	Set Pump #LV-31 on Mark Conway with EQM-whom is operating the excavator
09:45	Sid is back from teaching the asbestos awareness training class
09:50	Removed Samples from Pump #LV-31 & LV-5
09:51	Set Pump #LV-31 on Mark Conway
09:54	Set Pump # LV-5 on Kent Parker
09:55	Set pump #HV-200 at North corner of regulated area/center pit
09:58	Spoke with PAS about demolition tape on Southwest side of regulated area
10:35	Set Pump #LV-21 on Jacob Johnson (operating water hose) to keep material wet and dust down
10:45	Set Pump # HV-20 at Southwest side of regulated area
11:05	Removed Sample from Pump #LV-21
11:22	Mark stopped the equipment to speak with Dave
11:25	Mark started equipment back up and continued working
11:40	Set Pump #LV-21 on Jacob Johnson
11:45	Mark stopped equipment
12:20	AAC using crane to move objects around
12:30	Had meeting with EQM on how to access the decking for AAC. It will be required. PAS installed 8' wide plywood deck to de-regulate the area
12:40	Removed Sample from Pump #HV-200
13:10	AAC breaks for lunch
13:40	AAC back from lunch
14:20	Removed sample from Pump #LV-5
14:25	Removed Sample from Pump #HV-20
14:30	PAS installing plywood on deck for trestle layout
14:30	Set Pump #31 on Mark Conway
14:35	Removed Sample from Pump #LV-21
14:46	EQM watered deck where layout is to be done for trestle
15:45	Removed Sample from pump #LV-31
16:00	Finished paperwork and end of shift

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=9
Total blank air samples analyzed=2
No injuries reported

Shift

Air Sampling Technician		
Vinson White		
09:00 to 12:30	3.5	
15:00-16:00, no lunch	1	
Total=	**4.5**	**Vinson White**

Senior Project manager		
Sidney Carter		
07:00 to 07:30	0.5	
09:30 to 15:00 less 30 min lunch	5.5	
Total=	**6**	**Sidney Carter**

Vinson White / Sidney Carter

Advantage Environmental

Daily Project Log

Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/03/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 and HV-20

Daily Weather: 45°, 64% Humidity

Time	Observations
07:00	Morning safety meeting with PAS, EQM, AAC & START
07:20	Prepared personal samples
07:30	Set Pump #LV-5 on Kent Parker
07:30	Moved dumpster
07:45	Set Pump #LV-21 on Gary Brown
08:00	Removed Sample from Pump #LV-5
08:04	Moving dumpster
08:15	Removed Sample from Pump #LV-21
08:15	Moving dumpster
08:15	Set Pump #LV-5 on Kent Parker
08:16	Crews are still setting up for workday
08:20	Set Pump #LV-21 on Gary Brown
08:25	Set Pump #LV-1 on Mark Conway
08:45	Set Pump #HV-20 on Southwest side of working area
08:55	Removed Sample from Pump #LV-1
09:00	Set Pump #LV-1 on Mark Conway
09:45	Brittney handed me samples to analyze for START
10:00	Crews take a break
10:22	Removed Sample from Pump #LV-21
10:25	Removed Sample from Pump #LV-5
10:28	PAS is putting plastic liner around dumpster
11:00	Removed Sample from Pump #LV-1
11:00	Began analyzing cassettes
11:40	Finished analyzing cassettes
11:58	Filled dumpster removed from worksite
12:00	Removed Sample from Pump #HV-20
12:00	Crews break for lunch
12:45	New dumpster arrives to worksite
14:10	Dumpster is being relocated around worksite
15:50	I work on documentation
16:00	Finished documentation, end shift

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Shift
Vinson White 07:00 to 16:00 less 30-minute lunch break = 8.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/04/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-5 & HV-20

Daily Weather: 43°, 70% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	Dumpsters are being moved into regulated area, Sidney Carter with AEI arrives on site.
07:46	More dumpsters are being moved into and out of regulated area
08:03	Set Pump #LV-1 on Mark Conway
08:05	Set Pump #LV-5 on Kent Parker
08:15	Set Pump #HV-20 at Southwest side of regulated area
08:15	More dumpsters being moved in and out of regulated area
08:33	Removed sample from Pump #LV-1
08:35	Set Pump #LV-1 on Mark Conway
08:36	Removed sample from Pump #LV-5
08:36	Set Pump #LV-5 on Kent Parker
08:50	PAS has finished loading first dumpster and now the work crew has moved to the North side of the regulated area
08:55	Meeting with EQM & PAS to address debris on North side of platform. Debris is to be left until the end of the project. Also discussed section of boom that is hung-up and not in the water. Repairs are to ensue on boom.
09:05	Mechanic arrives onsite to repair excavator
10:30	PAS is sealing dumpsters to be taken offsite
10:55	PAS begins moving material on North side of regulated area for staging again
12:00	PAS breaks for lunch
12:00	Removed sample from Pump LV-1, LV-5 and HV-20
12:01	Begin analyzing air sample cassettes
12:10	Dumpsters moved to outside of regulated area for pickup and positioning
12:50	Set Pump #LV-1 on Mark Conway
13:00	Set Pump #HV-20 at Southwest side of regulated area
13:05	Set Pump #LV-5 on Kent Parker
13:55	Dumpsters being removed after filled to capacity with debris
14:00	Semi-truck arrives with flatbed full of large long logs to be used for installation of decking to move AAC crane into position for debris and decking removal at a later date
15:00	Debris has been removed in multiple areas and deck underneath is now visible

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
15:30	Removed sample from Pump #HV-20
15:22	Multiple dumpsters are being finish prepped for removal after having been loaded to capacity
15:30	Begin preparation for analyzing samples
15:40	Removed sample from Pump #LV-1
15:45	Removed sample from Pump #LV-5
15:50	Finish analyzing samples
15:51	AAC stops working for end of shift
16:00	Finished paperwork for end of shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:
Technician
Vinson White 07:00 to 16:00 less 30-minute lunch break = 8.5 hours

Senior Project Manager
Sidney Carter 07:30 to 12:30 pm = 5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/05/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-21, LV-5, HV-20

Daily Weather: 43°-73°, 74% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	PAS beginning to move equipment to NW corner of parking lot
07:30	Set Pump #LV-21 on crane operator Mark Jeffers
07:45	PAS pre-wetting material on North side of regulated area
08:00	Set Pump #HV-20 on Northwest side of regulated area
08:12	Set Pump #LV-5 on Jacob Johnson, who is cutting wall from the highlift
08:20	PAS removed lift in order to begin cutting and removing wall
08:45	AAC continues to install decking on first section of trestle
09:00	PAS continues to remove upper half of North wall
09:48	PAS takes a break
09:53	Metal drop-box is brought into the Northside of regulated area
10:07	PAS began filling metal drop-box with metal material before raising prior to loading
10:17	PAS removing exhaust vent from North wall
11:45	PAS wrapping plastic around debris in dumpster
11:47	PAS and EQM having meeting while overseeing worksite
11:55	Dumpster is being dropped off and filled to dumpster is being removed from worksite
12:00	AAC & PAS work crews are breaking for lunch
12:00	Removed sample from Pump #LV-21
12:00	Removed sample from Pump #HV-20
12:01	Removed sample from Pump #LV-5
12:36	Set Pump #LV-21 on Mark Jeffers
12:45	Set Pump #LV-5 on Jacob Johnson
12:52	Set Pump #HV-20 at Northwest side of regulated area
13:20	AAC is using crane to unload heavy beams onto decking
13:45	PAS added gasoline to generator on Northwest side of regulated area
14:00	Removed sample from Pump #HV-20
14:45	Removed sample from Pump #LV-5
14:45	Wood beams are being delivered by semi-truck on flatbed
14:47	PAS working on Northwest side of regulated area
15:45	Pulled sample from Pump #LV-21

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=6
Total blank air samples analyzed=2
No injuries reported

Shift:
Vinson White 07:00 to 16:00 less 30-minute lunch break = 8.5 hours
Sidney Carter 07:30 to 12:30 pm = 5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/06/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert Barton / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-411, LV-5, HV-1, HV-20

Daily Weather: 41°-70°, 99% Humidity

Time	Observations
07:00	Morning safety meeting Sidney carter with AEI on site
07:20	Walked site with Pete with (AEI) to go over scope of project
07:35	Prepared samples for today
07:55	EQM began moving debris Northeast corner with excavator
08:00	Set Pump #LV-1 on Eduardo Gonzalez
08:03	EQM moved large excavator to pit
08:04	Set Pump #LV-32 on Kent Parker
08:10	Set Pump #LV-21 on Nick Arruda
08:12	Set Pump #HV-1 at South corner of pit
08:15	Set Pump #LV-5 on Robert Barton
08:15	Rock begins arriving to the pit
08:30	PAS started loading dumpster
08:32	Removed Sample from Pump #LV-1
08:32	Set Pump #LV-1 on Eduardo Gonzalez
08:36	Removed Sample from Pump #LV-32
08:36	Set Pump #LV-32 on Kent Parker
08:42	Removed Sample from Pump #LV-21
08:42	Set Pump #LV-21 on Nick Arruda
08:43	Set Pump #HV-20 at North side of Regulated Area
08:46	Removed Sample from Pump #LV-5
08:46	Set Pump #LV-5 on Robert Barton
09:00	Pete goes offsite
09:40	PAS to move to pit to remove more decking
09:48	I am having PAS regulate the area for deck removal
10:05	Vinson with AEI arrives on worksite and is brought up to speed by Sidney Carter. Vinson will be takin over the remainder of the shift for today.
10:06	Rock is being dumped in front of pit in order to form grade to platform
10:30	Sid departs worksite
11:20	More rock arrives to worksite
11:30	Rock continues to arrives at the worksite
11:45	Removed Sample from Pump #LV-32

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:45	Set Pump #LV-32 on Kent Parker
12:00	Removed Sample from Pump #LV-21
12:00	Removed Sample from Pump #HV-20
12:05	Removed Sample from Pump #LV-1
12:06	Removed Sample from Pump #HV-1
12:06	Set Pump #HV-1 at South corner of pit
12:30	More rock arrives to worksite
12:45	Removed Sample from Pump #LV-5
13:55	Rock truck delivering rock
14:05	Rock being delivered by dump truck and trailer
14:30	Set Pump #LV-21 on Nick Arruda
14:35	Removed Sample from Pump #LV-32
14:35	Kent has reached his end of shift
15:15	Enough trestle has been completed to walk and drive across
15:22	More loads of rock are being dumped into the pit
15:25	Removed Sample from Pump #LV-21
15:25	Nick has reached the end of his shift
15:26	2 more loads of rock are dumped into the pit
15:35	Began analyzing samples
15:40	Removed Sample from Pump #HV-1

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Shift:
Technician
Vinson White 10:00 to 16:00 less 30 minute lunch = 7.5 hours

Senior Project Manager
Sidney Carter 07:00 am to 10:30 am = 3.5 hours

Advantage Environmental

Daily Project Log

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/07/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, , Robert Barton / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-411, LV-5, HV-1, HV-20

Daily Weather: 41°-70°, 99% Humidity

Time	Observations
07:00	Safety meeting with all work crews
07:45	Set sample on pump #HV-20 at center top of trestle in back area
07:57	Set sample on pump #LV-30 on Jacob Johnson
07:58	Set sample on pump #HV-21 on Northeast side of deck
08:03	Set sample on pump #LV-32 on Mark Conway
08:27	Removed Sample from Pump #LV-30
08:29	Set sample on pump #LV-30 on Jacob Johnson
08:34	Removed Sample from Pump #LV-32
08:35	Set sample on pump #LV-32 on Mark Conway
09:00	Noticing small amounts of dust. Addressed it with PAS and made engineering control changes
09:30	Setup analyzing equipment for cassettes under tent
11:00	Work is continuing outside and around the deck
11:05	Jacob continues wetting down debris and maintaining dust control
11:10	Jerry, Dave, Gary and Joe making arrangement to water left-side
11:59	Removed Sample from Pump #LV-32
12:00	Removed Sample from Pump #HV-20
12:00	Work crews break for lunch
12:02	Removed Sample from Pump #LV-30
12:03	Removed Sample from Pump #HV-21
12:45	Work crews return from lunch
12:45	Crew continues to move debris from front of trestle
13:45	Set sample on pump #LV-32 on Mark Conway
13:47	Set sample pump #LV-30 on Jacob Johnson
14:30	Begin analyzing personals from morning samples
14:45	Crew has debris moved from front of trestle and finalizing cleaning
15:00	Removed Sample from Pump #LV-32
15:00	Removed Sample from Pump #LV-30
15:00	Crew stop working for end of the shift

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time **Observations**

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:

Technician
Vinson White 07:00 to 15:00 less 30 minute lunch = 7.5 hours

Senior Project manager
Sidney Carter 07:00 am to 8:30 am = 1.5 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/10/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown / AAC = Kent Parker, Mark / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittney Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-21, HV-2

Daily Weather: 40°-58°, 99% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	Rock being delivered to enlarge the ramp to the trestle
07:40	PAS begins lining dumpsters
08:00	EQM moved dumpster to Southeast corner of deck for loading
08:10	Rock continues to be dumped for ramp
09:06	Placed Sample on Pump #LV-1 on Gary Brown
09:10	PAS begins loading first dumpster
09:16	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
09:23	Set Sample on Pump #HV-2 at Southeast corner of cell next to dumpster loading site
09:25	EQM Mark on trestle moving material on deck
09:37	Removed Sample from Pump #LV-1
09:38	Placed Sample on Pump #LV-1 on Gary Brown
09:45	AAC & EQM have meeting about ramp to trestle
09:46	Removed Sample from Pump #LV-21
09:47	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
11:00	Supervisor Dave with PAS is monitoring the worksite
11:01	Rock truck dumping rock by trestle
11:10	Burned debris continues to be moved to dumpster
11:12	Truck is delivery rock
11:50	Removed Sample from Pump #LV-21
11:52	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
11:55	Removed Sample from Pump #LV-1
12:01	Start is taking photographs of worksite
12:02	Removed Sample from Pump #HV-2
12:03	More rock is being delivered to worksite
12:05	Set Sample on Pump #HV-2 at Southeast corner of cell next to dumpster loading site
12:06	Eduardo is refilling water truck for wetting down debris

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:15	More rock is being delivered
12:30	Rock dumped on ground in front of trestle
12:31	Dave with PAS is repositioning dumpster
12:35	Tommy is sweeping rocks off the front area of trestle
12:57	Placed Sample on Pump #LV-1 on Gary Brown
13:05	More rock is being delivered
13:10	Mark moving rock with the compact track loader building a ramp
13:15	Excavator service company is to fix leaking oil on excavator
13:20	Eduardo is shoveling rock to the side of trestle
13:21	Flaggers switched areas for break
14:10	Rock being delivered
14:40	2 more rock trucks are delivering rock
14:43	PAS continuing to remove debris
15:30	Began analyzing samples from earlier in the day
15:40	Removed Sample from Pump #LV-21
15:45	Removed Sample from Pump #LV-1
15:46	Removed Sample from Pump HV-2
16:00	Finished analyzing cassettes and end of shift
17:00	Finalized documentation, end of shift.

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:

Technician
Vinson White 09:30 to 17:00 less 30-minute lunch = 7 hours

Senior Project manager
Sidney Carter 07:00 am to 11:00 am = 4 hours

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/11/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown / AAC = Kent Parker, Nick Muranda / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators

AEI equipment on site: Pumps LV-1, LV-21, LV-32 & HV-21

Daily Weather: 44°-52°, 99% Humidity

Time	Observations
07:00	Morning safety meeting
07:20	Met with AAC to discuss generator on trestle and placement when crane is moved onto trestle
07:25	Prepped pumps for usage throughout the day
07:30	Mark Conway began moving debris on deck with long reach excavator
	PAS moved 2 loaded dumpsters out of regulated area for hauling away from site today
07:38	PAS begins cutting holes into deck for next pilings to be set
07:43	Placed Sample on Pump #LV-32 on Mark Conway
07:58	Placed Sample on Pump #LV-21 on Nick Muranda
08:15	AAC/EQM begin laying decking at the front of the ramp to trestle
08:15	Removed Sample from Pump #LV-32
08:16	Placed Sample on Pump #LV-32 on Mark Conway
08:26	Placed Sample on Pump #HV-21 at West-end of trestle
08:30	Removed Sample from Pump #LV-21
08:31	Placed Sample on Pump #LV-21 on Nick Muranda
08:34	Placed Sample on Pump #LV-1 on Gary Brown
09:05	Removed Sample from Pump #LV-1
09:30	Both holes in deck have been completed
10:00	PAS takes a rest break
10:12	PAS is back onsite
	PAS moved metal dumpster out of regulated area and is tagging it out of work area
10:20	EQM is removing excavator from trestle and staging it in Northeast side of worksite
10:45	AAC moved crane on top of trestle
11:00	EQM/PAS begins loading dumpster on Southeast corner
12:00	AAC breaks for lunch
12:01	Removed Sample from Pump #LV-21
12:10	Removed Sample from Pump #LV-32
12:29	Analyzed morning samples
12:30	Placed Sample on Pump #LV-32 on Mark Conway
12:31	Removed Sample from Pump #HV-21
12:32	Placed Sample on Pump #HV-21 at West-end of trestle

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:35	Placed Sample on Pump #LV-1 on Gary Brown
12:40	Placed Sample on Pump #LV-21 on Nick Muranda
13:30	PAS moved loaded dumpster out and started loading new dumpster
14:15	Had meeting with Jerry and Joe with EQM. Addressed concerns of disturbing debris on deck and in the work area of AAC crane and laying down exotech in work area
14:37	PAS moved out 2nd loaded dumpster
14:50	First piling is set
15:15	Removed Sample from Pump #LV-32
15:20	Second piling is set PAS loaded last box
15:20	Removed Sample from Pump #LV-1
15:30	Removed Sample from Pump #HV-21
15:31	Removed Sample from Pump #LV-21
15:31	Analyzed samples
16:30	Completed documentation

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Shift:

Senior Project Manager
Sidney Carter 07:00 am to 16:00 pm less 30-minute lunch = 9 hours

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/12/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown / AAC = Kent Parker, Nick Muranda / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 49°, 92% Humidity

Time	Observations
07:00	Morning safety meeting covering safety, emergencies and laying fabric
07:30	Filled dumpsters are being removed from the worksite
07:31	PAS crew is beginning to set-up for workday
08:00	Set Sample on Pump #LV-1 on Mark Conway
08:05	Set Sample on Pump #LV-21 on Nick Maranda
08:15	Set Sample on Pump #LV-5 on Gary Brown
08:16	Work crews are beginning to lay fabric on deck, GO fabric cloth
08:30	Removed Sample from Pump #LV-1
08:31	Set Sample on Pump #LV-1 on Mark Conway
08:35	Removed Sample from Pump #LV-21
08:36	Set Sample on Pump #LV-21 on Nick Maranda
08:40	Continuing to lay the fabric on plastic in front of trestle
08:45	Removed Sample from Pump #LV-5
08:47	Set Sample on Pump #LV-5 on Gary Brown
09:05	Set Sample on Pump #HV-20 on South-end of trestle
09:30	Gary refilling water truck with water
09:40	PAS just finished putting down the GO cloth
09:46	PAS, Gary & Jacob taking break
10:05	United Toilet Service serviced the toilets onsite
10:20	PAS filling dumpsters with burned debris or wood
10:40	AAC brought in more heavy equipment and beams
10:55	AAC having meeting about moving equipment and material
11:00	Dave with PAS overseeing work crew and monitoring progress
11:01	Joe with EQM monitoring work area
11:03	Tommy from EQM and PAS work crews unloading large sheets of plywood
11:45	Dumpsters being delivered to worksite
11:50	Dumpsters that are filled to capacity have been moved out of worksite
11:53	AAC having more beams delivered to worksite
12:00	Removed Sample from Pump #LV-5
12:01	Set Sample on Pump #LV-5 on Gary Brown

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:05	Removed Sample from Pump #LV-1
12:06	Set Sample on Pump #LV-1 on Mark Conway
12:08	Removed Sample from Pump #LV-21
12:09	Set Sample on Pump #LV-21 o Nick Maranda
12:10	Removed Sample from Pump #HV-20
12:40	Filled dumpsters are being moved out of worksite while empty dumpsters are being moved into worksite
12:12	Set Sample on Pump #HV-20
13:06	2x4's being delivered to worksite for AAC
13:15	Mark Conway is continuing to move burned wood into dumpsters from containment
13:20	Dave with PAS standing on ladder monitoring dumpster
13:30	Removed Sample from Pump #LV-21
13:30	PAS is preparing dumpsters with debris
13:45	Gary is removing dumpster from worksite
16:05	Removed Sample from Pump #LV-1
16:08	Removed Sample from Pump #LV-5
16:10	Removed Sample from Pump #HV-20
16:20	Checked pontoons and ensured operating as required without visible problems
17:00	Competed documentation

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Shift:

Technician
Vinson White 0700 am to 14:10 pm less 30-minute lunch = 6.5 hours

Total technician hours **6.5**

Senior Project Manager
Sidney Carter
07:00 to 10:00= 3 hour
14:00 to 17:00= 3 hours

Total Senior Project Manager hours **6**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/13/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown / AAC = Kent Parker, Nick Muranda, Jeff Doggey / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-21 & HV-21

Daily Weather: 46°, 89% Humidity

Time	Observations
07:00	Morning Safety Meeting
07:55	Set Sample on Pump #LV-21 on Jeff Doggey
08:00	Vinson White arrives on worksite
08:05	Set Sample on Pump #LV-1 on Ever Bonilla
08:10	Set Sample on Pump #HV-20 at Southwest of trestle
08:20	AAC moving Steel Beams onto West-end of trestle
08:21	PAS still doing cleaning of old burned wood
08:25	Removed Sample from Pump #LV-21
08:30	Sidney Carter departed worksite
08:35	Removed Sample from Pump #LV-1
08:36	Set Sample on Pump #LV-1 on Ever Bonilla
08:40	Set Sample on Pump #LV-21 on Jeff Doggey
08:45	Dave with PAS is monitoring worksite
08:51	Gary with PAS is moving dumpsters
09:05	Moved dumpsters to East-end of work area
09:35	Joe is photographing worksite
09:36	Truck dropped off rock on left-side of trestle
09:37	Rock on top of GO Cloth
10:20	Truck dropped off more beams for trestle
10:40	Trucks going back and forth while work is being conducted throughout worksite
10:50	Put gas in generator on trestle
10:55	Load of beams unloading off truck by AAC with crane
11:00	Firehose is being used to control dust
11:02	Excavator is being used continuously to pick-up the burned remnants and put into dumpster
11:03	More rock being dropped over the GO Cloth
11:30	PAS is preparing a dumpster of wood debris to be taken away
11:31	Dave putting up asbestos tape in regulated area
11:40	Jacob putting liner inside of dumpster to be used inside containment
11:50	2 dumpsters being dropped off at worksite

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	Removed ample form Pump #LV-21
12:02	Removed Sample from Pump #LV-1
12:03	Set Sample on Pump #LV-21 on Jeff Doggey
12:05	Set Sample on Pump #LV-1 on Ever Bonilla
12:07	Removed Sample from Pump #HV-20
12:09	Set Sample on Pump #HV-20 at Southwest of trestle
12:45	PAS took lunch and now back to work
12:46	Dave with PAS continuing to monitor worksite
12:50	Robert from PAS laying down GO Cloth
13:15	Mark is continuing to dig around the trestle area with excavator
13:17	AAC still loading beams on trestle to go on the top of the iron beams
13:20	Checked down boom area and observed all looks good
13:44	PAS finished cleaning around left side of trestle and laying GO Cloth
13:51	Sid left in preparation of 2:00pm meeting with Jerry & Joe
14:00	Tommy with EQM is moving pieces of steel on slope of hill for trestle
14:05	Rock is being delivered on left-side of trestle on top of GO Cloth
14:10	Beam being lifted up and placed on trestle
14:11	Load of rock being poured near the left-side of trestle
14:30	Everybody shut down at this time because of thunder and lightning
14:45	Crew back to work
15:10	Truck delivering more rock
15:15	Began analyzing cassettes
15:30	Preparing to collect pumps and cassettes
15:35	Removed Sample from Pump #LV-21
15:45	Removed Sample from Pump #LV-1
15:50	Removed Sample from Pump #HV-20
15:51	Finished sampling, packing equipment and analyzing. Dumpster full of rock delivered
17:00	Completed documentation, end of work shift

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Shift:

Technician
Vinson White 0800 am to 17:00 pm less 30-minute lunch

Total technician hours **8.5**

Senior Project Manager
Sidney Carter
07:00 to 09:00= 2 hours
14:00 to 16:00= 2 hours

Total Senior Project Manager hours **4**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/16/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 46°, 96% Humidity

Time	Observations
07:00	Morning safety meeting
07:40	Placed Sample on Pump #LV-5 on Mark Conway
07:45	Placed Sample on Pump #LV-1 on Mark Jeffers
07:45	Spoke with Dave about demarcation tape
07:55	Placed Sample on Pump #HV-20 on Southwest of trestle
07:55	PAS & AAC prepping equipment for start of shift
08:00	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
08:10	AAC continuing work on trestle
08:10	Removed Sample from Pump #LV-5
08:12	Dumpster dropped off to worksite
08:15	Removed Sample from Pump #LV-1
08:16	Placed Sample on Pump #LV-5 on Mark Conway
08:17	Placed Sample on Pump #LV-1 on Mark Jeffers
08:30	Removed Sample from Pump #LV-21
08:35	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
08:42	Dumpster moved inside of work area
08:45	Began analyzing samples from this morning
08:46	PAS filling dumpster with metal debris
09:30	AAC moving steel beams onto trestle
09:31	Joe taking pictures and observing worksite
09:35	Dave overseeing PAS work crew
10:05	PAS and Dave moved to the Southwest side of work area to begin cleanup work
10:20	Rony onsite overseeing and monitoring work being completed
10:25	AAC preparing straps on big hinge of steel
10:30	Mark Jeffers and Kent Parker of AAC discussing work being completed onsite
10:35	Mark Jeffers back inside the crane ready to perform work
10:37	Randy and Joe discussing the project
10:45	Heavy-duty strap placed around the crane cable
10:53	AAC cutting beams into chunks and placing them on trestle
11:15	AAC working to tie down excavator to lift
11:55	Removed Sample from Pump #HV-20

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	Lifting excavator up and around side
12:00	Removed Sample from Pump #LV-5
12:05	Removed Sample from Pump #LV-1
12:06	Placed Sample on Pump #LV-1 on Mark Jeffers
12:07	Removed Sample from Pump #LV-21
12:08	Placed Sample on Pump #LV-5 on Mark Conway
12:09	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
12:10	Moved excavator around to backend of trestle
12:13	Placed Sample on Pump #HV-20
12:50	Work slowed down and all crews break for lunch
13:20	Jacob from PAS beginning to wet down the area so Mark beginning to go through the debris
13:25	AAC returns from lunch and beginning to work
13:26	PAS secures new demarcation tape
13:50	Dumpster relocated to West-end of worksite
14:35	PAS is still cleaning on Southeast side of trestle
14:40	Eduardo continues placing water on burned area for dust control
14:45	Moving excavator and putting boards down while moving to another area
14:51	Portable toilet truck arrived to clean toilets
15:00	PAS began loading debris on Southwest side of trestle
15:10	Eduardo driving water truck and spraying water to maintain dust control
15:12	Dave is driving the forklift to Southwest side of trestle
15:15	Removed Sample from Pump #LV-1
15:15	Mark Jeffers departs worksite for end of shift
15:30	Dumpster being loaded with debris on Southwest side of work area
16:00	Dave with PAS is moving dumpster
16:01	Randy having a meeting in front of trestle
16:05	Jacob continuing to put water down on debris and keeping work area wet and maintain dust control
16:08	Eduardo filled up water truck
16:10	Spoke with Joe about putting a firehose on Southeast side of trestle
16:40	Prepared to collect pumps and begin analyzing cassettes
16:40	Removed Sample from Pump #LV-5
16:42	Removed Sample from Pump #LV-21
16:43	Removed Sample from Pump #HV-20
16:50	Finished analyzing cassettes
17:30	Completed documentation and shift

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician: Vinson White 0700 AM to 17:00 pm less 30-minute lunch. **Total technician total hours** **8.5**

Senior Project Manager Sidney Carter 07:00 to 09:00= 2 hours **Total Senior Project Manager hours** **2**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/17/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-34, LV-32, HV-20 & HV-21

Daily Weather: 41°-58°, 99% Humidity

Time	Observations
07:00	Morning safety meeting
07:15	Secondary meeting with EQM, PAS and advantage to discuss the importance of all trades working together
07:57	Set Sample on Pump #LV-34 on Mark Conway
07:47	Set Sample on Pump #HV-21 on West-end of trestle
07:59	Set Sample on Pump #LV-1 on Jacob Johnson
08:00	EQM begins moving material on the deck from South of trestle
08:05	Set Sample on Pump #LV-32 on Brent Hardinger
08:20	EQM begins opening deck on North side
08:30	Removed Sample from Pump #LV-1
08:31	Removed Sample from Pump #LV-34
08:35	Set Sample on Pump #LV-34 on Mark Conway
08:36	Set Sample on Pump #LV-1 on Jacob Johnson
08:39	Removed Sample from Pump #LV-32
08:40	Set Sample on Pump #LV-32 on Brent Hardinger
08:45	PAS begins installing Geotech Cloth and plywood on deck
09:00	Set Sample on Pump #HV-20 on Northeast corner by pit
09:20	EQM filled first box on Northeast of pit
10:00	EQM preparing to work on North side of deck removing some platform and cleaning debris
11:45	2 Dumpsters are dropped off while analyzing cassettes
11:50	Removed Sample from Pump #LV-34
11:51	Set Sample on Pump #LV-34 on Mark Conway
11:58	Removed Sample from Pump #HV-20
11:59	Removed Sample from Pump #HV-21
12:00	Removed Sample from Pump # LV-32
12:01	Set Sample on Pump #LV-32 on Brent Hardinger
12:05	Additional dumpster delivered
12:15	Removed Sample from Pump #LV-1
12:19	Two dumpsters filled with debris are taken from the worksite

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:46	United Services cleaning toilets and portables
13:00	Began analyzing cassettes in EQM trailer.
13:00	Sidney Carter leaves Vancouver office for 2PM meeting.
13:20	Finished analyzing cassettes
13:30	Another dumpster arrives and is placed at the Southwest end of work area
13:58	AAC having pipes moved on worksite
14:00	Spoke with Dave with PAS about taped off North-end of trestle.
14:00	All parties not present for 2PM meeting
14:15	Dave put tape on the North-end of work area
14:30	Sidney Carter leaves jobsite (meeting did not take place while he was on site)
15:00	AAC preparing swing excavator to the North area, Sidney Carter returns to Vancouver office.
15:20	Preparing to begin analyzing samples
15:50	Removed Sample from Pump #LV-32
15:55	Removed Sample from Pump #LV-34
15:59	Finished analyzing cassettes
17:00	Completed documentation / shift

Total air sampled collected / analyzed=10
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
0700 AM to 17:00 pm less 30-minute lunch.

Total technician total hours 9.5

Senior Project Manager:
Sidney Carter
07:00 to 10:30
13:00 to 15:00

Total Senior Project Manager hours 5.5

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/18/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries

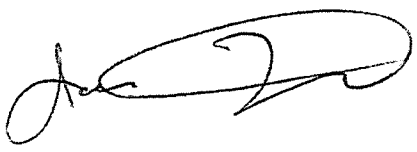
Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-30, HV-10 & HV-20

Daily Weather: 48°-62°, 99% Humidity

Time	Observations
07:00	Morning safety meeting
08:00	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
08:01	Placed Sample on Pump #HV-10 at South end of trestle
08:08	PAS preparing to load dumpsters at North-end of worksite
08:15	Placed Sample on Pump #LV-30 on Brent Hardinger
08:20	Placed Sample on Pump #LV-5 on Jacob Johnson
08:30	PAS having two dumpsters setup to be filled
08:30	Removed Sample from Pump #LV-1
08:31	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
08:48	Removed Sample from Pump #LV-30
08:49	Placed Sample on Pump #LV-30 on Brent Hardinger
08:50	Placed Sample on Pump #HV-20 at West-end of worksite
08:54	Removed Sample from Pump #LV-5
08:55	Placed Sample on Pump #LV-5 on Jacob Johnson
09:00	Began analyzing cassettes
09:40	Finished analyzing cassettes
09:50	PAS got three dumpsters lined to be filled
10:20	AAC brought more large beams for trestle
10:25	AAC setting giant hammer
10:40	PAS moving dumpsters after being filled and replacing with new ones within worksite
10:45	Dave walking around overseeing and monitoring his personnel
10:55	AAC started begins driving beams into the ground with giant hammer attached to crane
11:01	PAS continuing watering down debris and removing deck
11:15	Moved dumpster inside regulated area to be filled
11:20	Gary with PAS moved another dumpster inside of regulated area
12:00	AAC breaks for lunch
12:00	Removed Sample from Pump #HV-10
12:05	Placed Sample on Pump #HV-10
12:10	Removed Sample from Pump #HV-20

Vinson White / Sidney Carter
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
12:11	Placed Sample on Pump #HV-20 at West-end of worksite
12:15	First loaded box is being put onto truck
12:20	Checked booms and floats
12:25	Box pulled and loaded onto truck for shipping
12:25	Removed Sample from Pump #LV-5
12:26	Placed Sample on Pump #LV-5 on Jacob Johnson
12:30	PAS breaks for lunch
12:35	Removed Sample from Pump #LV-1
12:36	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
12:40	AAC is back from lunch break
12:50	EQM back onsite moving debris to Westside of regulated area
12:50	Removed Sample from Pump #LV-30
12:51	Placed Sample on Pump #LV-30 on Brent Hardinger
13:00	PAS is back from lunch break
13:45	EPA guests onsite for inspection inside of fenced area
15:00	Start's stand is on the ground with cassette
15:01	Start's samples are dirty
15:02	Dumpsters are being relocated
15:20	Removed Sample from Pump #HV-10
15:22	Removed Sample from Pump #LV-5
15:25	Removed Sample from Pump #HV-20
15:30	Removed Sample from Pump #LV-30
15:35	Neat box loaded
15:41	Removed Sample from Pump #LV-1
17:00	Completed documentation/end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
7:00 AM to 17:00 PM less 30-minute lunch.

Total Technician total hours **9.5**

Senior Project Manager:
Sidney Carter
07:00AM to 10:30AM=3.5
1:30PM to 3:00PM=1.5

Total Senior Project Manager hours **5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/19/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez

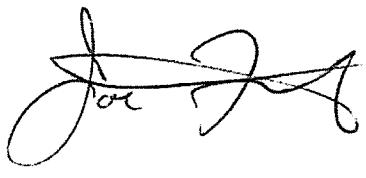
Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 56°, 95% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	Observed flagger directing traffic
07:38	Placed Sample on Pump #LV-1 on Mark Jeffers
07:40	Placed Sample on Pump #LV-5 on Justin Scott
07:46	Placed Sample on Pump #LV-21 on Will Marinez
08:10	Removed Sample from Pump #LV-5
08:11	Placed Sample on Pump #LV-5 on Justin Scott
08:12	Removed Sample from Pump #LV-1
08:13	Placed Sample on Pump #LV-1 on Mark Jeffers
08:16	Removed Sample from Pump #LV-21
08:20	Placed Sample on Pump #LV-21 on Will Marinez
08:21	Placed Sample on Pump #HV-20 at South-end of trestle
08:25	PAS moving filled dumpsters outside of work area and replacing with empty dumpsters inside of regulated area
08:26	Began analyzing Cassettes for Start
09:15	Finished analyzing Start samples
09:20	Three dumpsters have been filled to capacity and are ready to be taken from worksite
09:35	Observed Dave filling cherry picker with fuel
09:41	Dave with PAS is filling up excavator with fuel
09:55	Lunch truck arrives onsite
10:10	Excavator service truck onsite
10:30	AAC lifting beams of wood with crane onto trestle
10:55	PAS waiting for dumpster to be removed
11:15	AAC continuing to to load beams on the Southside of trestle
11:16	PAS is still working
11:17	Joe arrives onsite
11:30	Kent Parker with AAC is moving pipes across the worksite
11:55	Removed Sample from Pump #LV-1
12:00	Removed Sample from Pump #LV-5
12:01	Placed Sample on Pump #LV-1 on Mark Jeffers

Vinson White / Sidney Carter
Sampling Technician



Advantage Environmental

Daily Project Log

Time	Observations
12:02	Placed Sample on Pump #LV-5 on Justin Scott
12:07	Removed Sample from Pump #HV-20
12:13	Removed Sample from Pump #LV-21
12:15	Placed Sample on Pump #LV-21 on Will Marinez
12:20	Empty dumpsters are being delivered while dumpsters filled to capacity are being removed
12:30	Placed Sample on Pump #HV-20 at South-end of trestle
12:55	Dumpsters are continuing to be changed out on the worksite
13:05	Mark with AAC is operating crane, moving toolbox and other work equipment
13:16	Gary with PAS is removing dumpsters filled to capacity and replacing with empty dumpsters
13:17	PAS is poly-lining dumpsters
13:30	Checked booms & floats
13:45	Kent with AAC moving larges beams for trestle through worksite
13:46	Observed 4 dumpsters as being filled to capacity with debris to be exchanged for 2 empty dumpsters
14:00	Sid goes to 14:00 scheduled meeting
14:06	Gary from PAS removing filled dumpsters and placing empty dumpsters in place on the worksite
14:07	Dave from PAS overseeing PAS crew working
14:30	Vinson White leaves the site
14:55	Kent hanging giant beam for trestle by forklift
15:00	EQM moved long reach to Southside and started moving debris
15:15	Removed Sample from Pump #LV-1
15:16	Removed Sample from Pump #HV-20
15:17	Removed Sample from Pump #LV-5
15:20	Removed Sample from Pump #LV-21
15:30	Analyzed samples
17:00	Finished documentation/end of shift

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 AM to 14:30 PM less 30-minute lunch.

Total Technician total hours 7

Senior Project Manager:
Sidney Carter
07:00 AM to 10:30 AM=3.5
14:00 PM to 17:00 PM=3

Total Senior Project Manager hours 6.5

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5 & HV-20

Daily Weather: 49°, 90% Humidity

Time	Observations
07:00	Morning safety meeting with all crews
07:25	PAS setting up for start of workday
07:40	Set Sample on Pump #LV-1 on Tommy Smith
07:42	Set Sample on Pump #LV-21 on Ever Bonilla
07:45	Set Sample on Pump #LV-5 on Gary Brown
07:55	AAC moving beams for trestle
08:00	Picked-up dumpster filled to capacity while dropping off empty dumpster in its place
08:00	Set Sample on Pump #HV-20 at Front Northside of Work Area
08:01	Water truck preparing to water containment
08:10	Removed Sample from Pump #LV-1
08:12	Removed Sample from Pump #LV-21
08:13	Set Sample on Pump #LV-1 on Tommy Smith
08:15	Removed Sample form Pump #LV-5
08:16	Set Sample on Pump #LV-21 on Ever Bonilla
08:18	Set Sample on Pump #LV-5 on Gary Brown
09:05	AAC preparing to lift excavator up and over the back-end of trestle
09:50	Moved excavator to the other side of trestle
10:25	Moved dumpster inside of regulated area to be loaded with debris
10:30	Departed worksite
12:30	Removed Sample from Pump #LV-1
12:31	Set Sample on Pump #LV-1 on Tommy Smith
12:32	Removed Sample form Pump #LV-5
12:33	Set Sample on Pump #LV-5 on Gary Brown
12:38	Returned to worksite and spoke with Sidney Carter
12:35	Removed Sample from Pump #LV-21
12:38	Set Sample on Pump #LV-21 on Ever Bonilla
12:45	Went to EQM trailer to begin analyzing samples
12:50	Removed Sample from Pump #HV-20

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:59	Set Sample on Pump #HV-20 at Front Northside of Work Area
13:48	Finished analyzing samples
13:51	Debris being moved and loaded into dumpster
14:30	2 water trucks arrived onsite
14:31	AAC welding on giant pipes to put into ground
14:45	Empty dumpster delivered while dumpster filled to capacity with debris removed from worksite
15:00	AAC leaving for end of shift
15:05	Tommy on trestle watering down debris/maintaining dust control
15:10	Mark is in excavator sorting out the debris
15:20	Observed pontoons are in operating and in working order
15:29	Removed Sample from Pump #HV-20
15:31	Removed Sample from Pump #LV-1
15:35	Removed Sample from Pump #LV-21
15:36	Removed Sample from Pump #LV-5
15:40	Collecting pumps and went to EQM trailer to begin analyzing samples|
15:58	Finished analyzing samples
17:00	Completed documentation/shift

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 10:30= 3.5
13:00 to 17:00= 4

Total Technician total hours 7.5

Senior Project Manager:
Sidney Carter
07:00 to 08:00=1
13:00 to 15:30=2.5

Total Senior Project Manager hours 3.5

Vinson White / Sidney Carter

Advantage Environmental

Daily Project Log

Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/21/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21, HV-20 & HV-21

Daily Weather: 47°, 95% Humidity

Time	Observations
07:00	Morning safety meeting
07:31	Placed Sample on Pump #LV-5 on Jose Rodriguez
07:32	Placed Sample on Pump #LV-1 on Travis Harrison
07:36	Placed Sample on Pump #LV-21 on Mark Conway
07:45	Placed Sample on Pump #HV-20 at Southwest end of trestle
07:50	Placed Sample on Pump #HV-21 at North-end of worksite
07:55	Gary from PAS begins setting up dumpster to be filled
08:00	Supervisor Dave is overseeing the worksite
08:01	Removed Sample from Pump #LV-5
08:02	Removed Sample from Pump #LV-1
08:03	Placed Sample on Pump #LV-1 on Travis Harrison
08:05	Placed Sample on Pump #LV-5 on Jose Rodriguez
08:05	Sid on trestle supervising area
08:06	Added gas to generator
08:07	Removed Sample from Pump #LV-21
08:10	Placed Sample on Pump #LV-21 on Mark Conway
08:15	PAS crew continuing to load dumpsters
08:16	Sid on trestle watering debris
08:18	Jerry on trestle with Sid
08:30	Began analyzing samples for Start
09:02	Finishing analyzing personals
10:00	Some dumpsters are filled with debris
11:00	Edwards continuing watering down the debris
11:01	Dave is in his truck observing PAS work crew
11:20	Water truck issuing out water
11:22	Excavator moving to Northside of worksite while Eduardo is laying down plywood over railroad track
11:35	Eduardo continuing to move plywood over railroad track
12:00	Continuing to work in the rain moving debris

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	Removed Sample from Pump #HV-20
12:01	Gary from is running the compact excavator on railroad tracks and cleaning
12:03	Placed Sample on Pump #HV-20 at Southwest end of trestle
12:03	Jerry is on trestle surveying the worksite with Brent from EQM
12:04	Removed Sample from Pump #LV-5
12:05	Placed Sample on Pump #LV-5 on Jose Rodriguez
12:06	Removed Sample from Pump #HV-21
12:07	Removed Sample from Pump #LV-1
12:08	Placed Sample on Pump #Lv-1 on Travis Harrison
12:11	Removed Sample from Pump #LV-21
12:13	Placed Sample on Pump #HV-21 at North-end of worksite
12:14	Dave is on trestle talking with Brent about work
12:14	Placed Sample on Pump #LV-21 on Mark Conway
12:20	Mark from EQM is off the excavator and talking with Jerry
12:30	Observed pontoons are fully functional
13:00	Jerry said the guys are finished up for today
13:11	Crews are finished for the workday
13:30	Sample from Pump #LV-5 lost by Jose Rodriguez while working
13:33	Removed Sample from Pump #LV-21
13:35	Removed Sample form Pump #LV-1
13:44	Removed Sample from Pump #HV-21
13:45	Removed Sample from Pump #HV-20
14:45	Completed air sample analysis/documentation

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 14:45 less 30 minute lunch

Total Technician total hours 7.25

Senior Project Manager:
Sidney Carter
07:00 to 08:30

Total Senior Project Manager hours 1.5

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/23/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Muranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 50°, 97% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews
07:35	Placed Sample on Pump #LV-21 on Robert Barton
07:36	Placed Sample on Pump #LV-5 on Ever Bonilla
07:40	Truck delivering rock
07:45	Placed Sample on Pump #LV-1 on Mark Jeffers
07:46	Placed Sample on Pump #HV-20 on North-end of trestle
08:00	AAC preparing to move excavator off trestle
08:05	Removed Sample from Pump #LV-21
08:06	Removed Sample from Pump #LV-5
08:07	Placed Sample on Pump #LV-21 on Robert Barton
08:08	Placed Sample on Pump #LV-5 on Ever Bonilla
08:15	Jerry & Eric monitoring worksite
08:15	Removed Sample form Pump #LV-1
08:16	Placed Sample on Pump #LV-1 on Mark Jeffers
08:20	Dave using forklift to push trestle pipe for AAC
09:00	Went to EQM trailer to setup analyzing equipment
09:10	Began analyzing cassettes
09:40	Finished analyzing cassettes including Starts air samples
10:00	AAC preparing to unload more pipe on South-end of trestle
10:30	Rock truck dumped rocks on the North-end of worksite
11:10	AAC unloaded 2 pipes & preparing the hammer to plant it in the ground
11:11	Eric is monitoring worksite and progress
11:55	Removed Sample from Pump #HV-20
12:00	Dumpsters are being dropped off at North-end of trestle
12:01	Removed Sample from Pump #LV-5
12:02	Placed Sample on Pump #LV-5 on Ever Bonilla
12:03	Removed Sample from Pump #LV-21
12:04	Removed Sample from Pump #LV-1

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:05	Placed Sample on Pump #LV-21 on Robert Barton
12:08	Placed Sample on Pump #LV-1 on Mark Jeffers
12:20	Placed Sample on Pump #HV-20 on North-end of trestle
13:00	Observed buoys are fully functional
13:20	AAC continuing moving pipes on South-side of trestle
13:21	PAS is continuing to fill dumpsters with debris
14:00	AAC preparing to use giant hammer to drive pipes into the ground. I checked on the pontoons, they are functioning correctly.
14:01	Tommy from EQM is moving dumpster around
14:02	AAC welding on the pipes or cutting them
14:03	Mark with AAC, Crane Operator lifted up hammer and placed it on the back-end of trestle
14:04	Dave walking around checking out the worksite
15:05	Dave moved another dumpster
15:26	Removed Sample from Pump #HV-20
15:30	Removed Sample from Pump #LV-5
15:30	Went to EQM trailer to begin analyzing samples
15:33	Removed Sample from Pump #LV-1
15:35	Removed Sample from Pump #LV-21
16:30	Completed analysis and documentation

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 16:30 less 30 minute lunch **Total Technician total hours 9**

Senior Project Manager: **Total Senior Project Manager hours 2.5**
Sidney Carter
07:00 to 08:00= 1 hour
13:30 to 15:00=1.5 hours

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/24/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-30, HV-20 & HV-21

Daily Weather: 48°, 84% Humidity

Time	Observations
07:00	Morning meeting with all of the companies and work crews
07:20	Began setting up equipment for air monitoring
07:25	Observed water truck filling up with water
07:25	Placed Sample on Pump #HV-20 at South-end of trestle
07:39	Placed Sample on Pump #LV-30 on the flagger Robert Michael Ganison
07:40	Placed Sample on Pump #LV-1 on Nick Miranda
07:45	Placed Sample on Pump #LV-5 on excavator operator Brent Hardinger
08:00	Placed Sample on Pump #HV-21 at North-end of trestle
08:09	Removed Sample from pump #LV-30
08:10	Removed Sample from Pump #LV-1
08:11	Placed Sample on Pump #LV-30 on Robert Michael Ganison
08:12	Placed Sample on Pump #LV-1 on Nick Miranda
08:15	Removed Sample from Pump #LV-5
08:17	Placed Sample on Pump #LV-5 on Brent Hardinger
08:30	Begin analyzing cassettes
09:15	Finished analyzing first rounds of cassettes
10:15	Observed bigger dumpster arriving onsite
10:16	Watering of debris continues
10:17	Randy & Eric are on site observing progress
10:18	PAS is lining all dumpsters with poly
11:05	Eduardo is continuing to keep debris wet with water hose
11:50	Removed Sample from Pump #HV-20
11:52	Placed Sample on Pump #HV-20 at South-end of trestle
11:55	Removed Sample from Pump #HV-21
11:56	Placed Sample on Pump #HV-21 at North-end of trestle
11:59	Removed Sample from Pump #LV-30
12:01	PAS on North-end putting lining into dumpster
12:03	Removed Sample from Pump #LV-5

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:05	Placed Sample on Pump #LV-30 on Robert Michael Ganison
12:11	Placed Sample on Pump #LV-1 on Nick Miranda
12:13	Placed Sample on Pump #LV-5 on Brent Hardinger
12:46	Finished analyzing second-half of cassettes
13:30	Small dumpsters are being filled with debris
13:50	Work slowing down on worksite
13:51	All dumpsters onsite are filled to capacity and awaiting replacement with empty dumpsters
13:30	Removed Sample from Pump #LV-30
14:05	Brent continues stacking debris
14:10	PAS waiting on dumpsters to arrive onsite
14:11	AAC putting the giant hammer on trestle
14:25	PAS crew beginning to line dumpsters with poly
14:30	Jerry onsite & Dave sitting on forks of forklift
15:00	Observed pontoons fully functional
15:36	Removed Sample from Pump #HV-20
15:30	Begin analyzing samples
15:40	Removed Sample from Pump #HV-21
15:43	Removed Sample from Pump #LV-5
15:45	Removed Sample from Pump #LV-1
15:55	Finished analyzing samples
16:30	Completed documentation end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 16:30 less 30 minute lunch

Total Technician total hours **9**

Senior Project Manager:
Sidney Carter
07:00 to 10:00= 3 hours
13:30 to 15:00= 1.5 hours

Total Senior Project Manager hours **4.5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/25/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-30, LV-36, HV-20 & HV-21

Daily Weather: 47°, 92% Humidity

Time	Observations
07:00	Morning safety meeting
07:20	Began setting-up equipment in EQM trailer
07:35	Placed Sample on Pump #HV-20 at South-end of trestle
07:40	Placed Sample on Pump #LV-30 on Kent Parker
07:41	Placed Sample on Pump #LV-36 on Jacob Johnson
08:00	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
08:10	Large dumpster arrived onsite
08:10	Removed Sample from Pump #LV-30
08:11	Removed Sample from Pump #LV-36
08:12	Placed Sample on Pump #LV-30 on Kent Parker
08:15	Placed Sample on Pump #LV-36 on Jacob Johnson
08:30	Removed Sample from Pump #LV-1
08:31	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
08:33	Went to EQM trailer to analyze morning Samples and Start Samples
09:40	Finished analyzing morning Samples and Start Samples
09:45	Placed Sample on Pump #HV-21 at North-side of trestle
09:46	Observed large dumpsters are still being loaded with debris
10:45	PAS Tommy moved 4 dumpsters to be lined with poly and loaded with debris
10:46	Randy & Jerry are onsite, Jerry wanted me to make sure no one is inside of regulatedf area without Tyveks & related PPE.
11:00	PAS lining dumpster with poly
11:35	PAS breaks for lunch
11:36	2 more empty dumpsters arrive onsite
11:55	Removed Sample from Pump #LV-30
11:57	Placed Sample on Pump #LV-30 on Kent Parker
11:58	Removed Sample form Pump #LV-36
11:59	Placed Sample on Pump #LV-36 on Jacob Johnson
12:00	AAC loading more beams onto trestle
12:00	Removed Sample from Pump #LV-1

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:01	Removed Sample from Pump #HV-21
12:02	Placed Sample on Pump #LV-1 on Eduardo Gonzalez
12:03	Placed Sample on Pump #HV-21 at North-side of trestle
12:04	Removed Sample from Pump #HV-20
12:11	Placed Sample on Pump #HV-20 at South-side of trestle
13:40	AAC loading more beams onto trestle
14:00	PAS has most of the deck clean and loading metal debris into dumpsters
14:10	Tommy moving dumpsters filled with debris
14:11	Dave from PAS monitoring the worksite
14:12	Estimating 3 dumpsters are ready to be filled with debris
14:13	Estimating 5 dirt trucks arriving to offload dirt
15:00	PAS finished with one area of the deck
15:15	PAS begins loading dumpsters on the North-end of worksite
15:25	Begin collecting cassettes to analyze samples
15:25	Removed Sample from Pump #HV-20
15:26	Removed Sample from Pump #HV-21
15:28	Removed Sample from Pump #LV-30
15:30	Removed Sample from Pump #LV-36
15:31	Removed Sample from Pump #LV-1
16:30	Completed documentation / end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 16:30 less 30 minute lunch

Total Technician total hours **9**

Senior Project Manager:
Sidney Carter
07:00 to 8:30= 1.5 hours
13:00 to 14:30= 1.5 hours

Total Senior Project Manager hours **3**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/26/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 52°, 92% Humidity

Time	Observations
07:00	Morning safety meeting
07:25	Began prepping pumps and samples
07:30	Set Sample on Pump #LV-5 on Mark Jeffers
07:34	Set Sample on Pump #LV-1 on Eduardo Gonzalez
07:39	Set Sample on Pump #LV-21 on Jacob Johnson
07:45	Set Sample on Pump #HV-20 on top of South-end of trestle
08:00	Removed Sample from Pump #LV-5
08:04	Removed Sample from Pump #LV-1
08:05	Set Sample on Pump #LV-5 on Mark Jeffers
08:09	Removed Sample from Pump #LV-21
08:10	Set Sample on Pump #LV-1 on Eduardo Gonzalez
08:16	Set Sample on Pump #LV-21 on Jacob Johnson
08:30	Began setting up analyzing equipment
09:05	AAC moving forklift
09:35	Finished analyzing morning samples
10:15	Jacob Johnson & Dave Nelson observed on back-end of trestle watering debris for dust control
10:25	AAC moving equipment around work area with crane
10:55	Jacob Johnson cleaning 2 forklifts that were burned on the deck/part of debris
11:05	AAC preparing to place excavator on the trestle
11:45	Removed Sample from Pump #HV-20
11:45	Tommy Smith is unloading dumpsters on the north-side of work area to load & haul away metal debris
11:47	Set Sample on Pump #HV-20 on top of South-end of trestle
11:58	Removed Sample from Pump #LV-5
12:00	Set Sample on Pump #LV-5 on Mark Jeffers
12:05	Removed Sample from Pump #LV-1, this sample ended up being over loaded.
12:05	Excavator on South-end of trestle and preparing to move debris from deck
12:06	Water truck is watering down the metal portion of burned forklifts that were removed
12:07	Set Sample on Pump #LV-1 on Eduardo Gonzalez

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:12	Removed Sample from Pump #LV-21
12:15	Set Sample on Pump #LV-21 on Jacob Johnson
12:17	Returned to EQM trailer to analyze cassettes
12:18	Dave Nelson and Tommy Smith setting dumpsters for loading all metal debris and burned forklifts
12:20	Vinson White left worksite
13:45	Vinson White returned to worksite
14:00	Checked on Pontoons, they appear to be in operation correctly
14:10	Began analyzing Start Area & Blank Cassettes
14:30	Finished analyzing Start Area & Blank Cassettes
15:20	Began walking worksite to retrieve Pumps and Samples
15:25	Removed Sample from Pump #LV-21
15:28	Removed Sample from Pump #LV-5
15:35	Removed Sample from Pump #LV-1
15:36	Removed Sample from Pump #HV-20
15:45	Began analyzing Samples
16:45	Documentation completed / end of-shift

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 12:20, 5 hours 30-minute less lunch
13:45 to 16:45 =3

Total Technician total hours **7.75**

Senior Project Manager:
Sidney Carter
07:00 to 10:00= 3 hours
14:00 to 16:00= 2 hours

Total Senior Project Manager hours **5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/27/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21 & HV-20

Daily Weather: 57°, 80% Humidity

Time	Observations
07:00	Morning safety meeting
07:30	Began setting up cassettes and equipment
07:35	Observed buoys are fully operational
07:40	Placed Sample on Pump #LV-5 on Justin Scott
07:42	Placed Sample on Pump #LV-1 on Ever Bonilla
07:50	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
08:02	Placed Sample on Pump #HV-20 at South-end of trestle
08:10	Removed Sample from Pump #LV-5
08:12	Removed Sample from Pump #LV-1
08:17	Placed Sample on Pump #LV-1 on Ever Bonilla
08:20	Removed Sample from Pump #LV-21
08:22	Placed Sample on Pump #LV-5 on Justin Scott
08:35	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
08:50	More beams are being delivered to worksite for AAC
09:30	Dave repositioning full and empty dumpsters with forklift within regulated area
09:35	Dave is now repositioning dumpsters containing metal debris within regulated area
09:45	Excavator is being prepped to be moved
10:15	AAC is moving crane off of trestle and preparing to relocate crane to Northside of work area
11:10	Finished analyzing air samples for Start
11:35	AAC unloading beams from flatbed trailers to Northside of worksite
11:36	Firehose operator wetting debris aggressively to keep dust down
11:38	Long reach excavators and small excavator are continuing to relocate debris to Southeast side of trestle before loading into dumpsters lined with poly
11:55	AAC lifting giant pipes with crane to plant on Northside of worksite
11:40	Removed Sample from Pump #LV-21
11:45	Removed Sample from Pump #LV-5
11:50	Placed Sample on Pump #LV-5 on Justin Scott
11:55	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
12:00	Removed Sample from Pump #LV-1
12:05	Placed Sample on Pump #LV-1 on Ever Bonilla

Vinson White / Sidney Carter

Advantage Environmental

Daily Project Log

Sampling Technician

Time	Observations
12:10	Removed Sample from Pump #HV-20
12:12	Placed Sample on Pump #HV-20 at South-end of trestle
13:16	AAC is continuing to unload beams from flatbed trailers onto the Northside of worksite
13:17	AAC is beginning to setup pipe
14:00	Debris is continuing to be loaded into poly lined dumpsters from deck
14:25	Dave is moving dumpsters with forklift within the worksite
14:26	AAC is continuing work on the Northside of the deck
14:27	Observed 4 total dumpsters onsite at this time
14:30	Debris being moved across the deck into one pile at the Southeast before being loaded by excavator into poly lined dumpster
14:35	Dave with PAS is onsite overseeing work in progress
15:15	AAC is driving another pole into the ground
15:22	Removed Sample from Pump #HV-20
15:29	Removed Sample from Pump #LV-5
15:30	Firehose operators are continuing to aggressively wet debris to keep dust down
15:31	Removed Sample from Pump #LV-21
15:40	Removed Sample from Pump #LV-1
16:00	Left worksite for end of shift
17:00	Finished documentation

Total air sampled collected / analyzed=11
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 16:00 = 9 hours 30-minute less lunch
16:00 to 17:00 = 1 hour

Total Technician total hours **9.5**

Senior Project Manager:
Sidney Carter 07:00 to 10:00= 3 hours
13:30 to 16:00= 2.5 hours

Total Senior Project Manager hours **5.5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/28/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Pete Coleman

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21, HV-200 & HV-201

Daily Weather: 64°, 83% Humidity

Time	Observations
07:00	Morning safety meeting covering moving debris, high-sides being delivered on Monday, no eating, drinking or smoking in or around cell
07:34	Placed Sample on Pump #HV-200 at West-end of trestle
07:42	Placed Sample on Pump #LV-1 on Gary Brown
07:43	Placed Sample on Pump #LV-5 on Brent Hardinger
07:45	Placed Sample on Pump #LV-21 on Mark Conway
07:45	PAS begins suiting up for start of workday, long reach being greased up, laborers are putting on tyveks & ½ mask respirators
08:00	First box filled to capacity with debris & is being repositioned by Dave with PAS operating forklift
08:10	Placed Sample on Pump #HV-201 at South-end of regulated area
08:12	Removed Sample from Pump #LV-1
08:13	Removed Sample from Pump #LV-5
08:14	Placed Sample on Pump #LV-1 on Gary Brown
08:15	Removed Sample form Pump #LV-21
08:16	Placed Sample on Pump #LV-5 on Brent Hardinger
08:17	Placed Sample on Pump #LV-21 on Mark Conway
08:20	Dave is positioning empty box/dumpsters in place before work crew begins lining empty dumpster with poly
08:29	Long reach at West-end of trestle and long reach at Southeast side of work area are working in tandem to remove debris and load into dumpster with a small excavator on the East side of work area
08:25	Received cassettes from Start for analyzing
08:30	PAS finishes lining box/dumpster with poly & now ready to begin loading with debris by hand and small excavator
08:31	Began setting-up equipment to analyze morning & Start samples
08:50	Finished analyzing samples
08:54	Skid-steer running street sweeping attachment over wetted pavement on roadway & Eastside of work area beyond fence line
08:55	PAS finished filling another box/dumpster to capacity with debris
08:57	Began analyzing samples from Start

Pete Coleman / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
09:02	Long reach on trestle continues moving debris toward Southside of deck as smaller excavator continues stacking into pile for later loading into box/dumpster
09:20	Excavator on Southside of deck loading pile of debris into empty poly-lined box/dumpster
09:30	4 Boxes/dumpsters have been filled to capacity and wrapped in poly to be removed at a later date
09:35	Long reach on West-end of trestle & South-end of regulated continue working in tandem to remove debris from Westside of deck along Southside and then small excavator is scooping into a pile for loading into boxes/dumpsters
09:36	Debris is being wetted by two hose operators with PAS as long reach at West-end of trestle & South-end of worksite scoop and shift debris along into pile
09:37	Smaller excavator now scooping debris into pile
09:40	Long reach on center of trestle scraping I-beam across Southside of deck to sweep debris toward pile at Southeast corner of deck
09:45	3-Man PAS work crew still removing debris by hand into poly bags from Southside of worksite, next to river and below decking
09:59	Dave moving filled & poly wrapped dumpsters of debris
10:15	Dave repositioning all dumpsters within regulated area
10:28	Skid-steer with street sweeping attachment running over wetted asphalt to maintain dust control in front of Southwest end of metal fab shop, across street from worksite to Southeast
10:21	Removed Sample from Pump #LV-1
10:32	3 Filled and poly wrapped dumpsters are positioned outside of fenced area to the East over train tracks on roadway
10:37	Long reach now located on East-end of trestle & continuing to run I-beam over the deck to scrape soot and debris into pile at Southeast corner of deck
10:38	Smaller excavator loading debris into tighter pile to load into poly-lined empty dumpster
10:45	Hose operators continuing to wet debris at is being moved along decking and from decking into boxes/dumpsters
10:50	Skid-steer with sweeper attachment running water over ground in fence-in area/worksite where dumpsters were previously being stored and loaded with debris
10:56	Water truck being oved out of fenced-in area and skid-steer running over area where previously parked with street sweeper that has been wetted with water
11:02	Removed Sample from Pump #LV-5
11:03	Removed Sample from Pump #LV-21
11:04	Removed Sample from Pump #HV-200
11:05	Removed Sample from Pump #HV-201
11:30	Left worksite for end of shift
12:30	Finished paperwork

Total air sampled collected / analyzed=8
Total blank air samples analyzed=2
No injuries reported

Technician:
Pete Coleman
07:00 to 11:30 = 4.5 hours
11:30 to 12:30 = 1 hour

Total Technician total hours **5.5**

Senior Project Manager:
Sidney Carter 07:00 to 08:00 = 1 hour

Total Senior Project Manager hours **1**

Pete Coleman / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/30/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriquez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21, HV-20 & HV-21

Daily Weather: 57°, 38% Humidity

Time	Observations
07:00	Morning safety meeting
07:10	Begin to setup analyzation equipment & prep pumps & cassettes for air sampling
07:11	Dumpsters are being moved in and out of regulated area
07:30	Placed Sample on Pump #HV-20 on West-end of trestle
07:35	Placed Sample on Pump #HV-21 at North-end of worksite
07:40	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
07:42	Placed Sample on Pump #LV-1 on Jacob Santesson
07:45	Placed Sample on Pump #LV-21 on Jeff Doggey
07:46	AAC preparing to drive pilons into ground for construction of next trestle
08:00	AAC have relocated within worksite
08:01	Steel & wood beams are being delivered by semi-truck and flatbed trailer for construction of next trestle
08:10	Removed Sample from Pump #LV-5
08:12	Removed Sample from Pump #LV-1
08:14	Placed Sample on Pump #LV-1 on Jacob Santesson
08:15	Removed Sample from Pump #LV-21
08:16	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
08:18	Placed Sample on Pump #LV-21 on Jeff Doggey
08:20	PAS continuing to clean on the left-side of the trestle
09:45	PAS has larger dumpsters on site for loading debris into
10:00	Observed pontoons as fully operational
11:08	Additional large steel beams are being delivered by semi-truck and flatbed trailer for 2nd trestle construction
11:09	Jerry onsite monitoring
11:10	Eduardo watering Westside, Northside and Southside of decking to keep dust down
11:35	Advised by Jeff that having problems keeping Pump #LV-21 secured to him
11:40	Removed Sample from Pump #HV-20
11:41	Placed Sample on Pump #HV-20 on West-end of trestle
11:42	Removed Sample from Pump #HV-21

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:43	Placed Sample on Pump #HV-21 at North-end of worksite
11:50	Removed Sample from Pump #LV-21
11:51	Placed Sample on Pump #LV-21 on Jeff Doggey
11:55	Removed Sample from Pump #LV-1
11:58	Removed Sample from Pump #LV-5
12:00	Placed Sample on Pump #LV-1 on Jacob Santesson
12:05	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
12:46	More pipe arrives by semi-truck and flatbed trailer for construction of next trestle
13:45	Vinson White left worksite
14:15	Vinson White arrived back on worksite
14:55	Completed analyzing cassettes from earlier in the work shift
15:00	Observed AAC continuing progress on construction of second trestle
15:22	Removed Sample from Pump #LV-21
15:23	Removed Sample from Pump #LV-5
15:26	Removed Sample from Pump #LV-1
15:31	Removed Sample from Pump #HV-20
15:30	Removed Sample from Pump #HV-21
15:35	Begin analyzing samples
16:00	Finished analyzing samples and left worksite
17:00	Completed documentation and end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 13:45 less 30-minute lunch = 6.25 hours
14:15 to 17:00 = 2.75 hours

Total Technician total hours **9**

Senior Project Manager:
Sidney Carter 07:00 to 09:00 = 2 hours
13:30 to 15:00 = 1.5 hours

Total Senior Project Manager hours **3.5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 10/31/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21, HV-20 & HV-21

Daily Weather: 39°, 78% Humidity

Time	Observations
07:00	Morning safety meeting
07:20	Began setting up cassettes and equipment for air sampling
07:29	Observed pontoons fully operational
07:30	Placed Sample on Pump #HV-20 on West-end of trestle
07:35	Placed Sample on Pump #HV-21 at pit
07:40	Placed Sample on Pump #LV-1 on Ever Bonilla
07:42	Placed Sample on Pump #LV-21 on Eduardo Gonazlez
07:45	Placed Sample on Pump #LV-5 on Nick Maranda
08:00	All work crews are organized, warmed up equipment & are beginning to work
08:01	AAC moving hammer into position for mounting to crane
08:10	Removed Sample from Pump #LV-1
08:12	Placed Sample on Pump #Lv-1 on Ever Bonilla
08:13	Removed Sample from Pump #LV-21
08:15	Removed Sample from Pump #LV-5
08:20	Placed Sample on Pump #Lv-5 on Nick Maranda
08:22	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
09:45	Eduardo with EQM keeping decking and debris very wet over work area to maintain dust control
09:46	Dave with PAS walking the worksite and monitoring progress
09:48	AAC is in pit preparing holes for placement of beams and 2nd trestle structure
10:05	Vinson White left worksite
11:00	EQM moved excavator to North opening to remove rock at pilons
11:40	PAS went on deck to watch debris being removed from the center of the deck. Truck to be moved after lunchtime
12:05	Crews break for lunch
12:15	Removed Sample from Pump #LV-5
12:28	Removed Sample from Pump #LV-1
12:30	PAS back from lunch
12:30	Removed Sample from Pump #HV-20
12:31	Placed Sample on Pump #Hv-20 on West-end of trestle

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:32	Placed Sample on Pump #LV-5 on Nick Miranda
12:36	Removed Sample from Pump #LV-21
12:37	Placed Sample on Pump #LV-21 on Eduardo Gonzalez
12:50	Removed Sample from Pump #HV-21
12:51	Placed Sample on Pump #HV-21 at pit
13:00	EQM moved box onto trestle 1 Ramp to begin loading with debris
13:30	Dumpster filled to capacity & moved
13:50	Started analyzing samples
16:00	Left worksite
17:00	Finished compiling paperwork

Total air samples collected / analyzed=12
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 10:05 = 3.08 hours

Total Technician total hours **3.08**

Senior Project Manager:
Sidney Carter 07:00 to 16:00 = 9 hours

Total Senior Project Manager hours **9**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/01/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Gary Reynolds / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-1, LV-5, LV-21, HV-20 & HV-21

Daily Weather: 50°, 75% Humidity

Time	Observations
07:00	Morning safety meeting
07:28	Observed pontoons are fully functional
07:30	Empty box/dumpster is being delivered for loading of debris after being poly-lined
07:40	Watering is continuing within the work area in order to keep dust down
07:40	Placed Sample on Pump #LV-5 on Mark Conway
07:42	Placed Sample on Pump #LV-21 on Gary Reynolds
07:45	Placed Sample on Pump #HV-20 at West-end of first trestle
07:48	Placed Sample on Pump #HV-21 next to opening beside 2nd trestle
07:50	Placed Sample on Pump #LV-1 on Mark Jeffers
08:10	Removed Sample from Pump #LV-5
08:12	Removed Sample from Pump #LV-21
08:15	Placed Sample on Pump #LV-21 on Gary Reynolds
08:18	Placed Sample on Pump #LV-5 on Mark Conway
08:20	Removed Sample from Pump #LV-1
08:22	Placed Sample on Pump #LV-1 on Mark Jeffers
08:25	Received Air Sample Cassettes from Start
09:20	Eduardo & Gary are wetting down the deck to maintain dust control
09:21	Jerry onsite monitoring work area and progress
09:35	PAS is moving empty box/dumpster into place before lining with poly for loading of debris
09:37	Gary from PAS observed at the North-end of first trestle watering the area for dust control
10:40	PAS, EQM Brent moving rock into pit in front of trestle
10:41	Jerry leaves worksite
11:25	Removed Sample from Pump #LV-21
11:26	Removed Sample from Pump #LV-1
11:30	Removed Sample from Pump #HV-21
11:30	Work crews are continuing to clean-up all areas
11:31	AAC loading second trestle with wood beams
11:31	Placed Sample on Pump #LV-1 on Mark Jeffers

Vinson White / Sidney Carter
Sampling Technician

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Time	Observations
11:33	Eduardo keeping debris wet to maintain dust control
11:35	Removed Sample from Pump #HV-20
11:40	Placed Sample on Pump #HV-21 next to opening beside 2nd trestle
11:42	Placed Sample on Pump #HV-20 on West-end of first trestle
11:50	Placed Sample on Pump #LV-21 on Gary Reynolds
11:59	Removed Sample from Pump #LV-5
12:45	Empty box/dumpster is being moved being moved into place for loading of debris after being lined with poly
12:55	Placed Sample on Pump #LV-5 on Mark Conway
13:00	Rock being delivered by semi-dump truck and dump-bed
13:02	Randy is onsite observing work area progress
13:15	Removed Sample from Pump #LV-21
13:20	Removed Sample from Pump #LV-5
13:21	Gary & Mark returned their pumps and went offsite for end of shift
14:30	More loads of rock are being delivered by semi-dump truck and dump-bed
14:31	Work continues on digging pit for 2nd trestle
15:20	Removed Sample from Pump #LV-1
15:20	Crane Operator Mark with AAC handed me his personal pump and sample as he was leaving worksite for end of shift
15:28	Removed Sample from Pump #HV-20
15:30	AAC continuing to work on building second trestle
15:35	Removed Sample from Pump #HV-21
15:40	Observed final load of rock being delivered by semi-dump truck and dump-trailer for the day
15:41	All work crews slowed down for the day
15:45	AAC and EQM are preparing to leave worksite for end of shift until tomorrow
16:00	Left worksite to travel back to office
17:00	Completed documentation and end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00 = 10 hours

Total Technician total hours **10**

Senior Project Manager:
Sidney Carter 07:00 to 8:30 = 1.5 hours
13:30 to 15:30 = 2 hours

Total Senior Project Manager hours **3.5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/02/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Gary Reynolds / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-5, LV-21, LV-36, HV-20 & HV-21

Daily Weather: 50°, 89% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:30	Observed pontoons fully functional
07:35	Placed Sample on Pump #LV-21 on Jacob Johnson
07:36	Placed Sample on Pump #LV-5 on Tommy Smith
07:38	Placed Sample on Pump #LV-36 on Mark Conway
07:40	Placed Sample on Pump #HV-21 at South-end of deck
07:45	Placed Sample on Pump #HV-20 at West-end of first trestle
07:55	Eduardo is filling water truck for operating firehose in wetting down deck and debris to maintain dust control
07:57	Gary is moving water motor to Northside of worksite
08:05	Removed Sample form Pump #LV-21
08:06	Removed Sample from Pump #LV-5
08:07	Placed Sample on Pump #LV-5 on Tommy Smith
08:08	Removed Sample from Pump #LV-36
08:10	Dumpsters are being delivered to worksite by roll off truck to worksite
08:15	Placed Sample on Pump #LV-36 on Mark Conway
08:19	Placed Sample on Pump #LV-21 on Jacob Johnson
08:20	Ever Bonilla is watering down the deck to maintain dust control
09:45	Rock is being delivered next to decking by semi-dump truck with dump bed
09:46	Dave from PAS is overseeing jobsite and work progress
09:47	Two water trucks are going at the same time watering deck and debris to maintain dust control
10:00	Another load of rock is being delivered by semi-dump truck with dump bed
10:25	PAS is lining empty dumpsters with poly for loading of debris by hand and excavator
10:35	Gary with PAS is moving lined dumpsters into worksite while removing dumpsters filled to capacity out of worksite to be picked up and taken offsite for disposal of material
11:15	Additional rock is being delivered to worksite by semi-dump truck with dump bed
11:24	Removed Sample from Pump #HV-20
11:25	Placed Sample on Pump #HV-20 at West-end of first trestle

Vinson White / Sidney Carter
Sampling Technician

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Daily Project Log

Time	Observations
11:30	Two more empty dumpsters arrive at worksite to be lined with poly and filled with debris by hand and with excavator
11:31	Additional rock being delivered to worksite by semi-dump truck with dump bed
11:35	Removed Sample from Pump #HV-21
11:40	Placed Sample on Pump #HV-21 at South-end of deck
11:46	Removed Sample from Pump #LV-36
11:55	Removed Sample from Pump #LV-5
11:58	Placed Sample on Pump #LV-36 on Mark Conway
12:00	Placed Sample on Pump #LV-5 on Tommy Smith
12:01	Removed Sample from Pump #LV-21
12:05	Placed Sample on Pump #LV-21 on Jacob Johnson
12:45	Additional rock is being delivered by semi-dump truck with dump bed
13:20	Randy is onsite overseeing work crews and project progress
13:22	Eduardo is continuing to wet down the deck and debris to maintain dust control
13:30	Removed Sample from Pump #LV-36
13:46	Observed work being conducted via cherry picker
14:40	Raining steadily on worksite and work crews continuing despite of rainy conditions
15:00	Regulated areas are all taped off where needed
15:25	Removed Sample from Pump #LV-5
15:26	Removed Sample from Pump #HV-21
15:28	Removed Sample from Pump # HV-20
15:35	Removed Sample from Pump #LV-21
16:00	Left worksite
17:00	finished documentation and end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00 = 10 hours

Total Technician total hours **10**

Senior Project Manager:
Sidney Carter
07:00 to 08:30 = 1.5 hours
14:00 to 14:30 = .5 hours

Total Senior Project Manager hours **2**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/03/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Gary Reynolds / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-5, LV-21, LV-36, HV-20 & HV-21

Daily Weather: 44°, 83% Humidity

Time	Observations
07:00	Morning safety meeting including all work crews, operators and management
07:10	Received area monitoring cassettes from Start
07:25	Observed pontoons as fully functional
07:30	PAS & AAC begin preparations for start of workday
07:40	Placed Sample on Pump #LV-36 on Brent Hardinger
07:41	Placed Sample on Pump #LV-21 on Gary Brown
07:45	Placed Sample on Pump #LV-5 on Ever Bonilla
07:50	Placed Sample on Pump #HV-20 on West-end of first trestle
07:53	Placed Sample on Pump #HV-21 at North-end of Work Area
08:10	Removed Sample from Pump #LV-36
08:11	Removed Sample from Pump #LV-21
08:12	Placed Sample on Pump #LV-36 on Brent Hardinger
08:15	Joe and Jerry are onsite overseeing working conditions and work progress
08:15	Removed Sample from Pump #LV-5
08:16	Placed Sample on Pump #LV-21 on Gary Brown
08:18	Placed Sample on Pump #LV-5 on Ever Bonilla
10:00	PAS repositioning empty dumpsters before lining with poly within worksite in anticipating for filling with debris by excavators and by hand
10:30	AAC received delivery of piping via semi-truck and flatbed, now beginning to unload piping into worksite for construction of second trestle
10:32	Eduardo keeping decking and debris wet with firehose from trestle in order to keep dust down
11:00	Eduardo filling the water truck that is depleted from water in order to continue wetting decking and debris to maintain dust control
11:30	PAS & EQM continue working on trestle removing debris and soot from decking
11:50	Removed Sample from Pump #LV-36
11:55	Placed Sample on Pump #LV-36 on Brent Hardinger
11:58	Removed Sample from Pump #LV-5

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	Debris and soot removal continues via excavator on trestle and across decking
12:00	Removed Sample from Pump #LV-21
12:01	Gary Brown removed pump and set on security table, he was advised by Vinson White to place it back on himself as he continues to work
12:01	Placed Sample on Pump #LV-21 on Gary Brown
12:02	Placed Sample on Pump #LV-5 on Ever Bonilla
12:08	Removed Sample from Pump #HV-21
12:10	Placed Sample on Pump #HV-21at North-end of Work Area
12:15	Removed Sample from Pump #HV-20
12:16	Placed Sample on Pump #HV-20 on West-end of first trestle
13:07	Randy is onsite overseeing project progress
13:10	Gary is unloading truck with forklift
13:11	Dave directing crew on what to do while working onsite
13:31	Mark digging down in the pit with excavator
13:19	Dumpsters are being lined with poly for loading debris by hand and excavators
13:20	Wetting of debris and soot is being heavily sprayed with water to maintain dust control within work area
13:36	AAC is preparing to drive pilons into the ground
14:30	Pilons are continuing to be driven into the ground for construction of second trestle
15:20	Removed Sample from Pump #LV21
15:24	Heavy spraying and dousing of water continues in order to maintain dust control on deck and within worksite
15:25	Removed Sample from Pump #LV-36
15:28	Removed Sample from Pump #LV-5
15:34	Removed Sample from Pump #HV-21
15:35	Removed Sample from Pump #HV-20
16:00	Left worksite
17:00	Finished documentation and end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00 = 10 hours

Total Technician total hours **10**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager hours **0**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/06/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson, Chris Noce, Victor Hernandez / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Gary Reynolds / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-21, LV-30, LV-36, HV-20 & HV-21

Daily Weather: 49°, 91% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:20	Began setting up equipment & observed pontoons as fully operational
07:24	Dumpster filled to capacity and wrapped in poly picked-up and removed from worksite
07:25	Placed Sample on Pump #HV-21 at left-side of deck
07:30	Placed Sample on Pump #HV-20 at center of first trestle
07:35	Placed Sample on Pump #LV-36 on Brent Hardinger
07:36	Placed Sample on Pump #LV-21 on Chris Noce
07:40	Placed Sample on Pump #LV-30 on Victor Hernandez
07:50	Brent from EQM began picking-up debris
08:05	Removed Sample from Pump #LV-36
08:06	Removed Sample from Pump #LV-21
08:07	Placed Sample on Pump #LV-36 on Brent Hardinger
08:10	Removed Sample from Pump #LV-30
08:12	Placed Sample on Pump #LV-21 on Chris Noce
08:14	Placed Sample on Pump #LV-30 on Victor Hernandez
08:20	PAS preparing to load poly lined dumpsters with debris by hand and with excavator
08:22	AAC finishing driving pilons into ground and lining pilons up for construction of second trestle
10:05	AAC continuing to place pipe in formation of second trestle
10:30	Spoke with Eduard about wetting deck and debris in order to keep dust down
10:32	Joe is onsite overseeing the pile driving and second trestle construction
11:30	Empty dumpsters are being repositioned within worksite before being lined with poly and loaded with debris by hand and with excavator
11:33	11 empty dumpsters are onsite and ready to be loaded with debris by hand and with excavator
11:45	Removed Sample from Pump #LV-21
11:48	Placed Sample on Pump #LV-21 on Chris Noce
11:50	AAC down in the pit working and dumping loads of rock in construction of second ramp to second trestle
11:50	Removed Sample from Pump #LV-36

Vinson White / Sidney Carter
Sampling Technician

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Time	Observations
11:52	Placed Sample on Pump #LV-36 on Brent Hardinger
12:01	Removed Sample from Pump #LV-30
12:10	Placed Sample on Pump #LV-30 on Victor Hernandez
12:15	Removed Sample from Pump #HV-21
12:16	Placed Sample on Pump #HV-21 at left-side of deck
12:18	Removed Sample from Pump #HV-20
12:19	Placed Sample on Pump #HV-20 at center of first trestle
13:05	AAC crane operator is placing piping in construction of second trestle
13:15	AAC has 5 pieces of pipe ready to get driven into the ground with vibratory hammer in construction of second trestle
15:00	AAC driving pilons into the ground with vibratory hammer in construction of second trestle
15:02	Continuation of wetting of deck and debris in order to maintain dust control by EQM
15:20	Removed Sample from Pump #LV-36
15:23	Removed Sample from Pump #LV-30
15:25	Removed Sample from Pump #LV-21
15:30	Removed Sample from Pump #HV-21
15:31	Removed Sample from Pump #HV-20
15:35	Dave with PAS is overseeing worksite and progress of his work crew
15:36	AAC is intending to stay onsite past end of shift to finish driving pilons for construction of second trestle
16:00	Left worksite
17:00	Finished documentation & end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00-less 30 minute lunch

Total Technician total hours **9.5**

Senior Project Manager:
Sidney Carter
14:00 to 15:30

Total Senior Project Manager hours **1.5**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/07/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison Jacob Santesson, Chris Noce, Victor Hernandez / AAC = Kent Parker, Nick Miranda, Jeff Doggey, Mark Jeffers, Justin Scott, Brian Cosgrove / EQM = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway, Gary Reynolds / START = Brittany Jeffries / Flagger = Will Marinez, Robert Michael Genison

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, disposable coveralls & 1/2 face negative pressure respirators, rain coats or gear respirators

AEI equipment on site: Pumps LV-4, LV-5, LV-36, HV-20 & HV-21

Daily Weather: 41°, 65% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews
07:25	Began setting-up equipment onsite and observed pontoons as fully functional
07:26	Empty dumpsters have been lined with poly for loading of debris by hand and with excavator
07:30	Placed Sample on Pump #HV-21 at Northside of worksite in front of deck
07:33	Placed Sample on Pump #HV-20 on first trestle
07:35	Placed Sample on Pump #LV-36 on Brian Cosgrove
07:37	Placed Sample on Pump #LV-5 on Ever Bonilla
07:40	Placed Sample on Pump #LV-4 on Eduardo Gonzalez
08:05	Removed Sample from Pump #LV-36
08:07	Removed Sample from Pump #LV-5
08:10	Removed Sample from Pump #LV-4
08:15	Placed Sample on Pump #LV-5 on Ever Bonilla
08:16	Placed Sample on Pump #LV-36 on Brian Cosgrove
08:17	Placed Sample on Pump #LV-4 on Eduardo Gonzalez
08:20	PAS continuing to line empty dumpsters with poly for loading of debris by hand and excavator
08:21	AAC continuing construction of second trestle
09:00	Water of deck and debris from trestle by hose operator Eduardo Gonzalez continues in order to maintain dust control
10:18	AAC preparing the vibratory hammer and lifting over the trestle
10:30	AAC begins using vibratory hammer to drive pilings into the ground for construction of second trestle
11:03	Jerry & Randy are onsite overseeing work progress with Start
11:10	Skid steer being utilized to drop off plywood
11:40	Removed Sample from Pump #LV-4
11:42	Placed Sample on Pump #LV-4 on Eduardo Gonzalez
11:45	Removed Sample from Pump #LV-36
11:46	Placed Sample on Pump #LV-36 on Brian Cosgrove
11:55	Removed Sample from Pump #LV-5

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Time	Observations
11:57	Placed Sample on Pump #LV-5 on Ever Bonilla
12:05	Removed Sample from Pump #HV-21
12:07	Removed Sample from Pump #HV-20
12:08	Placed Sample on Pump #HV-21 at Northside of worksite in front of deck
12:10	Placed Sample on Pump #HV-20 on first trestle
12:50	4 empty dumpsters are onsite and lined with poly awaiting to be filled with debris by hand and excavator
13:00	Wetting of deck and debris continues as excavator is loading debris into piles before putting into poly-lined dumpsters
13:06	Vibratory hammer has been detached from crane
13:10	Long reach is demolishing Conex box before hauling debris away from worksite
13:20	AAC preparing to attach vibratory hammer to crane to continue construction of second trestle
13:30	PAS is laying poly down on ground by deck
13:34	Ever Bonilla turned in his pump for end of shift
13:40	Eduardo turned in his pump to leave for end of shift
13:40	Removed Sample from Pump #LV-4
14:36	Work continuing in construction of second trestle
15:25	Removed Sample from Pump #LV-36
15:30	Removed Sample from Pump #HV-21
15:32	Removed Sample from Pump #HV-20
15:34	Removed Sample from Pump #LV-5
16:00	Finished analyzing and left worksite
17:00	Completed documentation and end of shift

Total air samples collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00-less 30 minute lunch **Total Technician total hours 9.5**

Senior Project Manager:
Sidney Carter
07:30 to 08:30 = 1 hour **Total Senior Project Manager hours 1**

Vinson White / Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/09/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyvek & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV 5, LV-21, HV-20 & HV-21

Daily Weather: 45° F, 85% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and operators
07:26	Began setting up equipment for analyzing personal and area cassettes
07:27	Observed pontoons are fully functional
07:28	Prepared personal and high-flow pumps
07:30	Placed Sample on Pump #HV-21 on Southeast side of work area in front of deck
07:31	Placed Sample on Pump #HV-20 at West-end of first trestle
07:35	Placed Sample on Pump #LV-1 on Nick Maranda
07:36	Placed Sample on Pump #LV-5 on Brian Cosgrove
08:05	Removed Sample from Pump #LV-1
08:06	Removed Sample from Pump #LV-5
08:07	Placed Sample on Pump #LV-5 on Brian Cosgrove
08:10	Placed Sample on Pump #LV-1 on Nick Maranda
08:15	Placed Sample on Pump #LV-21 on Jacob Johnson
08:20	AAC preparing for start of workday
08:21	All cans are out of gas, Tommy is getting more fuel
08:45	Removed Sample from Pump #LV-21
08:48	Placed Sample on Pump #LV-21 on Jacob Johnson
10:00	More steel beams are being delivered for construction of second trestle
10:01	Wetting of deck and debris continues with firehose and water truck to maintain dust control
10:40	AAC Welding steel beams on second trestle
10:41	Cleaning of Southside of deck continues from first trestle
11:30	Removed Sample from Pump #HV-21
11:32	Placed Sample on Pump #HV-21 on Southeast side of work area in front of deck
11:34	Removed Sample from Pump #HV-20
11:35	Placed Sample on Pump #HV-20 at West-end of first trestle
11:50	Removed Sample from Pump # LV-1
11:51	Removed Sample from Pump #LV-5
11:52	Placed Sample on Pump #LV-5 on Brian Cosgrove

Vinson White
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Time	Observations
11:53	Placed Sample on Pump #LV-1 on Nick Maranda
12:00	Removed Sample from Pump #LV-21
12:01	AAC is trying to complete second trestle by laying beams
12:01	Placed Sample on Pump #LV-21 on Jacob Johnson
12:50	Jacob & Eduardo still working on cleaning the Northside
13:05	AAC moving wooden beams for second trestle in front of deck
14:00	Went to meeting
14:31	Meeting over, returned to worksite
14:32	Construction of second trestle continues
15:00	AAC continues setting beams for construction of second trestle
15:24	Removed Sample from Pump #HV-20
15:25	Removed Sample from Pump #HV-21
15:28	Removed Sample from Pump #LV-1
15:29	Removed Sample from Pump #LV-5
15:30	Some crews are leaving worksite for end of shift
15:32	Removed Sample from Pump #LV-21
16:00	Left worksite
17:00	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00 less 30-minute lunch

Total Technician Hours: **9.5**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/10/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV 5, LV-21, HV-20 & HV-21

Daily Weather: 46° F, 97% Humidity

Time	Observations
07:00	Morning safety meeting with all work crews and equipment operators
07:25	Began setting up analyzing equipment & observed buoy are fully functional
07:30	Placed Sample on Pump #HV-21 on Northside of Deck
07:35	Placed Sample on Pump #HV-20 West-end of first trestle
07:40	Placed Sample on Pump #LV-5 on Matt Weisker
07:43	Placed Sample on Pump #LV-21 on Nick Maranda
07:45	Placed Sample on Pump #LV-1 on Kent Parker
08:10	Removed Sample from Pump #LV-5
08:12	Placed Sample on Pump #LV-5 on Matt Weisker
08:13	Removed Sample from Pump #LV-21
08:15	Removed Sample from Pump #LV-1
08:18	Placed Sample on Pump #LV-21 on Nick Maranda
08:20	Placed Sample on Pump #LV-1 on Kent Parker
09:35	AAC continuing to build second trestle
09:36	All work is being concentrated on construction of second trestle at the North-end of worksite
10:53	AAC moving wooden beams on top of second trestle in construction of platform
11:15	Removed Sample from Pump #HV-20
11:16	Placed Sample on Pump #HV-20 West-end of first trestle
11:19	Removed Sample from Pump #HV-21
11:20	Placed Sample on Pump #HV-21 at Northside of deck
11:35	AAC continuing construction of second trestle
11:36	Crane & excavators are being relocated in closer proximity to second trestle construction
11:45	Removed Sample from Pump #LV-1
11:46	Placed Sample on Pump #LV-1 on Kent Parker
11:50	Removed Sample from Pump #LV-5
11:52	Placed Sample on Pump #LV-5 on Matt Weisker
12:00	Removed Sample from Pump #LV-21
12:02	Placed Sample on Pump #LV-21 on Nick Maranda

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
13:30	AAC is the only company working at the present time
13:31	Jerry is onsite overseeing work progress within the project
13:54	Removed Sample from Pump #HV-20
13:55	Removed Sample from Pump #HV-21
13:58	Removed Sample from Pump #LV-5
14:00	AAC is preparing to relocate excavator
14:20	Straps are being utilized to secure excavator to flatbed trailer connected to semi-truck
14:00	Removed Sample from Pump #LV-21
14:02	Removed Sample from Pump #LV-1
15:00	Worksite is reaching end of shift
16:00	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
07:00 to 17:00 less 30-minute lunch

Total Technician Hours: **9.5**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/13/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-5, LV-36, LV-38, HV-20 & HV-21

Daily Weather: 50° F, 86% Humidity

Time	Observations
06:30	Morning Safety Meeting with all work crews and operators
07:00	Observed pontoons are fully functional
07:05	Placed Sample on Pump #HV-21 at North-end of deck
07:07	Placed Sample on Pump #HV-20 on 2nd trestle
07:45	Placed Sample on Pump #LV-36 on Mark Jeffers
07:50	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
07:52	Placed Sample on Pump #LV-38 on Justin Scott
08:05	EQM and other crews are working to construct 2nd trestle by setting pilings and placing beams
08:06	Eduardo is operating firehose, wetting debris and deck to maintain dust control
08:15	Removed Sample from Pump #LV-36
08:17	Placed Sample on Pump #LV-36 on Mark Jeffers
08:20	Removed Sample from Pump #LV-5
08:21	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
08:22	Removed Sample on pump #LV38
08:23	Placed Sample on Pump #LV-38 on Justin Scott
09:15	AAC continuing to drive pilings and place beams in construction of 2nd trestle
09:35	Eduardo continuing to wet debris and decking in order to maintain dust control
09:40	Spoke with Start about area monitoring cassettes from 11/10/2017, was advised that no area sampling was run for that time to be analyzed
10:25	Steel beams delivered by flatbed trailer and semi-truck for AAC to continue building second trestle
10:50	6 dumpsters are onsite awaiting to be lined with poly and filled with debris
10:51	Empty dumpsters are being relocated within worksite for loading debris by excavator and by hand
11:40	Removed Sample from Pump #HV-21
11:41	Placed Sample on Pump #HV-21 at North-end of deck
11:42	Removed Sample from Pump #HV-20
11:45	Placed Sample on Pump #HV-20 on 2nd trestle
11:52	AAC is laying beams to ramp position in construction of 2nd trestle/upper area
11:53	AAC breaks for lunch

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:54	Excavator equipment is currently being serviced
11:55	Removed Sample from Pump #LV-5
11:57	Placed Sample on Pump #LV-5 on Eduardo Gonzalez
12:00	Spoke with Eduardo about watering down the decking and debris to maintain dust control
12:00	Removed Sample form Pump #LV-38
12:02	Carpet is being moved into poly lined dumpster by excavator while being wetted with water to maintain dust control
12:02	Placed Sample on Pump #LV-38 on Justin Scott
12:05	Removed Sample from Pump #LV-36
12:06	Placed Sample on Pump #LV-36 on Mark Jeffers
12:55	AAC is continuing to lay beams in front of 2nd trestle for construction of ramp to 2nd trestle
13:00	Dave, Joe & Jerry are overseeing the worksite progress
14:00	Construction of 2nd trestle continuing by laying of beams and construction of ramp
14:01	PAS is in tyveks and ½ mask respirators working in front of trestle scooping debris by hand into poly bags for putting into poly-lined dumpster
14:05	Eduardo operating water truck when empty, filling water truck to full capacity and operating water hose to to wet debris and deck with to maintain dust control
14:45	PAS continuing clean-up of debris by hand and excavator, scooping and putting into poly-lined dumpsters
15:15	AAC continuing to lay steel beams down for construction of ramp to 2nd trestle
15:20	Removed Sample from Pump #HV-21
15:21	Removed Sample from Pump #HV-20
15:24	Removed Sample from Pump #LV-36
15:25	Removed Sample from Pump #LV-5
15:28	Removed Sample from Pump #LV-38
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 16:30 less 30-minute lunch **Total Technician Hours:** **8.5**

Senior Project Manager:
Sidney Carter
06:30 to 08:40 **Total Senior Project Manager Hours:** **2.17**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/14/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-38, HV-20 & HV-21

Daily Weather: 46° F, 83% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:45	Observed pontoons as fully functional
07:00	Placed Sample on Pump #LV-5 on Gary Brown
07:01	Placed Sample on Pump #LV-1 on Kent Parker
07:05	Dumpster filled to capacity with debris and poly-lined was removed from worksite by Waste Management
07:05	Placed Sample on Pump #LV-38 on Ever Bonilla
07:30	Removed Sample from Pump #LV-5
07:31	Six dumpsters are ready to be poly-lined and filled with debris by hands and excavator
07:31	Placed Sample on Pump #LV-5 on Gary Brown
07:32	Removed Sample from Pump #LV-1
07:33	Placed Sample on Pump #LV-1 on Kent Parker
07:35	Removed Sample from Pump #LV-38
07:36	Placed Sample on Pump #LV-38 on Ever Bonilla
07:40	Placed Sample on Pump #HV-20 at West-end of first trestle
07:45	Placed Sample on Pump #HV-21 at Southeast corner of worksite
09:20	AAC unloading wooden beams from flatbed on semi-truck for construction of second trestle
09:35	AAC moving all equipment closer to the second trestle to continue construction
10:30	AAC continuing to relocate heavy equipment for trestle construction
10:31	Rock being delivered by semi-dump truck with dump bed, rock is being offloaded in front of second trestle
10:45	PAS lining empty dumpsters with poly
11:00	United Services cleaning both bathrooms & portables
11:10	3 loads of rock have been delivered by semi-dump truck with dump bed completing rock delivery for the day
11:30	Dumpster lined with poly is being loaded with debris by hand and with excavator before being removed from worksite
11:40	Removed Sample from Pump #LV-1

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:41	Placed Sample on Pump #LV-1 on Kent Parker
11:45	Removed Sample from Pump #LV-5
11:46	Placed Sample on Pump #LV-5 on Gary Brown
11:50	Removed Sample from Pump #LV-38
11:52	Placed Sample on Pump #LV-38 on Ever Bonilla
11:54	Removed Sample from Pump #HV-20
11:57	Placed Sample on Pump #HV-20 at West-end of first trestle
12:00	Removed Sample from Pump #HV-21
12:01	Placed Sample on Pump #HV-21 at Southeast corner of worksite
12:46	Dirt for ramp construction to second trestle has been raked and smoothed over creating incline grade that appears optimal for equipment to drive up and onto second trestle once complete
12:48	Brent from EQM is continuing to form debris into piles before being loaded into poly-lined dumpster
12:50	Tommy is moving plywood to and from worksite for equipment being relocated
13:00	Joe overseeing worksite and safety progress
14:00	Meeting with Jerry, Randy, Aaron, Mark & Joe
14:45	PAS continuing to line empty dumpsters with poly
15:21	Removed Sample from Pump #LV-5
15:22	Removed Sample from Pump #LV-38
15:25	Removed Sample from Pump #LV-1
15:25	All work crews and companies are leaving worksite for end of shift
15:26	Construction of 2nd trestle is almost complete
15:30	Removed Sample from Pump #HV-21
15:31	Removed Sample from Pump #HV-20
15:32	Began analyzing personal cassettes
15:45	Finished analyzing and left worksite
16:45	Finished documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 16:45 less 30-minute lunch

Total Technician Hours: **9.75**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/15/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-30, HV-20 & HV-21

Daily Weather: 50° F, 86% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:50	Observed pontoons as fully functional
06:51	Start delivered area samples from 11/14/2017 to be analyzed
06:55	Began setting up equipment for sample analyzing
07:00	Placed Sample on Pump #HV-21 at Southeast side of work area
07:05	Placed Sample on Pump #HV-20 on West-end of 2nd trestle
07:01	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
07:02	Placed Sample on Pump #LV-1 on Brent Hardinger
07:15	Placed Sample on Pump #LV-5 on Jacob Johnson
07:31	Removed Sample from Pump #LV-30
07:32	Removed Sample from Pump #LV-1
07:33	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
07:36	Placed Sample on Pump #LV-1 on Brent Hardinger
07:45	Removed Sample from Pump #LV-5
07:47	Dumpster full of debris lined and wrapped with poly being removed from worksite
07:47	Placed Sample on Pump #LV-5 on Jacob Johnson
09:10	Work ensuing around 2nd trestle moving rock
10:30	Brent moved excavator off of 2nd trestle for more work to ensue in 2nd trestle construction
10:31	AAC continuing construction around 2nd trestle
10:32	Nick with AAC is taking photographs of 2nd trestle progress and construction
11:00	AAC is moving wood beams onto 2nd trestle
11:25	Jubitz Fuel Truck onsite supplying worksite with fuel
11:26	AAC has offloaded from semi-truck with flatbed trailer and stacked wooden beams within worksite for 2nd trestle reinforcement and construction
11:27	AAC is breaking for lunch
11:30	Removed Sample from Pump #LV-30
11:32	Placed Sample on Pump #LV-30 on Eduardo Gonzalez
11:35	Joe is on top of 2nd trestle overseeing worksite and having discussion by phone

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:35	Removed Sample from Pump #LV-1
11:36	Placed Sample on Pump #LV-1 on Brent Hardinger
11:45	Removed Sample from Pump #LV-5
11:48	Placed Sample on Pump #LV-5 on Jacob Johnson
11:55	Removed Sample from Pump #HV-21
11:57	Placed Sample on Pump #HV-21 at Southeast side of work area
11:59	Removed Sample from Pump #HV-20
12:01	Placed Sample on Pump #HV-20 on West-end of 2nd trestle
12:30	Eduardo has the water truck onsite, operating firehose and wetting debris and deck to maintain dust control
14:00	Meeting with Randy, Jerry, Mark with AAC, and Joe with Start
15:00	AAC has left the worksite for end of shift
15:15	Began searching for Personal Pumps left behind by AAC
15:19	PAS begins wrapping up for end of shift
15:20	Removed Sample from Pump #HV-21
15:22	Removed Sample from Pump #HV-20
15:25	Removed Sample from Pump #LV-30
15:27	Removed Sample from Pump #LV-1
15:35	Removed Sample from Pump #LV-5
16:00	Left worksite
17:00	Finished documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 16:00 less 30-minute lunch

Total Technician Hours: **8.5**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/16/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Jibri Johnson

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-30, HV-8 & HV-33

Daily Weather: 45°-52° F, 86% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews & operators
06:50	Began prepping pumps for air sampling
06:55	Observed no fuel for generators to run HV Pumps
07:00	Work crews begin setting up for workday and oiling equipment
07:05	Placed Sample on Pump #LV-5 on Ever Bonilla
07:07	Placed Sample on Pump #LV-30 on Mark Jeffers
07:18	Placed Sample on Pump #LV-1 on Brent Hardinger
07:35	Removed Sample from Pump #LV-5
07:36	Placed Sample on Pump #LV-5 on Ever Bonilla
07:37	Removed Sample from Pump #LV-30
07:38	Placed Sample on Pump #LV-30 on Mark Jeffers
07:45	First high-side trailer arrives via semi-truck
07:46	PAS begins lining box with poly
07:48	Removed Sample from Pump #LV-1
07:50	Placed Sample on Pump #LV-1 on Brent Hardinger
08:10	AAC moved first piling into place for construction of trestle 2
08:12	EQM begins loading first truck
08:25	First 20-yard box is being removed from worksite after being loaded to capacity and secured with poly
09:15	Placed Sample on Pump #HV-33 at West-end of 2nd trestle
09:20	EQM began filling new dumpster with debris by hand and with excavator
09:45	Dumpster fully loaded with debris and secured with poly
10:03	AAC trying to connect to piling and piling fell to the side. AAC is trying to reconnect
10:15	Placed Sample on Pump #HV-8 at Loading Area
10:40	PAS lining new dumpster
11:15	Began analyzing morning samples
11:45	AAC breaks for lunch
11:50	EQM continues loading boxes

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:00	PAS breaks for lunch
12:02	Removed Sample from Pump #HV-33
12:03	Placed Sample on Pump #HV-33 at West-end of 2nd trestle
12:05	Observed pontoons are clear of debris and fully functional
12:15	AAC returns from lunch
12:19	Removed Sample from Pump #LV-30
12:20	Placed Sample on Pump #LV-30 on Mark Jeffers
12:22	Removed Sample from Pump #HV-8
12:23	Placed Sample on Pump #HV-8 at Loading Area
12:44	Removed Sample from Pump #LV-5
12:45	PAS returns from lunch
12:45	Placed Sample on Pump #LV-5 on Ever Bonilla
12:46	Removed Sample from Pump #LV-1
12:47	Placed Sample on Pump #LV-1 on Brent Hardinger
12:50	AAC begins hammering pilings into the ground in continuation of trestle 2 construction
13:30	PAS filled and poly secured another dumpster to capacity with debris by hand and excavator
13:40	AAC completed driving piles into ground
14:25	PAS on deck of trestle 2 moving debris in construction of landing for generator
14:30	EQM finishes loading dumpsters
14:30	Removed Sample on Pump #LV-1
14:32	Removed Sample from Pump #HV-8
14:34	Removed Sample from Pump #HV-33
14:37	Removed Sample from Pump #LV-30
14:38	Removed Sample on Pump #LV-5
15:00	Analyzed cassettes
15:30	Left worksite
16:30	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Jibri Johnson
09:00 to 16:00 less 30-minute lunch **Total Technician Hours:** **6.5**

Senior Project Manager:
Sidney Carter
14:00 to 15:30 **Total Senior Project Manager Hours:** **1.5**

Jibri Johnson
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/17/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-30, HV-20 & HV-21

Daily Weather: 43° F, 91% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:40	Placed Sample on Pump #HV-21 at Southeast side of trestle 2
06:42	Placed Sample on Pump #HV-20 at West-end of trestle 1
06:50	Observed pontoons in water and nets are fully functional
06:55	Began setting up equipment for analyzing samples after calibrating pumps and cassettes for monitoring
07:00	Placed Sample on Pump #LV-30 on Mark Jeffers
07:10	Placed Sample on Pump #LV-1 on Ever Bonilla
07:12	Placed Sample on Pump #LV-5 on Jacob Johnson
07:25	AAC is moving equipment on trestle 2
07:26	Dumpsters that are filled to capacity and poly wrapped are being removed from worksite and taken away for disposal of debris
07:30	Removed Sample from Pump #LV-30
07:31	Placed Sample on Pump #LV-30 on Mark Jeffers
07:40	Removed Sample from Pump #LV-1
07:41	Placed Sample on Pump #LV-1 on Ever Bonilla
07:42	removed Sample from Pump # LV-5
07:43	Placed Sample on Pump #LV-5 on Jacob Johnson
08:15	AAC continuing to move equipment around trestle 2
09:15	Finished analyzing Area cassettes for Start
09:16	AAC is placing the vibratory hammer on crane for driving pilings into the ground for continuation of construction of trestle 2
10:17	Jacob & Ever are cleaning and loading debris by hand into poly bags from deck
11:01	Steel beams are being delivered by flatbed semi-truck to worksite for AAC to store and drive into ground for construction of trestle 2
11:45	Removed Sample from Pump #LV-30
11:46	Placed Sample on Pump #LV-30 on Mark Jeffers

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:50	Dumpster is being delivered to be lined with poly and loaded with debris by hand and with excavator
11:51	Dumpster that is poly wrapped and filled with debris is removed from worksite
11:55	Removed Sample from Pump #LV-1
11:56	Placed Sample on Pump #LV-1 on Ever Bonilla
12:02	Removed Sample from Pump #LV-5
12:03	Placed Sample on Pump #LV-5 on Jacob Johnson
12:08	Removed Sample from Pump #HV-21
12:09	Placed Sample on Pump #HV-21 at Southeast side of trestle 2
12:11	Removed Sample from Pump #HV-20
12:12	Placed Sample on Pump #HV-20 at West-end of trestle 1
12:15	AAC breaks for lunch
12:16	PAS Jacob and Ever continuing cleanup by loading debris by hand into polybags from deck
12:55	AAC has returned from lunch
12:58	Large pile of rock is delivered to worksite for trestle 2 construction
13:05	PAS is poly lining dumpster for loading and securing of debris from worksite
14:00	Afternoon meeting with Randy, Jerry & Joe
14:50	Meeting ended with Randy, Jerry & Joe
14:58	PAS continuing to loading debris by-hand into poly lined dumpster
14:59	AAC on backside of trestle 2 laying beams to continue construction
15:00	Removed Sample from Pump #LV-30
15:01	Removed Sample from Pump #LV-1
15:02	Removed Sample from Pump #LV-5
15:05	Removed Sample from Pump #HV-21
15:07	Removed Sample from Pump #HV-20
15:15	All work crews have left for end of shift
16:00	Finished analyzing and left worksite
17:00	Finished documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 17:00 less 30-minute lunch

Total Technician Hours: **10**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Advantage Environmental

Daily Project Log

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/20/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-30, LV-38, HV-20 & HV-21

Daily Weather: 52° F, 95% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:45	Placed Sample on Pump #HV-21 next to Southeast corner of ramp to trestle 2
06:47	Placed Sample on Pump #HV-20 on top of trestle 2
06:53	Observed pontoons and netting are fully functional in water
06:55	Began setting-up equipment
07:20	Placed Sample on Pump #LV-38 on Gary Brown
07:22	Placed Sample on Pump #LV-1 on Ever Bonilla
07:25	Placed Sample on Pump #LV-30 on Tommy Smith
07:30	AAC beginning to move wood beams onto trestle 2
07:50	Removed Sample from Pump #LV-38
07:51	Placed Sample on Pump #LV-38 on Gary Brown
07:52	Removed Sample from Pump #LV-1
07:53	Placed Sample on Pump #LV-1 on Ever Bonilla
07:55	Removed Sample from Pump #LV-30
07:56	Placed Sample on Pump #LV-30 on Tommy Smith
08:30	Gary from PAS left worksite due to lack of work for him to complete
09:50	Tommy from EQM moving wooden beams onto trestle 2 for AAC
09:52	AAC using crane to place beams at South-end of trestle 2
11:00	Rainy conditions have stopped, AAC & PAS continue to work
11:40	Removed Sample from Pump #LV-30
11:41	Placed Sample on Pump #LV-30 on Tommy Smith
11:50	Removed Sample from Pump #LV-1
11:51	Placed Sample on Pump #LV-1 on Ever Bonilla
11:55	Removed Sample from Pump #LV-38
11:56	Placed Sample on Pump #LV-38 on Gary Brown
12:00	Removed Sample from Pump #HV-21
12:01	Placed Sample on Pump #HV-21 next to Southeast corner of ramp to trestle 2
12:02	Removed Sample from Pump #HV-20

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
12:03	Placed Sample on Pump #HV-20 on top of trestle 2
13:00	Water truck is at North-end of worksite with hose being used to wet deck & debris in order to maintain dust control
13:02	AAC crane operator swinging equipment to South side of trestle 2
13:50	PAS has filled 2 dumpsters with debris and wrapped with poly to be taken offsite for unloading
14:00	Afternoon meeting with Randy, Jerry & Start
14:15	Afternoon meeting has ended
14:17	AAC preparing to move excavator onto trestle 2
14:38	AAC completed swinging excavator around Southside of worksite
14:40	Tommy from EQM returned pump because it has died
14:40	Removed Sample from Pump #LV-30
15:08	AAC continuing to work on trestle 2
15:15	Tommy running water truck, wetting down debris & decking to maintain dust control
15:20	Removed Sample from Pump #HV-20
15:21	Removed Sample from Pump #HV-21
15:25	Removed Sample from Pump #LV-38
15:30	Removed Sample from Pump #LV-1
15:30	Returned to EQM trailer to analyze air samples
16:00	Left worksite
17:00	Completed documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 17:00 less 30-minute lunch

Total Technician Hours: **10**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/21/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Vinson White

On-site contractor personnel that may be represented by air sampling: PAS = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-21, HV-20 & HV-21

Daily Weather: 49° F, 91% Humidity

Time	Observations
06:30	Morning safety meeting with all work crews and operators
06:45	Began setting up equipment for analyzing air cassettes
06:46	Placed Sample on Pump #HV-21 at Southeast corner of ramp to trestle 2
06:48	Placed Sample on Pump #HV-20 on top of trestle 2
06:50	Observed pontoons and nets are fully functional in water
06:55	AAC begins warming up and greasing equipment
06:58	PAS begins loading poly lined dumpsters with debris by hand
07:15	Placed Sample on Pump #LV-5 on Gary Reynolds
07:17	Placed Sample on Pump #LV-1 on Jacob Johnson
07:20	Placed Sample on Pump #LV-21 on Mark Conway
07:30	All work crews sorting through debris before loading into poly lined dumpster
07:40	Jerry is onsite overseeing project progress
07:45	Removed Sample from Pump #LV-5
07:46	Placed Sample on Pump #LV-5 on Gary Reynolds
07:47	Removed Sample from Pump #LV-1
07:48	Placed Sample on Pump #LV-1 on Jacob Johnson
07:50	Removed Sample from Pump #LV-21
07:51	Placed Sample on Pump #LV-21 on Mark Conway
08:30	Dave is onsite utilizing water truck and firehose to wet debris and decking to maintain dust control
09:00	Gary is stacking debris into piles before loading into poly-lined dumpsters to be taken offsite and disposed of
10:10	Work crews are taking a rest break
10:11	AAC is working in multiple areas of worksite constructing trestle 2 and securing pilings
10:30	Excavators are working tandem, one excavator is on trestle 2 and the other is on the Northside of the worksite moving debris and scraping deck
11:20	Randy from EPA is onsite overseeing worksite progress
11:21	Jerry arrived onsite again to continue monitoring worksite progress
11:45	Removed Sample from Pump #HV-21

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
11:46	Placed Sample on Pump #HV-21 at Southeast corner of ramp to trestle 2
11:48	Removed Sample from Pump #HV-20
11:49	Placed Sample on Pump #HV-20 on top of trestle 2
12:00	Removed Sample from Pump #LV-1
12:01	Placed Sample on Pump #LV-1 on Jacob Johnson
12:05	Removed Sample from Pump #LV-21
12:06	Placed Sample on Pump #LV-21 on Mark Conway
12:10	Removed Sample from Pump #LV-5
12:11	Placed Sample on Pump #LV-5 on Gary Reynolds
13:20	United Site Services arrived at worksite to service portable restrooms
13:25	EQM preparing to turn on water pump to reload water truck
14:00	Afternoon meeting with Randy & Jerry
14:30	Filling of water truck continuing
14:45	Dumpster has been filled to capacity with debris and wrapped in poly to be taken offsite and disposed of
15:15	Removed Sample from Pump #HV-21
15:17	Removed Sample from Pump #HV-20
15:22	Removed Sample from Pump #LV-5
15:25	Removed Sample from Pump #LV-1
15:28	Removed Sample from Pump #LV-21
16:00	Left worksite
17:00	Finished documentation and end of shift

Total air sampled collected / analyzed=13
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White
06:30 to 17:00 less 30-minute lunch

Total Technician Hours: **10**

Senior Project Manager:
Sidney Carter

Total Senior Project Manager Hours: **0**

Vinson White
Sampling Technician

Advantage Environmental

Daily Project Log

Client: Environmental Quality Management **Project Name:** River St Water Front **Date:** 11/22/2017

Project Location: 1525 N River St Portland, OR **Client Project #** 30309.0047

Site Contact: Jerry Wade **Contractor Supervisor:** David Nelson **AEI Technician:** Sidney Carter

On-site contractor personnel that may be represented by air sampling: **PAS** = Jacob Johnson, Dave Nelson, Robert Barton, Ever Bonilla, Gary Brown, Brent Hardinger, Travis Harrison, Gary Reynolds / **AAC** = Kent Parker, Nick Maranda, Jeff Doggey, Mark Jeffers, Justin Scott, Matt Weisker, Brian Cosgrove / **EQM** = Jerry Wade, Joe Ficek, Jose Rodriguez, Tommy Smith, Eduardo Gonzalez, Mark Conway / **START** = Brittany Jeffries / **Pacific River** = Will Martinez, Shelby Clark

Personnel protective equipment utilized on site: Hard hats, safety vest, safety glasses, tyveks & 1/2 face negative pressure respirators

AEI equipment on site: LV Pumps LV-1, LV-5, LV-36, HV-20 & HV-21

Daily Weather: 53° F, 96% Humidity

Time	Observations
06:30	Morning Safety Meeting with all work crews and equipment operators
06:45	Had meeting with Jerry to remove Vinson White from EQM worksite
07:00	PAS installed more Geotech cloth on worksite for AAC
07:10	Placed Sample on Pump #HV-21 on Southeast side of trestle 1
07:12	Placed Sample on Pump #HV-20 at West-end of trestle 1
07:15	EQM moved long reach form trestle 1 to trestle 2 for staging
07:35	EQM began loading first box
07:45	AAC started unloading trestles from truck
08:15	EQM started loading 2nd box
08:15	Placed Sample on Pump #LV-36 on Brent Hardinger
08:17	Placed Sample on Pump #LV-5 on Jacob Johnson
08:20	Placed Sample on Pump #LV-1 on Mark Jeffers
08:30	AAC moving pilings into place
08:40	EQM loading metal into box
08:45	Removed Sample from Pump #LV-36
08:46	Placed Sample on Pump #LV-36 on Brent Hardinger
08:47	Removed Sample from Pump #LV-5
08:48	Placed Sample on Pump #LV-5 on Jacob Johnson
08:50	Removed Sample from Pump #LV-1
09:05	AAC having problems with piling and vibratory hammer
09:30	Work is stopping in order to refuel equipment
09:35	Inspected booms in water and took notice that logs appear to be stuck on the booms
09:40	Met with Jerry to show him logs and bring to his attention that there is debris in netting. Jerry is to have all debris removed next week
09:45	Jibri arrived onsite
10:00	EQM cleaning roadway using skid-steer with sweeper attachment
10:20	PAS leaving worksite for the day
10:25	Removed Sample from Pump #HV-21
10:27	Removed Sample from Pump #HV-20

Sidney Carter
Sampling Technician

Advantage Environmental

Daily Project Log

Time	Observations
10:30	Removed Sample from Pump #LV-36
10:30	Worksite is being secured
10:32	Removed Sample from Pump #LV-5
11:30	Finished documentation

Total air sampled collected / analyzed=7
Total blank air samples analyzed=2
No injuries reported

Technician:
Vinson White

Total Technician Hours: **0**

Senior Project Manager:
Sidney Carter
06:30 to 11:30

Total Senior Project Manager Hours: **5**

Sidney Carter
Sampling Technician