TRIP REPORT

Price Street Asbestos
Port Hadlock-Irondale, Jefferson County, Washington
Contract No.: 68HE0720D0005
Task Order No.: 68HE0720F0147-09

Prepared for:

U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, WA 98101

Prepared by:

Weston Solutions, Inc.
1011 SW Klickitat Way, Suite 212
Seattle, WA 98134

November 2021

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1 SITE DETAILS

Table 1-1 Site Information

Site Name:	Price Street Asbestos
Location:	111 West Price Street Port Hadlock-Irondale, Jefferson County, WA 98339
Tax Parcel ID:	961805605
SSID	10TP
EPA ID	WAN001020665
Latitude, Longitude:	48.043625° North, 122.782766° West
Date(s) of Trip:	9/19 – 9/21/2021; 10/07/2021

Notes:
ID = Identification Number
SSID = Site/Spill Identification Code
EPA = U.S. Environmental Protection Agency

2 PURPOSE

The U.S. Environmental Protection Agency (EPA) performed an emergency response removal action at the Price Street Asbestos Site (Site) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. EPA activated Weston Solutions, Inc. (WESTON®), under Superfund Technical Assessment and Response Team (START) Contract No. 68HE0720D0005 and Task Order (TO) No. 68HE0720F0147, Subtask No. 09, to provide technical support and photographic documentation of the removal activities at a partially demolished mobile home with asbestos-containing materials (ACM) in Port Hadlock-Irondale, Jefferson County, Washington. The emergency response removal activities were conducted on September 20, 2021 and September 21, 2021.

The purpose of the Price Street Asbestos Site emergency response was to:

- Locate and contain potential pathways of ACM and presumed asbestos-containing material (PACM) originating from the Site;
- Excavate and secure contaminated demolition debris;
- Collect air samples and conduct real-time air monitoring at the perimeter of the Site;

- Prevent ACM/PACM migration downslope into Chimacum Creek; and
- Dispose of ACM and PACM.

This Trip Report includes the following attachments associated with the tasks outlined above:

- Attachment A – Photographic Documentation
- Attachment B – Data Validation and Laboratory Results
- Attachment C – Waste Disposal Documentation

3 PARTICIPATING ORGANIZATIONS

Table 3-1 Participating Organizations

Agency/Company	Contact Persons	Role
EPA	Eric Nuchims	Federal On-Scene Coordinator
START	Christopher Landrum	Field Team Lead
	Tana Jones	Field Team Member
ERRS	Pat Turina	Removal Manager
Jefferson County Public Health	Pinky Mingo	Director of Environmental Health and Water Quality
	Debra Murdock	Code Compliance Officer

Notes:
EPA = U.S. Environmental Protection Agency
START = Superfund Technical Assessment and Response Team
ERRS = Emergency and Rapid Response Services

4 BACKGROUND

Jefferson County Public Health (JCPH) received an initial complaint in 2014 of a partially demolished mobile home on a property at 111 West Price Street, Port Hadlock-Irondale, Washington (**Figure 1**). Since the filing of that complaint, inspectors issued violation notices in 2014 and 2019 to the property owner. On May 18, 2021, JCPH collected bulk material samples from the mobile home and confirmed the presence of chrysotile asbestos within the debris. As a result, JCPH issued an abatement order to the property owner who did not comply.

JCPH observed a significant decline of the property's condition during a summer 2021 visit. Inspectors were concerned about the instability of the mobile home debris and its potential to travel down the slope into Chimacum Creek as a result of degradation, weathering, and erosion. Chimacum Creek is a salmon-bearing stream known for spawning aggregations of Hood Canal summer-run chum salmon (*Oncorhynchus keta*), which is a threatened species protected under the Endangered Species Act (U.S. Fish and Wildlife Service, 2021).

In September 2021, JCPH requested assistance from EPA to abate and remove the partially demolished mobile home from the property. EPA visited the Site on September 17, 2021, and based on conditions observed, activated START and Emergency and Rapid Response Services (ERRS) contractors to conduct an emergency response removal action at the Site.

5 ESTABLISHMENT OF SITE SCREENING AND ACTION LEVELS

EPA determined site-specific screening and action levels for worker health and safety based on the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for asbestos, which recommends the use of a time-weighted average (TWA) of 0.1 fibers per cubic centimeter (f/cc) for respirable asbestos fibers. ERRS collected and managed personal air samples and associated results for workers who operated in the exclusion zone. Those results are not included as part of this report.

The action level for perimeter air sampling is based on the EPA Region 10 emergency action level of 0.01 f/cc (EPA, 2017). EPA developed this asbestos action level to be protective of workers and/or residents who could be exposed to airborne asbestos fibers.

Action levels for particulate monitoring were set at 1 milligram per cubic meter (mg/m^3) as a threshold for controlling ambient particulate matter size 2.5 micrometers (µm) ($PM_{2.5}$) or greater. Airborne particulate levels were monitored in real time using DustTrak DRX 8533 aerosol monitors.

6 HEALTH AND SAFETY

Site-specific safety plans were completed for emergency response activities, and daily safety meetings were conducted. During the emergency response, START continually monitored and evaluated that the level of personal protective equipment (PPE) used was appropriate for each site activity.

ERRS contractors in the exclusion zone utilized Level C PPE with a full-face air purifying respirator. Level D PPE was used in the support zone.

7 FIELD ACTIVITY

EPA, START, and ERRS, mobilized to the Site on September 19, 2021, and began emergency response removal activities on September 20, 2021.

EPA activities at the Site can be broadly categorized into the following functional areas:

- Site Setup and Overview
- Removal of Asbestos-Containing Debris
- Site Screening and Action Levels
- Air Sampling and Monitoring
- Final Site Inspection and Demobilization

Additional information for each of these categories is included in the following sections.

7.1 SITE SETUP AND OVERVIEW

The Site consists of a partially demolished mobile home on a 0.23-acre parcel located in a residential neighborhood. Additional residential properties are located immediately adjacent to the north and west of the Site. Parcels administered by the Washington Department of Fish and Wildlife are located immediately adjacent to the east. Chimacum Creek is located to the south and downgradient of the Site. The partially demolished mobile home is situated on the northern portion of the parcel.

Prior to assessment and removal activities, EPA established exclusion and contamination reduction

zones around the partially demolished mobile home. START stood up fixed air monitoring stations on the Site to co-locate air monitoring and air sampling instrumentation. Additional information about air monitoring and sampling can be found in Section 7.3.

7.2 REMOVAL OF ASBESTOS-CONTAINING DEBRIS

ACM in and around the partially demolished mobile home was observed to be intermingled with non-asbestos-containing building materials and debris. However, efforts to segregate the ACM from non-ACM were determined to be prohibitive as part of the scope of this emergency removal action. EPA decided that the intermingled debris would be considered PACM. Certain materials, including tires and metal, were segregated into individual piles and left onsite. Household Hazardous Waste (HHW) was segregated and transported off-site for disposal by JCPH.

To remove the PACM, ERRS utilized excavating equipment to transfer the debris into 20-yard roll-off boxes lined with 6-millimeter poly sheeting. During removal activities, water from an on-site tank was sprayed onto the debris to minimize dust and mitigate the potential release of asbestos fibers. Debris located on the steep slope near Chimacum Creek was removed by ERRS using shovels and hand tools.

7.3 AIR MONITORING AND SAMPLING

EPA used a combination of air monitoring and air sampling during removal activities to mitigate and document impacts to nearby residences. Air monitoring and sampling activities were conducted in accordance with the approved Sampling and Analysis Plan (WESTON, 2021). Locations of air stations and other Site features are depicted on **Figure 2**.

Air stations consisted of co-located DustTrak DRX 8533 aerosol monitors and air sampling pumps and media. Air stations were placed daily at three locations around the Site. To determine if contamination was migrating off-site, one station was placed downwind of the mobile home location. An upwind location was selected to demonstrate that any elevated downwind results were not a result of upwind conditions. In addition to the upwind and downwind locations, a third station was added perpendicular to the wind direction angled toward Price Street to be reflective of impacts to the nearest residential populations.

Table 7-1 presents the data collected from the three perimeter air monitoring stations. Results did not exceed the site-specific action level of 1 mg/m^3.

Table 7-1 Air Monitoring Data Summary

Air Station Location	Date	Location Description	$PM_{2.5}$ TWA (mg/m^3)	$PM_{2.5}$ Maximum (mg/m^3)	Run time (minutes)	Distance from Mobile Home (feet)
PSL1-0920	9/20/2021	Upwind	0.004	0.0163	376	30
PSL2-0920	9/20/2021	Crosswind	0.007	0.0200	379	40
PSL3-0920	9/20/2021	Downwind	0.009	0.0120	102*	70
PSL1-0921	9/21/2021	Upwind	0.006	0.0213	343	60
PSL2-0921	9/21/2021	Crosswind	0.006	0.0184	345	40
PSL3-0921	9/21/2021	Downwind	0.006	0.0167	352	80

Notes:
$PM_{2.5}$ = particulate matter size 2.5 micrometers
TWA = time-weighted average
mg/m^3 = milligrams per cubic meter
*DustTrak instrument at PSL3 on 9/20/21 had a shortened run time due to instrument error

Perimeter air samples were collected on 0.8 µm mixed-cellulose ester (MCE) filter cassettes using a high-volume sampling pump at a flow rate of approximately 10 liters per minute (L/min). The samples were collected over a 6-hour period to collect a representative sample.

Ten asbestos air samples (six exclusion zone perimeter and four laboratory quality control [QC] samples) were collected during the emergency response removal action. Sampling and analytical results are discussed further in Section 8.

7.4 FINAL SITE INSPECTION AND DEMOBILIZATION

Upon completion of removal activities, START and ERRS conducted final air monitoring and a site inspection on September 21, 2021. Following the site inspection, EPA, START, and ERRS personnel demobilized from the Site. On October 4, 2021, EPA returned to document the transportation of the remaining roll-off boxes for off-site disposal. START returned on October 7, 2021, to conduct final Site photographic documentation.

8 SAMPLING AND ANALYSIS

Perimeter air samples were submitted to Lab/Cor, Inc., a National Voluntary Laboratory Accreditation Program (NVLAP) asbestos fiber analysis-certified laboratory, for analysis under International Organization for Standardization (ISO) method 10312. This method determines the total fiber concentrations based on the flow rate of the sample and duration of the run time. If any air samples exceeded the site-specific action level of 0.01 f/cc or greater, they would be further analyzed using transmission electron microscopy (TEM) analysis to identify the presence and type of asbestos fibers.

Table 8-1 presents the analytical results of the exclusion zone perimeter air samples that were collected during Site activities. Results did not exceed the site-specific action level of 0.01 f/cc. The data validation summary and laboratory sample results can be found in Attachment B.

Table 8-1 Air Sampling Laboratory Results Summary

Air Station Location	Date	Location Description	Sample Number	Result (f/cc)
PSL1-0920	9/20/2021	Upwind	PSA-PSL1-20210920-11	<0.0020
PSL2-0920	9/20/2021	Crosswind	PSA-PSL2-20210920-11	<0.0021
PSL3-0920	9/20/2021	Downwind	PSA-PSL3-20210920-11	<0.0020
PSL1-0921	9/21/2021	Upwind	PSA-PSL1-20210921-11	<0.0022
PSL2-0921	9/21/2021	Crosswind	PSA-PSL2-20210921-11	<0.0022
PSL3-0921	9/21/2021	Downwind	PSA-PSL3-20210921-11	<0.0020

Notes:
< = less than
f/cc = fibers per cubic centimeter

9 WASTE AND DISPOSAL

Six roll-off boxes were removed from the Site and transported to the Greater Wenatchee Regional Landfill in Wenatchee, Washington. A summary of the removed materials is provided below in **Table 9-1**. ERRS Waste Disposal Documentation, including the CERCLA Off-Site Disposal Report and Waste Manifests, is provided in Attachment C.

Table 9-1 Total Materials Removed from the Site

Waste Stream	Medium	Volume
ACM and PACM	Solid Debris	120 CY
HHW	Paint Cans/Propane	6 paint cans One 1-pound camping propane cylinder

Notes:
ACM = asbestos-containing material
PACM = presumed asbestos-containing material
CY = cubic yards
HHW = Household Hazardous Waste

10 SUMMARY AND CONCLUSIONS

EPA completed an emergency response removal action to address asbestos contamination at an abandoned, partially demolished mobile home in Port Hadlock-Irondale, Washington. The partially demolished mobile home was located atop a steep slope adjacent to Chimacum Creek, a salmon-bearing stream. The debris was not stabilized, and ACM had the potential to be released at any time as a result of degradation, weathering, and erosion, potentially endangering human health and the environment.

EPA removed intermingled ACM and PACM demolition debris found on the Site. These materials were removed using excavators and hand tools and were encapsulated in roll-off boxes lined with plastic sheeting. Water was used for dust-suppression during the removal to minimize the potential for exposure or off-site migration of asbestos fibers. During removal activities, EPA conducted perimeter air monitoring to monitor the efficacy of dust suppression. Air sampling was conducted to document that on-site removal activities did not result in ACM migrating off-site and impacting nearby residents.

Six roll-off boxes were transported for off-site disposal at the Greater Wenatchee Regional Landfill in Wenatchee, Washington. Small quantities of HHW were removed by JCPH at the conclusion of Site activities. No additional response actions at the Site are anticipated at this time.

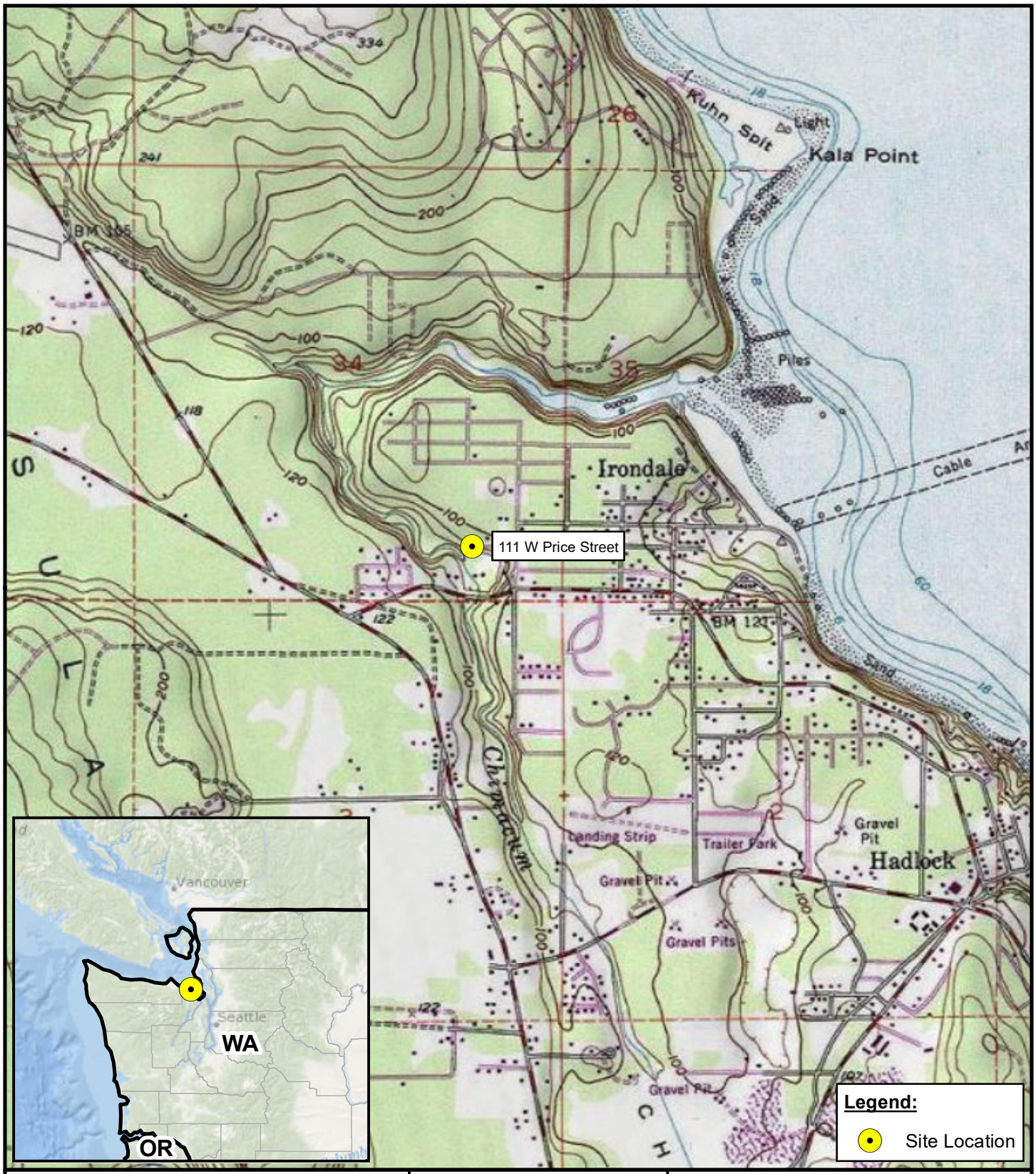
11 REFERENCES

U.S. Fish and Wildlife Service, 2021. *Species Profile for Chum salmon (Oncorhynchus keta)*. Accessed September 2021. Available at: https://ecos.fws.gov/ecp/species/8494.

U.S. Environmental Protection Agency (EPA, 2017). *Memorandum - Development of site-specific asbestos action levels for River Street Warehouse Fire*. May 20, 2017.

Weston Solutions, Inc. (WESTON, 2021). *Price Street Asbestos Sampling and Analysis Plan*. September 19, 2021.

SITE FIGURES



Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere
Datum: WGS 1984

Source:
Background: USGS USA Topo Maps (2013)
Inset: ESRI Ocean Basemap (2021)

0 0.5 1 Miles

N

Prepared for:
USEPA - Region 10

Task Order No.:
68HE0720F0147-09

Prepared By:
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FIGURE 1
SITE LOCATION MAP
PRICE STREET ASBESTOS
PORT HADLOCK-IRONDALE,
JEFFERSON COUNTY, WA 98339

Date: 11/4/2021

Path: EPA Region 10 - Documents\01_Project Site Folders\0060 Price Street Asbestos\Data Technical\Maps & Figures\Fig 1 Site Location Map.mxd

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere
Datum: WGS 1984

Source:
Background: ESRI World Imagery - Clarity (2021)
Inset: ESRI Ocean Basemap (2021)
Site Boundary: Washington Parcel Boundary (2020)

0 75 150 Feet

N

Prepared for:
USEPA - Region 10

Task Order No.:
68HE0720F0147-09

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FIGURE 2
SITE LAYOUT
PRICE STREET ASBESTOS
PORT HADLOCK-IRONDALE,
JEFFERSON COUNTY, WA 98339

Date: 11/4/2021

Path: EPA Region 10 - Documents\01_Project Site Folders\0060 Price Street Asbestos\Data Technical\Maps & Figures\Fig 2 Site Layout.mxd

ATTACHMENT A

Photographic Documentation

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 1	Date: 09/19/2021
Photo Coordinates	
Lat	48.04375
Long	-122.78257
Direction Photo Taken:	West
Description:	View of partially demolished mobile home perched atop steep slope leading into Chimacum Creek.

Photo No. 2	Date: 09/19/2021
Photo Coordinates	
Lat	48.04379
Long	-122.78267
Direction Photo Taken:	South
Description:	View of the partially demolished mobile home. The slope leading to Chimacum Creek is in the background.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 3	Date: 09/20/2021
Photo Coordinates	
Lat	48.04379
Long	-122.78229
Direction Photo Taken:	West
Description:	An air sampling and monitoring station was established downwind of removal activities.

Photo No. 4	Date: 09/20/2021
Photo Coordinates	
Lat	48.04396
Long	-122.78273
Direction Photo Taken:	South
Description:	Air sampling and monitoring station located crosswind of removal activities.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 5	Date: 09/20/2021
Photo Coordinates	
Lat	48.04381
Long	-122.78284
Direction Photo Taken:	East
Description:	Emergency and Rapid Response Services (ERRS) contractors in Level C personal protective equipment (PPE) wrapping presumed asbestos-containing material (PACM) into a roll-off box lined with plastic sheeting.

Photo No. 6	Date: 09/21/2021
Photo Coordinates	
Lat	48.04378
Long	-122.78283
Direction Photo Taken:	Southeast
Description:	ERRS contractor uses water for dust suppression to minimize release of asbestos fibers during removal activities.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 7	Date: 09/21/2021
Photo Coordinates	
Lat	48.04384
Long	-122.78250
Direction Photo Taken:	West

Description:

ERRS removes a section of vinyl sheet flooring and mastic containing chrysotile asbestos from the demolition debris into a roll-off box staged on site.

Photo No. 8	Date: 09/21/2021
Photo Coordinates	
Lat	48.04375
Long	-122.78278
Direction Photo Taken:	East

Description:

ERRS uses an excavator to remove PACM from the exclusion zone into a roll-off box.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 9	Date: 09/21/2021
Photo Coordinates	
Lat	48.04376
Long	-122.78243
Direction Photo Taken:	Down

Description:

ERRS collected household hazardous waste (HHW) found on site and staged it for pickup by Jefferson County Public Health. Contents included several paint cans and a camping propane cylinder.

Photo No. 10	Date: 09/21/2021
Photo Coordinates	
Lat	48.04367
Long	-122.78262
Direction Photo Taken:	West

Description:

ERRS uses an excavator to remove additional soil after initial removal of demolition debris was completed.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 11	Date: 09/21/2021
Photo Coordinates	
Lat	48.04384
Long	-122.78207
Direction Photo Taken:	Southwest
Description:	Site waste was collected in six 20-CY roll-off boxes staged for transport and disposal.

Photo No. 12	Date: 10/07/2021
Photo Coordinates	
Lat	48.04378
Long	-122.78256
Direction Photo Taken:	South
Description:	View of site at the conclusion of emergency removal actions after roll-off boxes were removed.

PHOTOGRAPH LOG

Project Name:	Site Location:	Project No.
Price Street Asbestos	Port Hadlock-Irondale, Washington	68HE0720F0147-09

Photo No. 13	Date: 10/07/2021
Photo Coordinates	
Lat	48.04375
Long	-122.78260
Direction Photo Taken:	West
Description:	View of site at the conclusion of emergency removal actions after roll-off boxes were removed.

Photo No. 14	Date: 10/07/2021
Photo Coordinates	
Lat	48.04377
Long	-122.78289
Direction Photo Taken:	East
Description:	View of site at the conclusion of emergency removal actions after roll-off boxes were removed.

ATTACHMENT B

Data Validation and Laboratory Results

DATA QUALITY ASSURANCE REVIEW

SITE NAME Price Street Asbestos ER

WORK ORDER NUMBER 20510.012.001.0060.00 CONTRACT NO. 68HE0720D0005

TASK ORDER NUMBER 68HE0721F0147 SDG NUMBER 210951

Weston Solutions, Inc. (WESTON®) has completed a QA review for Work Order Number 20510.012.001.0060.00; Price Street Asbestos Emergency Response Project. Samples were analyzed for asbestos fibers via ISO-10312 Transmission Electron Microscopy (TEM). Samples were submitted to Lab/Cor, Inc. a NVLAP Accredited lab (Lab Code 101920-0) in compliance with ISO/IEC 17025.

SAMPLE NUMBERS

PSA-PSL1-20210920-11	PSA-PSL1-20210920-22	PSA-PSL1-20210921-11
PSA-PSL1-20210921-22	PSA-PSL2-20210920-11	PSA-PSL2-20210920-23
PSA-PSL2-20210921-11	PSA-PSL2-20210921-23	PSA-PSL3-20210920-11
PSA-PSL3-20210920-11		

This data package was validated to determine if Quality Control (QC) specifications were achieved, following method guidelines and *USEPA TEM Validation Process Guidelines For Asbestos Data Review* (October, 2016) Specific data qualifications are listed in the following subsections.

REVIEWER Jeffrey Wright DATE 10/20/2021

DATA QUALIFIER AND REASON CODE DEFINITIONS

Data Qualifier Definitions and Reason Code Definitions were supplied by the Office of Superfund Remediation and Technology Innovation (OSRTI), United States Environmental Protection Agency (USEPA) and are included in the TEM Validation process Guidelines for Asbestos Data Review.

Data Qualifier Definitions

UJ - The non-detect result may be inaccurate or imprecise due to the quality of the data generated because certain QC criteria were not met.

J - The result is estimated. The associated numerical value is an approximation.

R - The sample results are rejected due to serious deficiencies.

Reason Code Definitions

MC - Structure/fiber counts and recorded structure dimensions may be inaccurate due to improper or infrequent scope alignment and/or magnification calibrations.

IC - Identification by elemental composition or diffraction pattern may be inaccurate due to improper or infrequent EDXA or camera constant calibration.

PA - Structure/fiber counts and reported concentrations may be inaccurate due to imporoper or infrequent calibration of the plasma asher.

DR - The reported concentrations or structure/fiber identification may be inaccurate due to infrequent or discordant intra- and/or inter-analyst, laboratory duplicate, and/or reference material analyses.

FB - The reported concentration may be inaccurate due to the presence of analyte structures/fibers in the associate field blank.

LB - The reported concentration may be inaccurate due to the presence of analyte structures/fibers in the associate laboratory blank.

SC - The reported concentration may be inaccurate due to the condition of samples upon receipt at the laboratory and/or improper storage prior to sample preparation and/or analysis.

DL - The number of grid openings analyzed is insufficient to meet the required limit of detection (LOD).

ID - The asbestos identification and concentrations may be inaccurate because the recorded structure types are not consistent with those described in TEM SOW and/or method.

TEM VALIDATION SUMMARY

1. Data Package Inventory and Sample Receipt:

The data package included a narrative, Chain-of-Custody (COC) record, EDD files, raw data (bench sheets), and QC samples. The samples were properly packaged, sealed, undamaged, and labeled upon receipt at the laboratory. The COC record was reviewed and found to be acceptable. 10 samples were listed on COC No. 10-092221-122022-0002 and all samples were analyzed by the laboratory.

2. Sample Preparation:

Samples were prepared and analyzed per method requirements as noted by the laboratory.

3. Equipment Calibration and Performance Checks (i.e., daily microscope alignment, screen magnification, EDS calibration and sensitivity checks):

The required daily microscope alignments and monthly calibration of the commonly used RI oils was performed and recorded on the documentation provided prior to the validation process.

4. Analytical Sensitivity:

A sufficient number of grid openings have been analyzed to achieve the required analytical sensitivity and/or the appropriate stopping rule was invoked.

5. Structure Recording and Identification:

No structures were detected in this sample delivery group.

6. Blank Analysis:

Four field blanks (PSA-PSL1-20200920-22, PSA-PSL1-20200921-22, PSA-PSL2-20200920-23 and PSA-PSL2-20210921-23) and one field blank SAL-PSL01-20201029-33 and one lab blank were analyzed and reported within this sample set. There were no structures reported.

7. Recount/Repreparation/Replicate Analysis:

Sample PSA-PSL1-20210920-11 underwent replicate analysis. No structures were detected, which matched the results in the original analysis.

7. Laboratory Modifications:

No modifications noted.

8. Overall Assessment:

The deliverable was found to be complete and accurate. No qualification of the data is necessary.

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Phone: (206) 781-0155
http://www.labcor.net

ISO 10312 - Direct Final Report

Job Number: 210951
Client: Weston Solutions
Address: 1011 SW Klickitat Way
#212
Seattle, WA 98134
Project Name: Price Street Asbestos ER
Project No.:
PO Number:
Sub Project:
Reference No.:

Report Number: 210951R02
Report Date: 10/15/2021

Report Note: REVISED REPORT: to update the client address.

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample Number	Analysis	Analysis Notes	Date Received:
210951 - S1	PSA-PSL1-20210920-11 -	ISO 10312 - Direct		9/24/2021
210951 - S2	PSA-PSL1-20210920-22 -	ISO 10312 - Direct		9/24/2021
210951 - S3	PSA-PSL1-20210921-11 -	ISO 10312 - Direct		9/24/2021
210951 - S4	PSA-PSL1-20210921-22 -	ISO 10312 - Direct		9/24/2021
210951 - S5	PSA-PSL2-20210920-11 -	ISO 10312 - Direct		9/24/2021
210951 - S6	PSA-PSL2-20210920-23 -	ISO 10312 - Direct		9/24/2021
210951 - S7	PSA-PSL2-20210921-11 -	ISO 10312 - Direct		9/24/2021
210951 - S8	PSA-PSL2-20210921-23 -	ISO 10312 - Direct		9/24/2021
210951 - S9	PSA-PSL3-20210920-11 -	ISO 10312 - Direct		9/24/2021
210951 - S10	PSA-PSL3-20210921-11 -	ISO 10312 - Direct		9/24/2021
210951 - B1	Blank -	ISO 10312 - Direct		9/24/2021

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Phone: (206) 781-0155
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ISO 10312 - Direct Final Report

Job Number: 210951
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Report Date: 10/15/2021

ISO 10312 - Direct

Upon sample receipt the samples and the associated packaging were checked to ensure that samples were not packaged in untreated polystyrene foam (peanuts), vermiculite, paper shreds, or excelsior packing materials; and samples were properly sealed and undamaged, neither shipped nor stored with bulk samples, and were labeled upon receipt at the laboratory. Any items of note were recorded on the chain of custody before login commenced, this included the Project name and method requested and turn around time. These were all applied from emails with Jeff Wright prior to sample submission. All edits are part of the chain of custody record (210951_coc.pdf).

Preparation and analysis of the above samples was conducted in accordance with the ISO method 10312 (Direct) for the identification of asbestos. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

Some of the samples had a slight discoloration (particulate load) present at sample preparation. There was no loose debris in the cassette or on the filter and no visible particulate shift occurred during prep.

TEM analysis was performed using a Hitachi 7000FA transmission electron microscope equipped with a Thermo Fisher X ray Spectral analyzer, with a Silicon Drift Detector. The microscope is also equipped with digital CCD cameras to capture diffraction patterns and brightfield images. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

The air samples were analyzed at an approximate screen magnification of 20,000x for asbestos structures greater than 0.5 micrometer length, at any width with an aspect ratio of 3:1. The analyst records the quality of each grid preparation in the database.
The count categories used on this report are the standard ISO 10312 categories:

Primary Asbestos Structures: Counts all primary structures containing identified asbestos. Included ISO Structure Classes – F, B, CC, MC, CD and MD.
Total Asbestos Structures: Counts all total/component structures classified as asbestos. Included ISO Structure Classes – F, B, MF, MB, CF, CB, MC, CC, MR and CR.
Total Amphibole Structures: Counts all total/component structures classified as amphibole asbestos. Included ISO Structure Classes – F, B, MF, MB, CF, CB, MC, CC, MR and CR.
Total Chrysotile Structures: Counts all total/component structures classified as chrysotile asbestos. Included ISO Structure Classes – F, B, MF, MB, CF, CB, MC, CC, MR and CR.
Asbestos Structures >5um and 3:1: Counts all primary structures containing identified asbestos that are >5µm in length, of any width with an aspect ratio >3:1. Included ISO Structure Classes – F, B, CC, MC, CD and MD.
Asbestos Structures > 5um and 5:1 : Counts all primary structures containing identified asbestos that are >5µm in length, of any width with an aspect ratio >5:1. Included ISO Structure Classes – F, B, CC, MC, CD and MD.
Asbestos Fibers and Bundles > 5um and 3:1: Counts all total/component fiber and bundle structures classified as asbestos that are >5µm in length, of any width with an aspect ratio >3:1. Included ISO Structure Classes – F, B, MF, MB, CF, and CB.
Asbestos Fibers and Bundles > 5um and 5:1: Counts all total/component fiber and bundle structures classified as asbestos that are >5µm in length, of any width with an aspect ratio >5:1. Included ISO Structure Classes – F, B, MF, MB, CF, and CB.
PCM Equivalent Structures-ISO: Counts all primary structures that are >5µm in length, have a width between 0.2µm and 3µm, and have an aspect ratio >3:1. Includes ISO Structure Classes – F, B, MD, CD, MC, and CC.
PCM Equivalent Fibers-ISO: Counts all total/component fibers and bundles that are >5µm in length, have a width between 0.2µm and 3µm, and have an aspect ratio >3:1. Includes ISO Structure Classes – F, B, MF, MB, CF and CB.

The customer has requested a modification to the ISO level confidence limits. The ISO 10312 method utilizes a statistical concentration adjustment based on a 1-sided Poisson interval when fewer than four structures are detected. The customer has requested a modification to these limits where 0=0, 1=1, 2=2, etc.

QC Findings:
Equipment – all equipment maintenance schedules were adhered to for the duration of this project. All of the required equipment documentation is provided as part of the final data package.

Analysis – All quality control (QC) analyses were within limits. An analyst replicate was performed for this set of samples. This quality control sample was a replicate (same grid openings analyzed, same analyst from original). The assigned replicate QC for this data set was S1 (PSA -PSL1-20210920-11). This analysis passed the QC criteria, no structures were found on either analysis. Results of this analysis are found on the QC final report – Q210951aR01_20211011_Final_ISO10312D.pdf.

Lab/Cor, Inc.
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ISO 10312 - Direct Final Report

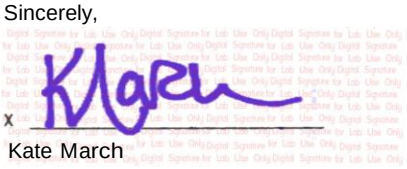
Job Number: 210951
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Report Date: 10/15/2021

Disclaimer The results reported relate only to the samples tested or analyzed; the laboratory is not responsible for data collected by personnel who are not affiliated with the laboratory. Results reported in both structures/cm3 and structures/mm2 are dependent on the sample volume and area. These parameters are measured and recorded by non-laboratory personnel and are not covered by the laboratory's accreditation. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,



Kate March
Quality Control Officer

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No.: S1
Client Sample No.: PSA-PSL1-20210920-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 4020
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0019952

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	< 0.002	0 - 0.0074 - Poisson	0	
Total Asbestos Structures	0	< 0.002	0 - 0.0074 - Poisson		0
Total Amphibole Structures	0	< 0.002	0 - 0.0074 - Poisson		0
Total Chrysotile Structures	0	< 0.002	0 - 0.0074 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.002	0 - 0.0074 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.002	0 - 0.0074 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.002	0 - 0.0074 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.002	0 - 0.0074 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.002	0 - 0.0074 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.002	0 - 0.0074 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S2
Client Sample No.: PSA-PSL1-20210920-22
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000
SH	10/7/2021	Hitachi 7000FA	20000

Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.12
Analytical Sens. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Total Amphibole Structures	0	Not Applicable	Not Applicable		0
Total Chrysotile Structures	0	Not Applicable	Not Applicable		0
Asbestos Structures >5um and 3:1	0	Not Applicable	Not Applicable	0	
Asbestos Structures > 5um and 5:1	0	Not Applicable	Not Applicable	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	Not Applicable	Not Applicable		0
Asbestos Fibers and Bundles > 5um and 5:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No.: S3
Client Sample No.: PSA-PSL1-20210921-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 3643
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0022017

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0022	0 - 0.0081 - Poisson	0	
Total Asbestos Structures	0	< 0.0022	0 - 0.0081 - Poisson		0
Total Amphibole Structures	0	< 0.0022	0 - 0.0081 - Poisson		0
Total Chrysotile Structures	0	< 0.0022	0 - 0.0081 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.0022	0 - 0.0081 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.0022	0 - 0.0081 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.0022	0 - 0.0081 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0022	0 - 0.0081 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0022	0 - 0.0081 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.0022	0 - 0.0081 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S4
Client Sample No.: PSA-PSL1-20210921-22
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.12
Analytical Sens. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Total Amphibole Structures	0	Not Applicable	Not Applicable		0
Total Chrysotile Structures	0	Not Applicable	Not Applicable		0
Asbestos Structures >5um and 3:1	0	Not Applicable	Not Applicable	0	
Asbestos Structures > 5um and 5:1	0	Not Applicable	Not Applicable	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	Not Applicable	Not Applicable		0
Asbestos Fibers and Bundles > 5um and 5:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No.: S5
Client Sample No.: PSA-PSL2-20210920-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 3870
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0020726

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	< 0.0021	0 - 0.0076 - Poisson	0	
Total Asbestos Structures	0	< 0.0021	0 - 0.0076 - Poisson		0
Total Amphibole Structures	0	< 0.0021	0 - 0.0076 - Poisson		0
Total Chrysotile Structures	0	< 0.0021	0 - 0.0076 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.0021	0 - 0.0076 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.0021	0 - 0.0076 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.0021	0 - 0.0076 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0021	0 - 0.0076 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0021	0 - 0.0076 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.0021	0 - 0.0076 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S6
Client Sample No.: PSA-PSL2-20210920-23
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.12
Analytical Sens. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Total Amphibole Structures	0	Not Applicable	Not Applicable		0
Total Chrysotile Structures	0	Not Applicable	Not Applicable		0
Asbestos Structures >5um and 3:1	0	Not Applicable	Not Applicable	0	
Asbestos Structures > 5um and 5:1	0	Not Applicable	Not Applicable	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	Not Applicable	Not Applicable		0
Asbestos Fibers and Bundles > 5um and 5:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No.: S7
Client Sample No.: PSA-PSL2-20210921-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 3677
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0021814

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0022	0 - 0.008 - Poisson	0	
Total Asbestos Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Total Amphibole Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Total Chrysotile Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.0022	0 - 0.008 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.0022	0 - 0.008 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.0022	0 - 0.008 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0022	0 - 0.008 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0022	0 - 0.008 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.0022	0 - 0.008 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S8
Client Sample No.: PSA-PSL2-20210921-23
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.12
Analytical Sens. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Total Amphibole Structures	0	Not Applicable	Not Applicable		0
Total Chrysotile Structures	0	Not Applicable	Not Applicable		0
Asbestos Structures >5um and 3:1	0	Not Applicable	Not Applicable	0	
Asbestos Structures > 5um and 5:1	0	Not Applicable	Not Applicable	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	Not Applicable	Not Applicable		0
Asbestos Fibers and Bundles > 5um and 5:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No.: S9
Client Sample No.: PSA-PSL3-20210920-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 3963
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0020239

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	< 0.002	0 - 0.0075 - Poisson	0	
Total Asbestos Structures	0	< 0.002	0 - 0.0075 - Poisson		0
Total Amphibole Structures	0	< 0.002	0 - 0.0075 - Poisson		0
Total Chrysotile Structures	0	< 0.002	0 - 0.0075 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.002	0 - 0.0075 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.002	0 - 0.0075 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.002	0 - 0.0075 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.002	0 - 0.0075 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.002	0 - 0.0075 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.002	0 - 0.0075 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S10
Client Sample No.: PSA-PSL3-20210921-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 3677
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0021814

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	< 0.0022	0 - 0.008 - Poisson	0	
Total Asbestos Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Total Amphibole Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Total Chrysotile Structures	0	< 0.0022	0 - 0.008 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.0022	0 - 0.008 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.0022	0 - 0.008 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.0022	0 - 0.008 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0022	0 - 0.008 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0022	0 - 0.008 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.0022	0 - 0.008 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

La /Cor Sample No.: B1
Client Sample No.: Blank
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/6/2021	Hitachi 7000FA	20000

Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.12
Analytical Sens. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Total Amphibole Structures	0	Not Applicable	Not Applicable		0
Total Chrysotile Structures	0	Not Applicable	Not Applicable		0
Asbestos Structures >5um and 3:1	0	Not Applicable	Not Applicable	0	
Asbestos Structures > 5um and 5:1	0	Not Applicable	Not Applicable	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	Not Applicable	Not Applicable		0
Asbestos Fibers and Bundles > 5um and 5:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Reviewed by:

x

Kate March
Quality Control Officer

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Raw Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER
Project No.:

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No: S1
Client Sample No: PSA-PSL1-20210920-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C51				NSD								
G1	2	C52				NSD								
G2	3	F44				NSD								
G2	4	C52				NSD								

Lab/Cor Sample No: S2
Client Sample No: PSA-PSL1-20210920-22
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C31				NSD								
G1	2	C32				NSD								
G1	3	E31				NSD								
G1	4	C42				NSD								
G1	5	E41				NSD								
G2	6	C42				NSD								
G2	7	E41				NSD								
G2	8	E42				NSD								
G2	9	F41				NSD								
G2	10	F42				NSD								

Lab/Cor Sample No: S3
Client Sample No: PSA-PSL1-20210921-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C31				NSD								
G1	2	C32				NSD								
G2	3	F42				NSD								
G2	4	G41				NSD								

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Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No: S4
Client Sample No: PSA-PSL1-20210921-22
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F34				NSD								
G1	2	G33				NSD								
G1	3	G34				NSD								
G1	4	F42				NSD								
G1	5	G41				NSD								
G2	6	F44				NSD								
G2	7	G43				NSD								
G2	8	G44				NSD								
G2	9	G51				NSD								
G2	10	G52				NSD								

Lab/Cor Sample No: S5
Client Sample No: PSA-PSL2-20210920-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F41				NSD								
G1	2	F42				NSD								
G2	3	E41				NSD								
G2	4	F42				NSD								

Lab/Cor Sample No: S6
Client Sample No: PSA-PSL2-20210920-23
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F42				NSD								
G1	2	G41				NSD								
G1	3	G42				NSD								
G1	4	G43				NSD								
G1	5	G44				NSD								
G2	6	F41				NSD								
G2	7	F42				NSD								
G2	8	G41				NSD								
G2	9	F43				NSD								
G2	10	F44				NSD								

Lab/Cor Sample No: S7
Client Sample No: PSA-PSL2-20210921-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C44				NSD								
G1	2	C51				NSD								
G2	3	E43				NSD								
G2	4	F41				NSD								

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ISO 10312 - Direct Raw Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Lab/Cor Sample No: S8
Client Sample No: PSA-PSL2-20210921-23
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C31				NSD								
G1	2	C33				NSD								
G1	3	C34				NSD								
G1	4	C43				NSD								
G1	5	C44				NSD								
G2	6	F43				NSD								
G2	7	F44				NSD								
G2	8	G43				NSD								
G2	9	G44				NSD								
G2	10	H43				NSD								

Lab/Cor Sample No: S9
Client Sample No: PSA-PSL3-20210920-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F51				NSD								
G1	2	F52				NSD								
G2	3	C41				NSD								
G2	4	C42				NSD								

Lab/Cor Sample No: S10
Client Sample No: PSA-PSL3-20210921-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	E41				NSD								
G1	2	F42				NSD								
G2	3	C51				NSD								
G2	4	C52				NSD								

Lab/Cor Sample No: B1
Client Sample No: Blank
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F43				NSD								
G1	2	F44				NSD								
G1	3	G43				NSD								
G1	4	G44				NSD								
G1	5	H43				NSD								
G2	6	G34				NSD								
G2	7	G42				NSD								
G2	8	H41				NSD								
G2	9	H42				NSD								
G2	10	H43				NSD								

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ISO 10312 - Direct Raw Data - Final Report

Job Number: 210951 SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: 210951R02
Date Received: 9/24/2021

Count Categories					
AFB>5	Asbestos Fibers and Bundles > 5um and 5:1	AFB>5, 3:1	Asbestos Fibers and Bundles > 5um and 3:1	AS>5	Asbestos Structures > 5um and 5:1
AS>5, 3:1	Asbestos Structures >5um and 3:1	PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAmpSt	Total Amphibole Structures	TAS	Total Asbestos Structures
TChrysStr	Total Chrysotile Structures				

Reviewed by:

Kate March
Quality Control Officer

Lab/Cor, Inc. Prep Verification Sheet - Manual

Job 210951 SEA

Weston Solutions

Printed: 9/24/2021 12:27:01 PM

Project: Price Street Asbestos

Turn Around Time: 10 days

LC ID	Client Number - Sample Description	MeasNol	Purpose
S1	PSA-PSL1-20210920-11	4020	LV'
S2	PSA-PSL1-20210920-22	OL	'-""
S3	PSA-PSU-20210921-11	3643	LV
S4	PSA-PSL1-20210921-22	0	L -...../
S5	PSA-PSL2-20210920-11	3870	L''v
S6	PSA-PSL2-20210920-23	0	L 'V
S7	PSA-PSL2-20210921-11	3677	LV
S8	PSA-PSL2-20210921-23	OL	V
S9	PSA-PSL3-20210920-11	3963	L V
S10	PSA-PSL3-20210921-11	3677	LV
B1	Blank	0	L ,

Prep 1	Prep 1 Date	Prep 2	Prep 2 Date	Prep 3	Prep 3 Date	Samp Frac Part Load
5b tats						

Employee Signature for Verification

Date 10/5/21

Analyze Blank as Q210003-S58 ✓ 10/6/21

1 s' 3 grids

S2, 4 6, 7, 8, 10 2 grids

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Completed QC Report

5/1/2021 - 10/15/2021

A Professional Service Corporation in the Northwest

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QC Job Number	Sample Num	Analyst Name	Date Done	QC Analyst Name	Analysis Date	Original Structures	Original Weight %	QC Structures	QC Weight%	Passed	Pass/Fail Precision/Accuracy	R	LWL UWL	LAL UAL	Accuracy Lower Upper
ISO		**Duplicate**													
Q210415a	S9		6/8/2021	SH	6/2/2021	0		0		☑	PASS	0.000			

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ISO 10312 - Direct Final Report

Job Number: Q210951a
Client: Weston Solutions
Address: 190 Queen Anne Ave NSuite 200
Seattle, WA 98109-4926
Project Name: Price Street Asbestos ER
Project No.:
PO Number:
Sub Project:
Reference No.:

Report Number: Q210951aR01
Report Date: 10/11/2021

Report Note: REPLICATE ANALYSIS, Same Grid Openings

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample Number	Analysis	Analysis Notes	Date Received:
Q210951a - S1	PSA-PSL1-20210920-11 -	ISO 10312 - Direct		9/24/2021

ISO 10312 - Direct

Preparation and analysis of the above samples was conducted in accordance with the ISO method 10312 (Direct) for the identification of asbestos. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

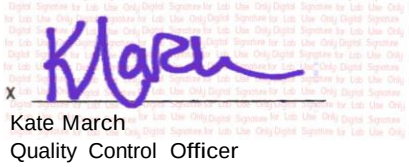
TEM analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The air samples were analyzed at an approximate screen magnification of 20,000x for asbestos structures greater than 0.5 micrometer lengths. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

Disclaimer

The results reported relate only to the samples tested or analyzed; the laboratory is not responsible for data collected by personnel who are not affiliated with the laboratory. Results reported in both structures/cm3 and structures/mm2 are dependent on the sample volume and area. These parameters are measured and recorded by non-laboratory personnel and are not covered by the laboratory's accreditation. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,



Kate March
Quality Control Officer

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ISO 10312 - Direct Summary Data - Final Report

Job Number: Q210951a SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER

Report Number: Q210951aR01
Date Received: 9/24/2021

Lab/Cor Sample No.: S1
Client Sample No.: PSA-PSL1-20210920-11
Description:

Analyst(s)	Analysis Date	Microscope	Magnification
SH	10/7/2021	Hitachi 7000FA	20000

Volume (L) : 4020
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.012
Area Analyzed (mm2) : 0.048
Analytical Sens. (struc/cc) : 0.0019952

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.002	0.006 - 0.0074 - Poisson	0	
Total Asbestos Structures	0	< 0.002	0.006 - 0.0074 - Poisson		0
Total Amphibole Structures	0	< 0.002	0.006 - 0.0074 - Poisson		0
Total Chrysotile Structures	0	< 0.002	0.006 - 0.0074 - Poisson		0
Asbestos Structures >5um and 3:1	0	< 0.002	0.006 - 0.0074 - Poisson	0	
Asbestos Structures > 5um and 5:1	0	< 0.002	0.006 - 0.0074 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 3:1	0	< 0.002	0.006 - 0.0074 - Poisson		0
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.002	0.006 - 0.0074 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.002	0.006 - 0.0074 - Poisson	0	
PCM Equivalent Fibers-ISO	0	< 0.002	0.006 - 0.0074 - Poisson		0

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Reviewed by:

x _____

Kate March
Quality Control Officer

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312 - Direct Raw Data - Final Report

Job Number: Q210951a SEA
Client: Weston Solutions
Project Name: Price Street Asbestos ER
Project No.:

Report Number: Q210951aR01
Date Received: 9/24/2021

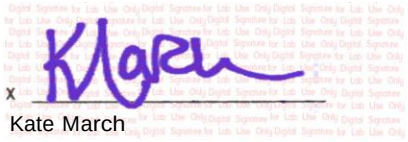
Lab/Cor Sample No: S1
Client Sample No: PSA-PSL1-20210920-11
Description:

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C51				NSD							
G1	2	C52				NSD							
G2	3	F54				NSD							
G2	4	C52				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and 5:1	AFB>5, 3:1	Asbestos Fibers and Bundles > 5um and 3:1	AS>5	Asbestos Structures > 5um and 5:1
AS>5, 3:1	Asbestos Structures >5um and 3:1	PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAmpSt	Total Amphibole Structures	TAS	Total Asbestos Structures
TChrysStr	Total Chrysotile Structures				

Reviewed by:



Kate March
Quality Control Officer

k-factor Calibration

SRM 2063a (Revision# 9)

			Signature:		Date:	
Date:	8/11/2021		Microscope:	Hitachi 7000FA		
Analyst:	SH					

Fill in Shaded Cells ONLY! Just record the Peak Area of each peak of interest. Instrument automatically subtracts the background.

Spectra Number	Mg	Si	Ca	Fe		
1	1.08	1.00	1.25	1.71		
2	1.13	1.00	1.25	1.73		
3	1.22	1.00	1.44	1.80		
4	1.28	1.00	1.50	2.00		
5	1.07	1.00	1.22	1.67		
Average	1.16	1.00	1.33	1.78		
Standard Deviation	0.09	0.00	0.13	0.13		
2s	0.18	0.00	0.26	0.26		
STDEV Pass/Fail	Fail	Pass	Fail	Fail		
Sensitivity (Mg:Fe)	0.65					
Pass/Fail	PASS		PASS			
Relative Limits	Mg		Ca	Fe		
	Pass		Pass	Pass		

Sensitivity (Mg:Fe) values greater than 1.5 are failed. Instrument must be taken out of operation, serviced and k-factor calibrations redone before instrument may be place back into service.

SRM 2063a Raw data						
Spectra Number		Mg	Si	Ca	Fe	
1	Background	0	0	0	0	
F65629SP	Net Area	26816	92024	34318	23513	
	Counts - Background	26816	92024	34318	23513	
	Isi/Ia	3.4316826	1	2.681508246	3.9137498	
	Ca/Csi	0.3145225	1	0.466456196	0.4364641	
	k-factor	1.08	1.00	1.25	1.71	
2	Background	0	0	0	0	
F65630SP	Net Area	25111	90517	33761	22789	
	Counts - Background	25111	90517	33761	22789	
	Isi/Ia	3.6046752	1	2.681111341	3.9719602	
	Ca/Csi	0.3145225	1	0.466456196	0.4364641	
	k-factor	1.13	1.00	1.25	1.73	
3	Background	0	0	0	0	
F65631SP	Net Area	23368	90565	29406	21935	
	Counts - Background	23368	90565	29406	21935	
	Isi/Ia	3.8755991	1	3.079813643	4.1287896	
	Ca/Csi	0.3145225	1	0.466456196	0.4364641	
	k-factor	1.22	1.00	1.44	1.80	
4	Background	0	0	0	0	
F65632SP	Net Area	22314	90668	28210	19794	
	Counts - Background	22314	90668	28210	19794	
	Isi/Ia	4.0632787	1	3.214037575	4.58058	
	Ca/Csi	0.3145225	1	0.466456196	0.4364641	
	k-factor	1.28	1.00	1.50	2.00	
5	Background	0	0	0	0	
F65633SP	Net Area	26911	91691	35187	23935	
	Counts - Background	26911	91691	35187	23935	
	Isi/Ia	3.4071941	1	2.605820331	3.8308335	
	Ca/Csi	0.3145225	1	0.466456196	0.4364641	
	k-factor	1.07	1.00	1.22	1.67	

Hitachi 7000FA Quarterly Beam Dose Check

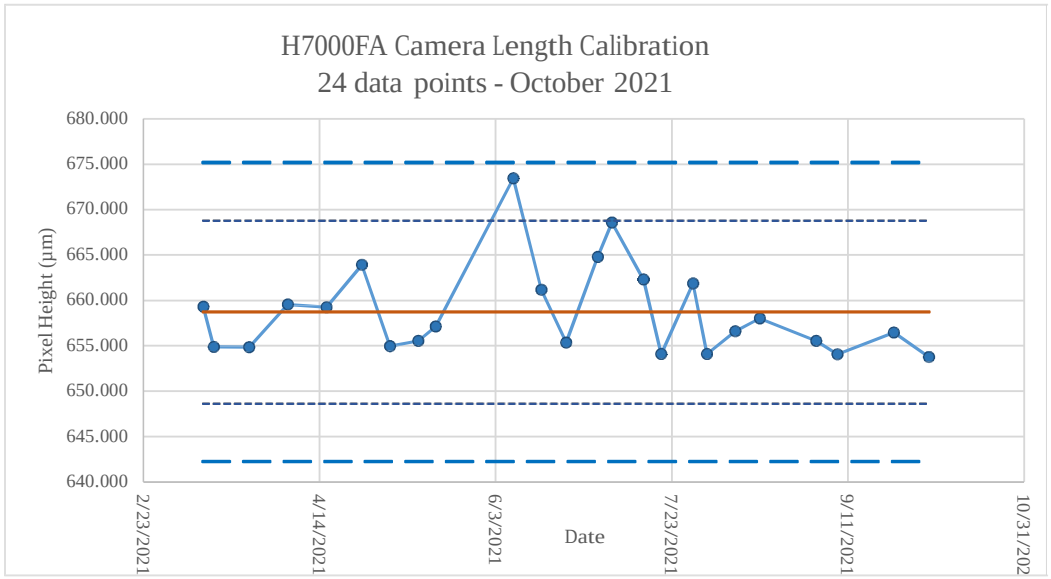
Check that each fibril diffraction pattern visible for 15 seconds (Y/N in each column)

Date	Analyst	Fibril 1 Visible?	Fibril 2 Visible?	Fibril 3 Visible?	Fibril 4 Visible?	Fibril 5 Visible?	Fibril 6 Visible?	Fibril 7 Visible?	Fibril 8 Visible?	Fibril 9 Visible?	Fibril 10 Visible?	Diff. #	Mg:Si Res Check: Mg:Si Ratio (P/F)	Spectra #
1/7/2016	JH							Y	Y	Y	Y	F46498DF	P	F46499SP
4/29/2016	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F48754DF	P	F48753SP
7/27/2016	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F51291DF	P	F51292SP
10/7/2016	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F51779DF	P	F51779SP
1/9/2017	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F52341DF	P	F52340SP
6/13/2017	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F53476DF	P	F53477SP
7/27/2017	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F53848DF	P	F53849SP
11/3/2017	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F54696DF	P	F54696SP
1/4/2018	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F55276DF	P	F55276SP
4/3/2018	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F55788DF	P	F55788SP
7/2/2018	SL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F56422DF	P	F56422SP
10/8/2018	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F57246DF	P	F56422SP
1/11/2019	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F57807DF	P	F57807SP
4/1/2019	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F58406DF	P	F58406SP
10/14/2019	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F59661DF	P	F59661SP
2/18/2020	SH	Y	Y	Y	Y	Y	Y	Y	Y	y	Y	F60173DF	P	F60173SP
4/8/2020	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F60538DF	P	F60538SP
11/24/2020	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F62511DF	P	F62511SP
1/5/2021	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F62657DF	P	F62657SP
4/5/2021	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F63520DF	P	F63520SP
7/15/2021	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F65359DF	P	F65359SP
10/6/2021	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	F65545DF	P	F65545SP

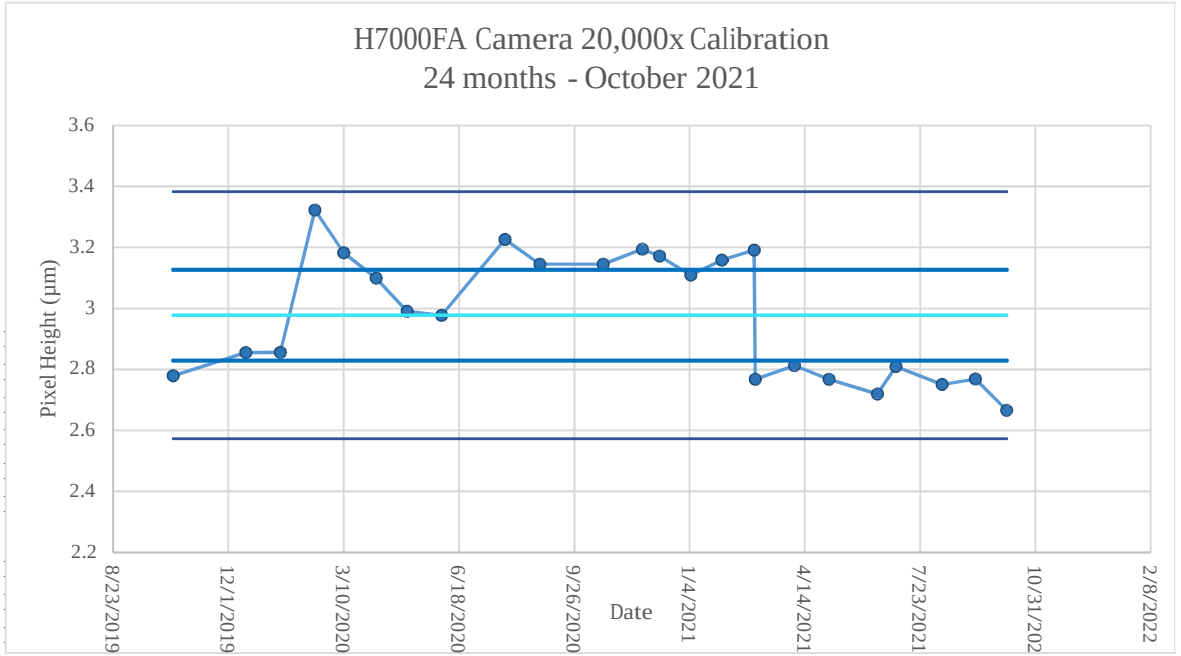
HITACHI MnKa Peak Resolution Calibration

	** - New Thermo SDD detector installed ~ Feb 20 2013					
Date	Analyst	EDS	Resolution	Std Dev	Std Dev (2s)	Pass/Fail
			(eV)			
1/9/2017	SL	F52342	131.33	4.805492	9.610984	Pass
4/7/2017	JH	F52990	129.88	4.793601	9.587201	Pass
6/1/2017	JH	F53351	133.83	4.769335	9.53867	Pass
7/27/2017	SL	F53850	126.55	4.880265	9.760531	Pass
8/18/2017	SL	F54021	129.59	4.892122	9.784244	Pass
9/4/2017	JH	F54159	130.56	4.84637	9.692739	Pass
11/14/2017	SH	F54851	127.9	4.894061	9.788121	Pass
12/18/2017	SL	F55184	127.93	4.935487	9.870973	Pass
1/4/2018	SL	F55275	129.39	4.8814	9.7628	Pass
2/1/2018	SL	F55405	130.55	4.882888	9.765775	Pass
2/24/2018	SL	F55486	128.61	4.897769	9.795539	Pass
3/14/2018	SH	F55593	130.72	4.88	9.76	Pass
5/4/2018	SH	F56059	129.54	4.890938	9.781876	Pass
6/16/2018	SL	F56288	130.45	4.859741	9.719482	Pass
7/2/2018	SL	F56429	128.5	4.879399	9.758798	Pass
8/1/2018	SH	F56745	129.59	4.885453	9.770906	Pass
9/4/2018	SH	F56951	129.58	4.87665	9.7533	Pass
10/8/2018	SH	F57244	131.08	1.549123	3.098245	Pass
11/14/2018	SH	F57519	130.89	1.43673	2.873459	Pass
12/20/2018	SH	F57729	129.77	1.407828	2.815655	Pass
1/2/2019	SL	F57755	129.28	1.412446	2.824892	Pass
2/20/2019	SH	F58159	129.75	1.388398	2.776797	Pass
3/1/2019	SH	F58221	129.32	1.389862	2.779724	Pass
4/1/2019	SH	F58399	130.18	1.352131	2.704262	Pass
5/7/2019	SH	F58643	129.18	1.356129	2.712258	Pass
6/20/2019	SH	F59037	138.08	2.121814	4.243629	Pass
10/2/2019	SH	F59597	130.94	2.113974	4.227948	Pass
12/16/2019	SH	F59893	127.59	2.168899	4.337798	Pass
1/15/2020	SH	F60017	132.46	2.086577	4.173153	Pass
2/14/2020	SH	F60159	132.58	2.031132	4.062264	Pass
3/9/2020	SH	F60413	128.79	2.046026	4.092053	Pass
4/6/2020	SH	F60514	131.64	2.066108	4.132216	Pass
5/4/2020	SH	F60732	130.84	2.017057	4.034115	Pass
6/3/2020	SH	F60945	129.77	1.962931	3.925862	Pass
7/28/2020	SH	F61667	128.8	1.977813	3.955626	Pass
8/17/2020	SH	F61853	144.84	3.467225	6.93445	Pass
10/21/2020	SH	F62253	130.29	3.438849	6.877698	Pass
11/24/2020	SH	F62503	128.87	3.462649	6.925297	Pass
12/3/2020	SH	F62542	132.14	3.460268	6.920536	Pass
1/5/2021	SH	F62646	130.17	3.462384	6.924768	Pass
2/1/2021	SH	F62646	152.4	5.408987	10.81797	Pass
3/1/2021	SH	F63039	130.39	5.397716	10.79543	Pass
4/5/2021	SH	F63512	130.75	5.382383	10.76477	Pass
5/5/2021	SH	F63711	130.26	5.390103	10.78021	Pass
6/16/2021	SH	F64396	130.32	5.395624	10.79125	Pass
7/15/2021	SH	F65354	130.01	5.392039	10.78408	Pass
8/11/2021	SH	F65626	130.56	5.372882	10.74576	Pass
9/30/2021	SH	F66293	127.46	5.42901	10.85802	Pass
10/6/2021	SH	F66529	128.89	5.437738	10.87548	Pass

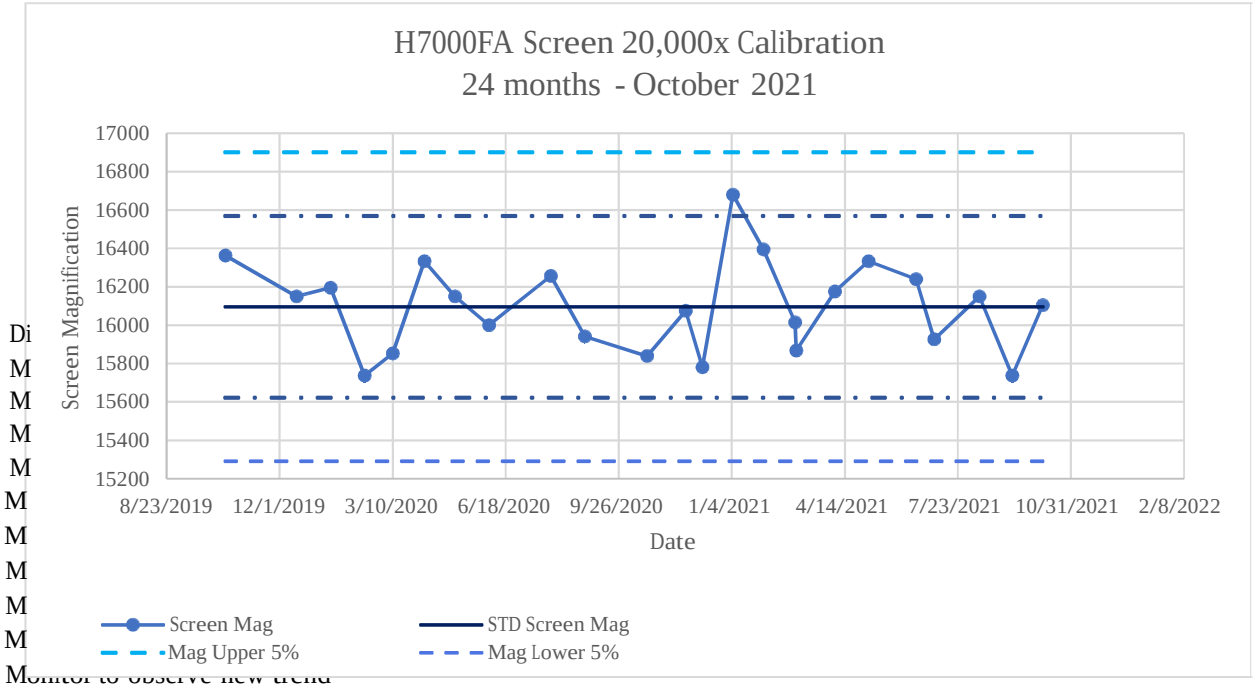
Calibration	Analyst	Negative#	Date	Camera Length	Pass/ Fail	Upper 2.5%	Lower 2.5%	STD WIDTH	Upper 2s	Lower 2s	2s	DO NOT EDIT
						675.191	642.255	658.723	668.807	648.639	10.084	3/12/2021
												10/4/2021
												24
						Comments:						
204	SH	F63031	3/1/2021	654.515	PASS	weekly check						
205	SH	F63143	3/12/2021	659.284	PASS	weekly check						
206	SH	F63150	3/15/2021	654.864	PASS	weekly check						
207	SH	F63428	3/25/2021	654.830	PASS	weekly check						
208	SH	F63504	4/5/2021	659.559	PASS	weekly check						
209	SH	F63628	4/16/2021	659.244	PASS	weekly check						
210	SH	F63652	4/26/2021	663.905	PASS	weekly check						
211	SH	F63709	5/4/2021	654.943	PASS	weekly check						
212	SH	F63756	5/12/2021	655.534	PASS	weekly check						
213	SH	F63791	5/17/2021	657.134	PASS	weekly check						
214	SH	F64240	6/8/2021	673.429	Warning	weekly check						
215	SH	F64391	6/16/2021	661.158	PASS	weekly check						
216	SH	F64574	6/23/2021	655.340	PASS	weekly check						
217	SH	F64654	7/2/2021	664.768	PASS	weekly check						
218	SH	F64713	7/6/2021	668.579	PASS	weekly check						
219	SH	F65352	7/15/2021	662.292	PASS	weekly check						
220	SH	F65461	7/20/2021	654.078	PASS	weekly check						
221	SH	F65538	7/29/2021	661.863	PASS	weekly check						
222	SH	F65579	8/2/2021	654.088	PASS	weekly check						
223	SH	F65618	8/10/2021	656.584	PASS	weekly check						
224	SH	F65693	8/17/2021	658.030	PASS	weekly check						
225	SH	F65867	9/2/2021	655.546	PASS	weekly check						
226	SH	F65907	9/8/2021	654.055	PASS	weekly check						
227	SH	F66067	9/24/2021	656.471	PASS	weekly check						
228	SH	F66471	10/4/2021	653.770	PASS	weekly check						



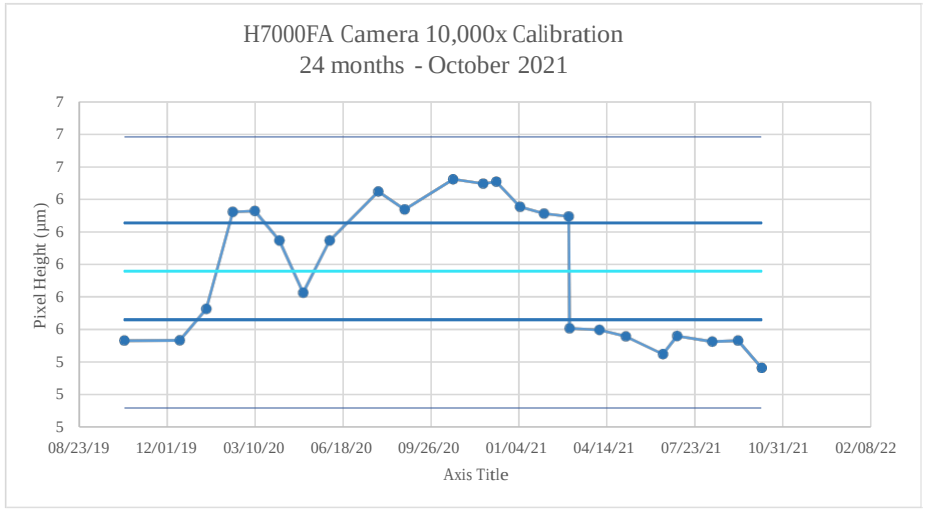
Calibration	Negative#	Date	Screen Width (µm)	Screen Height (µm)	Width Pass/ Fail	WDTH Upper 5%	WDTH Lower 5%	STD WIDTH	WDTH Upper 2s	WDTH Lower 2s	WDTH 2s	DO NOT EDIT:	Chart Title:
						3.127	2.829	2.978	3.383	2.573	0.405	10/14/2019	
						Any Maintenance Notes avail on Digital Versi on						10/6/2021	
												24	
51	F57564	11/20/18	2.764	2.711	FAIL								
52	F57740	12/26/18	2.677	2.626	FAIL								
53	F57749	01/02/19	2.758	2.706	FAIL								
54	F58160	2/20/2019	2.797	2.743	FAIL								
55	F58222	3/1/2019	2.732	2.68	FAIL								
56	F58401	4/1/2019	2.714	2.662	FAIL								
57	F58646	5/7/2019	2.786	2.733	FAIL								
58	F59041	6/21/2019	2.804	2.751	FAIL								
59	F59600	10/14/2019	2.779	2.726	FAIL								
60	F59894	12/16/2019	2.855	2.8	PASS								
61	F60018	1/15/2020	2.856	2.802	PASS								
62	F60154	2/14/2020	3.322	3.259	FAIL								
63	F60416	3/10/2020	3.182	3.121	FAIL								
64	F60532	4/7/2020	3.099	3.04	PASS								
65	F60733	5/4/2020	2.991	2.933	PASS								
66	F60946	6/3/2020	2.977	2.92	PASS								
67	F61671	7/28/2020	3.226	3.164	FAIL								
68	F61941	8/27/2020	3.145	3.084	FAIL								
69	F62254	10/21/2020	3.145	3.085	FAIL								
70	F62506	11/24/2020	3.194	3.133	FAIL								
71	F62567	12/9/2020	3.172	3.112	FAIL								
72	F62649	1/5/2021	3.109	3.05	PASS	Monitor to observe new trend							
73	F62782	2/1/2021	3.158	3.098	FAIL	Monitor to observe new trend; new filament and other maintenance							
74	F63033	3/1/2021	3.191	3.13	FAIL	Monitor to observe new trend; new filament							
75	F63047	3/2/2021	2.768	2.715	FAIL	Monitor to observe new trend; measurements updated							
76	F63513	4/5/2021	2.812	2.758	FAIL	Monitor to observe new trend							
77	F63712	5/5/2021	2.768	2.715	FAIL	Monitor to observe new trend							
78	F64397	6/16/2021	2.72	2.668	FAIL	Monitor to observe new trend							
79	F64647	7/2/2021	2.81	2.756	FAIL	Monitor to observe new trend							
80	F65622	8/11/2021	2.751	2.698	FAIL	Monitor to observe new trend							
81	F65938	9/9/2021	2.769	2.716	FAIL	Monitor to observe new trend							
82	F66533	10/6/2021	2.666	2.615	FAIL	Monitor to observe new trend							



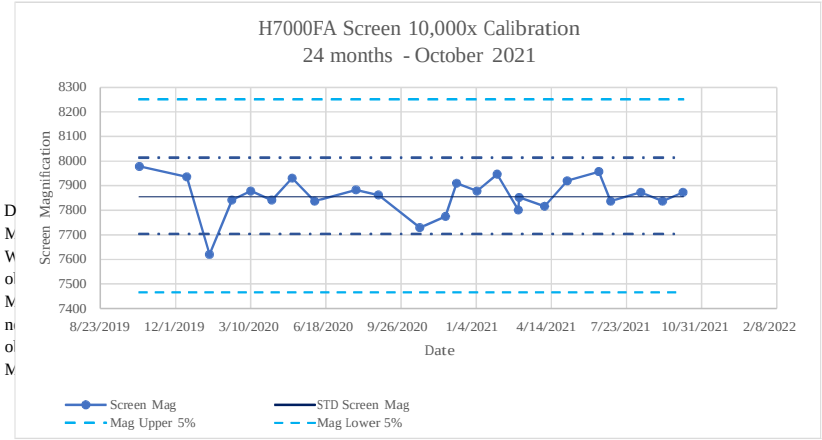
Cal bration	Date	# Spaces	Screen Mag	PASS/ Fail	Mag Upper 5%	Mag Lower 5%	STD Screen Mag	Mag Upper 2s	Mag Lower 2s	Screen Mag 2s	Do Not Edit:	Chart Title:
					16900.418	15290.854	16095.636	16568.752	15622.520	473.116	10/14/2019	
		21.70									10/6/2021	
		21.66			Any Maintenance Notes avail on Digital Version						24	
51	11/20/2018	20.90	16535.885	PASS								
52	12/26/2018	21.18	16317.280	PASS								
53	1/2/2019	21.16	16332.703	PASS								
54	2/20/2019	21.30	16225.352	PASS								
55	3/1/2019	21.20	16301.887	PASS								
56	4/1/2019	21.40	16149.533	PASS								
57	5/7/2019	21.06	16410.256	PASS								
58	6/21/2019	21.30	16225.352	PASS								
59	10/14/2019	21.12	16363.636	PASS								
60	12/16/2019	21.40	16149.533	PASS								
61	1/15/2020	21.34	16194.939	PASS								
62	2/14/2020	21.96	15737.705	PASS	Di							
63	3/10/2020	21.80	15853.211	PASS	M							
64	4/7/2020	21.16	16332.703	PASS	M							
65	5/4/2020	21.40	16149.533	PASS	M							
66	6/3/2020	21.60	16000.000	PASS	M							
67	7/28/2020	21.26	16255.880	PASS	M							
68	8/27/2020	21.68	15940.959	PASS	M							
69	10/21/2020	21.82	15838.680	PASS	M							
70	11/24/2020	21.50	16074.419	PASS	M							
71	12/9/2020	21.90	15780.822	PASS	M							
72	1/5/2021	20.72	16679.537	Warning	M							
73	2/1/2021	21.08	16394.687	PASS	Monitor to observe new trend; new filament and other maintenance							
74	3/1/2021	21.58	16014.829	PASS	Monitor to observe new trend; new filament							
75	3/2/2021	21.78	15867.769	PASS								
76	4/5/2021	21.37	16175.232	PASS								
77	5/5/2021	21.16	16332.703	PASS								
78	6/16/2021	21.28	16240.602	PASS								
79	7/2/2021	21.70	15926.267	PASS								
80	8/11/2021	21.40	16149.533	PASS								
81	9/9/2021	21.96	15737.705	PASS								
82	10/6/2021	21.46	16104.380	PASS								



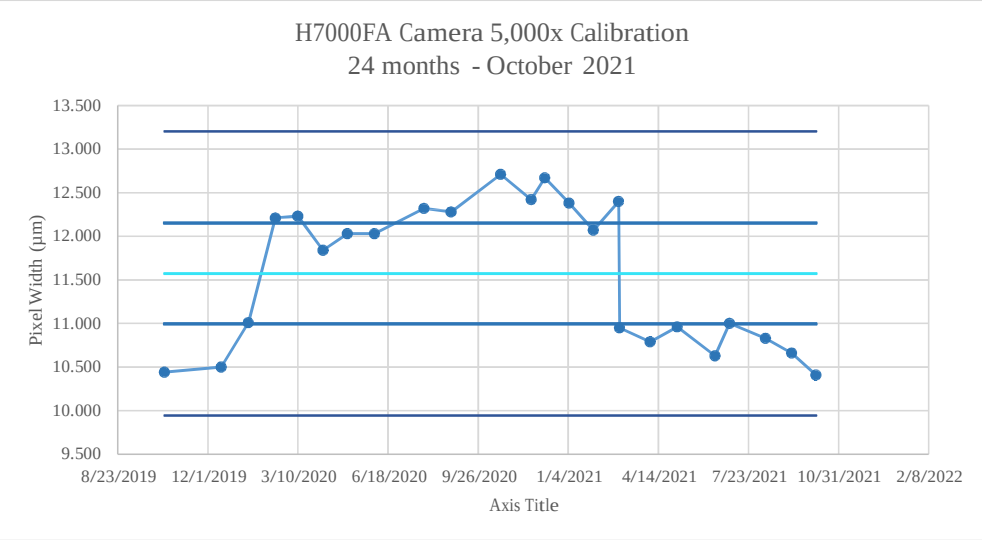
Calibration	Negative#	Date	Screen Width (µm)	Screen Height (µm)	Width Pass/ Fail	WDTH Upper 5%	WDTH Lower 5%	STD WIDTH	WDTH Upper 2s	WDTH Lower 2s	WDTH 2s	DO NOT EDIT:	Chart Title:	Comments
						6.256	5.660	5.958	6.791	5.124	0.834	######## 10/6/2021 24		
						Any Maintenance Notes avail on Digital Versi on								
43	F55509	02/27/18	5.482	5.377	FAIL									
44	F55536	03/05/18	5.439	5.335	FAIL									
45	F55781	04/02/18	5.323	5.221	FAIL									
46	F56053	05/03/18	5.314	5.212	FAIL									
47	F56282	06/15/18	5.494	5.389	FAIL									
48	F56418	07/02/18	5.360	5.257	FAIL									
48	F56747	08/01/18	5.498	5.393	FAIL									
49	F56953	09/04/18	5.522	5.416	FAIL									
50	F57300	10/23/18	5.386	5.283	FAIL									
51	F57565	11/20/18	5.268	5.167	FAIL									
52	F57741	12/26/18	5.413	5.309	FAIL									
53	F57750	01/02/19	5.413	5.310	FAIL									
54	F58161	02/20/19	5.596	5.489	FAIL									
55	F58223	03/01/19	5.546	5.439	FAIL									
56	F58402	04/01/19	5.481	5.376	FAIL									
57	F58647	05/07/19	5.594	5.487	FAIL									
58	F59042	06/21/19	5.603	5.496	FAIL									
59	F59601	10/14/19	5.531	5.425	FAIL									
60	F59895	12/16/19	5.533	5.427	FAIL									
61	F60019	01/15/20	5.725	5.615	PASS									
62	F60155	02/14/20	6.320	6.199	FAIL									Did a full column alignment; included lens correction
63	F60417	03/10/20	6.325	6.203	FAIL									Monitor Weekly to observe new trend
64	F60533	04/07/20	6.145	6.027	PASS									Monitor Weekly to observe new trend
65	F60734	05/04/20	5.824	5.713	PASS									Monitor Weekly to observe new trend
66	F60947	06/03/20	6.145	6.027	PASS									Monitor to observe new trend
67	F61669	07/28/20	6.445	6.332	FAIL									Monitor to observe new trend
68	F61942	08/27/20	6.335	6.214	FAIL									Monitor to observe new trend
69	F62255	10/21/20	6.520	6.395	FAIL									Monitor to observe new trend
70	F62507	11/24/20	6.493	6.369	FAIL									Monitor to observe new trend
71	F62568	12/09/20	6.505	6.381	FAIL									Monitor to observe new trend
72	F62650	01/05/21	6.351	6.229	FAIL									Monitor to observe new trend
73	F62783	02/01/21	6.309	6.188	FAIL									Monitor to observe new trend; new filament and other maintenance
74	F63034	03/01/21	6.292	6.171	FAIL									Monitor to observe new trend; new filament
75	F63048	03/02/21	5.606	5.498	FAIL									Monitor to observe new trend; measurements updated
76	F63514	04/05/21	5.597	5.490	FAIL									Monitor to observe new trend
77	F63713	05/05/21	5.557	5.450	FAIL									Monitor to observe new trend
78	F64398	06/16/21	5.448	5.343	FAIL									Monitor to observe new trend
79	F64648	07/02/21	5.560	5.454	FAIL									Monitor to observe new trend
80	F65623	08/11/21	5.525	5.419	FAIL									Monitor to observe new trend
81	F65939	09/09/21	5.532	5.426	FAIL									Monitor to observe new trend
82	F66535	10/06/21	5.364	5.261	FAIL									Monitor to observe new trend



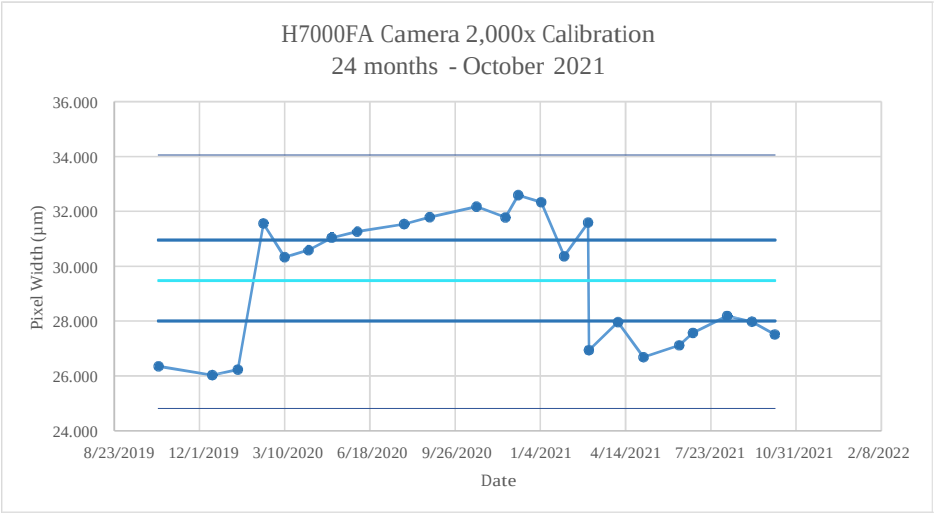
Calibration	Date	# Spaces	Screen Mag	PASS/ Fail	Mag Upper 5%	Mag Lower 5%	STD Screen Mag	Mag Upper 2s	Mag Lower 2s	Screen Mag 2s	Do Not Edit:	Chart Title:
					8251.692	7465.816	7858.754	8014.195	7703.313	155.441	10/14/2019	
		30.62									10/6/2021	
		30.16			Any Maintenance Notes avail on Digital Versio						24	
51	11/20/2018	29.54	8043.331	Warning								
52	12/26/2018	29.92	7941.176	PASS								
53	1/2/2019	29.16	8148.148	Warning								
54	2/20/2019	30.04	7909.454	PASS								
55	3/1/2019	29.52	8048.780	Warning								
56	4/1/2019	30.06	7904.192	PASS								
57	5/7/2019	30.26	7851.950	PASS								
58	6/21/2019	30.20	7867.550	PASS								
59	10/14/2019	29.78	7978.509	PASS								
60	12/16/2019	29.94	7935.872	PASS								
61	1/15/2020	31.18	7620.269	Warning								
62	2/14/2020	30.30	7841.584	PASS	D							
63	3/10/2020	30.16	7877.984	PASS	M							
64	4/7/2020	30.30	7841.584	PASS	W							
65	5/4/2020	29.96	7930.574	PASS	o							
66	6/3/2020	30.32	7836.412	PASS	M							
67	7/28/2020	30.14	7883.212	PASS	n							
68	8/27/2020	30.22	7862.343	PASS	o							
69	10/21/2020	30.74	7729.343	PASS	M							
70	11/24/2020	30.56	7774.869	PASS								
71	12/9/2020	30.04	7909.454	PASS								
72	1/5/2021	30.16	7877.984	PASS								
73	2/1/2021	29.90	7946.488	PASS	Monitor to observe new trend; new filament and other maintenance							
74	3/1/2021	30.46	7800.394	PASS	Monitor to observe new trend; new filament							
75	3/2/2021	30.26	7851.950	PASS								
76	4/5/2021	30.40	7815.789	PASS								
77	5/5/2021	30.00	7920.000	PASS								
78	6/16/2021	29.86	7957.133	PASS								
79	7/2/2021	30.32	7836.412	PASS								
80	8/11/2021	30.18	7872.763	PASS								
81	9/9/2021	30.32	7836.412	PASS								
82	10/6/2021	30.18	7872.763	PASS								



Calibration	Negative#	Date	Screen Width (µm)	Screen Height (µm)	Width Pass/ Fail	WDTH Upper 5%	WDTH Lower 5%	STD WIDTH	WDTH Upper 2s	WDTH Lower 2s	WDTH 2s	DO NOT EDIT:	Chart Title:	Comments
						12.152	10.995	11.57375	13.203	9.944	1.629338	######## 10/6/2021 24		
						Any Maintenance Notes avail on Digital Versi on								
41	F55510	2/27/2018	10.470	10.270	FAIL									
42	F55537	3/5/2018	10.500	10.300	FAIL									
43	F55782	4/2/2018	10.250	10.050	FAIL									
44	F56054	5/3/2018	10.240	10.040	FAIL									
45	F56283	6/15/2018	10.530	10.330	FAIL									
46	F56419	7/2/2018	10.390	10.190	FAIL									
47	F56748	8/1/2018	10.820	10.620	FAIL									
49	F56954	9/4/2018	10.610	10.410	FAIL									
50	F57301	10/23/2018	10.530	10.330	FAIL									
51	F57566	11/20/2018	10.640	10.430	FAIL									
52	F57742	12/26/2018	10.640	10.440	FAIL									
53	F57751	1/2/2019	10.450	10.250	FAIL									
54	F57751	2/20/2019	10.800	10.590	FAIL									
55	F58224	3/1/2019	10.620	10.420	FAIL									
56	F58403	4/1/2019	10.670	10.470	FAIL									
57	F58648	5/7/2019	10.610	10.400	FAIL									
58	F59043	6/21/2019	10.600	10.400	FAIL									
59	F59602	10/14/2019	10.440	10.240	FAIL									
60	F59896	12/16/2019	10.500	10.300	FAIL									
61	F60020	1/15/2020	11.010	10.800	PASS									
62	F60156	2/14/2020	12.210	11.980	FAIL									Did a full column alignment; included lens correction
63	F60418	3/10/2020	12.230	11.990	FAIL									Monitor Weekly to observe new trend
64	F60534	4/7/2020	11.840	10.830	PASS									Monitor Weekly to observe new trend
65	F60735	5/4/2020	12.030	11.800	PASS									Monitor Weekly to observe new trend
66	F60948	6/3/2020	12.030	11.800	PASS									Monitor to observe new trend
67	F61670	7/28/2020	12.320	12.080	FAIL									Monitor to observe new trend
68	F61943	8/27/2020	12.280	12.050	FAIL									Monitor to observe new trend
69	F62256	10/21/2020	12.710	12.470	FAIL									Monitor to observe new trend
70	F62508	11/24/2020	12.420	12.190	FAIL									Monitor to observe new trend
71	F62569	12/9/2020	12.670	12.430	FAIL									Monitor to observe new trend
72	F62651	1/5/2021	12.380	12.140	FAIL									Monitor to observe new trend
73	F62784	2/1/2021	12.070	11.840	PASS									Monitor to observe new trend; new filament and other maintenance
74	F63035	3/1/2021	12.400	12.160	FAIL									Monitor to observe new trend; new filament
75	F63049	3/2/2021	10.950	10.740	FAIL									Monitor to observe new trend; measurements updated
76	F63515	4/5/2021	10.790	10.580	FAIL									Monitor to observe new trend
77	F63714	5/5/2021	10.960	10.750	FAIL									Monitor to observe new trend
78	F6439	6/16/2021	10.630	10.430	FAIL									Monitor to observe new trend
79	F64649	7/2/2021	11.000	10.790	PASS									Monitor to observe new trend
80	F65624	8/11/2021	10.830	10.630	FAIL									Monitor to observe new trend
81	F65940	9/9/2021	10.660	10.460	FAIL									Monitor to observe new trend
82	F66536	10/6/2021	10.410	10.210	FAIL									Monitor to observe new trend



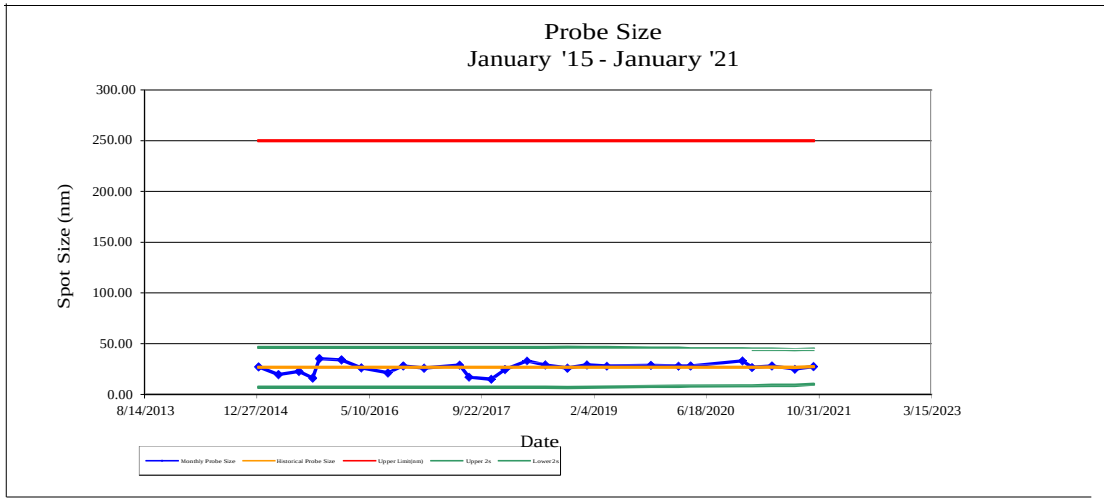
Calibration	Negative#	Date	Screen Width (µm)	Screen Height (µm)	Width Pass/ Fail	WDTH Upper 5%	WDTH Lower 5%	STD WIDTH	WDTH Upper 2s	WDTH Lower 2s	WDTH 2s	DO NOT EDIT:	Chart Title:
						30.953	28.005	29.47875	34.102	24.856	4.622938	######## 10/6/2021 24	
						Any Maintenance Notes avail on Digital Version							
42	F55511	2/27/2018	27.660	27.130	FAIL								
43	F55538	3/5/2018	26.500	25.990	FAIL								
44	F55783	4/2/2018	25.930	25.440	FAIL								
45	F56055	5/3/2018	26.270	25.760	FAIL								
46	F56284	6/15/2018	27.730	27.200	FAIL								
47	F56420	7/2/2018	26.990	26.470	FAIL								
48	F56749	8/1/2018	27.740	27.710	FAIL								
49	F56955	9/4/2018	27.770	27.230	FAIL								
50	F57302	10/23/2018	27.060	26.540	FAIL								
51	F57567	11/20/2018	27.360	26.840	FAIL								
52	F57743	12/26/2018	27.570	27.040	FAIL								
53	F57752	1/2/2019	26.930	26.410	FAIL								
54	F58163	2/20/2019	28.060	27.520	PASS								
55	F58225	3/1/2019	26.880	26.360	FAIL								
56	F58404	4/1/2019	28.160	27.620	PASS								
57	F58649	5/7/2019	28.240	27.700	PASS								
58	F59044	6/21/2019	27.310	26.780	FAIL								
59	F59603	10/14/2019	26.350	25.840	FAIL								
60	F59897	12/16/2019	26.030	25.530	FAIL								
61	F60021	1/15/2020	26.230	25.730	FAIL								
62	F60157	2/14/2020	31.560	30.950	FAIL	Did a full column alignment; included lens correction							
63	F60419	3/10/2020	30.330	29.780	PASS	Monitor Weekly to observe new trend							
64	F60535	4/7/2020	30.590	30.010	PASS	Monitor Weekly to observe new trend							
65	F60736	5/4/2020	31.040	30.440	FAIL	Monitor Weekly to observe new trend							
66	F60949	6/3/2020	31.260	30.660	FAIL	Monitor to observe new trend							
67	F61671	7/28/2020	31.540	30.940	FAIL	Monitor to observe new trend							
68	F61944	8/27/2020	31.790	31.180	FAIL	Monitor to observe new trend							
69	F62257	10/21/2020	32.170	31.550	FAIL	Monitor to observe new trend							
70	F62509	11/24/2020	31.780	31.170	FAIL	Monitor to observe new trend							
71	F62570	12/9/2020	32.590	31.970	FAIL	Monitor to observe new trend							
72	F62652	1/5/2021	32.330	31.710	FAIL	Monitor to observe new trend							
73	F62785	2/1/2021	30.360	29.770	PASS	Monitor to observe new trend; new filament and other maintenance							
74	F63036	3/1/2021	31.590	30.990	FAIL	Monitor to observe new trend; new filament							
75	F63050	3/2/2021	26.940	26.420	FAIL	Monitor to observe new trend; Measurments Updated							
76	F63516	4/5/2021	27.960	27.430	FAIL	Monitor to observe new trend							
77	F63715	5/5/2021	26.680	26.170	FAIL	Monitor to observe new trend							
78	F64400	6/16/2021	27.120	26.600	FAIL	Monitor to observe new trend							
79	F64650	7/2/2021	27.570	27.040	FAIL	Monitor to observe new trend							
80	F65625	8/11/2021	28.190	27.650	PASS	Monitor to observe new trend							
81	F65941	9/9/2021	27.980	27.440	FAIL	Monitor to observe new trend							
82	F66537	10/6/2021	27.510	26.980	FAIL	Monitor to observe new trend							



Digital Probe Size Calibration

H7000FA

Analyst	Negative	Date	Monthly Probe Size	Historical Probe Size	Upper Limit(nm)	Upper 2s	Lower 2s	2S	Pass/Fail	Special Settings
SL	F37544	1/3/2015	27.17	26.78	250	46.42	7.14	27.63	PASS	STEM at 29, EDX M
JH	F39675	4/1/2015	19.55	26.78	250	46.42	7.14	26.67	PASS	STEM at 29, EDX M
JH	F39675	7/2/2015	22.67	26.78	250	46.42	7.14	25.65	PASS	STEM at 27, EDX M
JH	F43951	9/1/2015	16.33	26.78	250	46.42	7.14	25.12	PASS	STEM at 30 EDX M
JH	F44679	10/1/2015	35.31	26.78	250	46.42	7.14	24.87	PASS	STEM at 30 EDX M
JH	F46493	1/7/2016	34.08	26.78	250	46.42	7.14	24.48	PASS	STEM at 30 EDX M
JH	F46493	4/4/2016	26.27	26.78	250	46.42	7.14	23.75	PASS	STEM at 30 EDX M
SL	F51333	7/31/2016	21.42	26.78	250	46.42	7.14	23.16	PASS	STEM at 30 EDX M
SL	F51333	10/7/2016	28.17	26.78	250	46.42	7.14	22.58	PASS	STEM at 30 EDX M
SL	F52336	1/9/2017	26.03	26.78	250	46.42	7.14	22.01	PASS	STEM at 30 EDX M
SL	F53494	6/15/2017	28.99	26.78	250	46.42	7.14	21.53	PASS	STEM at 26 EDX M
SL	F53847	7/27/2017	17.04	26.78	250	46.42	7.14	21.34	PASS	STEM at 26 EDX M
SL	F53847	11/3/2017	15.00	26.78	250	46.42	7.14	21.29	PASS	STEM at 26 EDX M
SL	F55274	1/4/2018	24.63	26.78	250	46.42	7.14	20.85	PASS	STEM at 31 EDX M
SH	F55854	4/11/2018	33.08	26.78	250	46.42	7.14	20.68	PASS	STEM at 35 EDX M
SL	F56426	7/2/2018	29.05	26.78	250	46.42	7.14	20.33	PASS	STEM at 31 EDX M
SH	F57245	10/8/2018	26.08	26.78	250	46.73	6.83	19.95	PASS	STEM at 26 EDX M
SL	F57756	1/2/2019	29.18	26.78	250	46.42	7.14	19.64	PASS	STEM at 35 EDX M
SH	F58405	4/1/2019	28.00	26.78	250	46.10	7.46	19.32	PASS	STEM at 34 EDX M
SH	F59660	10/14/2019	28.79	26.78	250	45.81	7.75	19.03	PASS	STEM at 34 EDX M
SH	F60159	2/14/2020	27.96	26.78	250	45.52	8.04	18.74	PASS	STEM at 27 EDX M
SH	F60537	4/8/2020	28.16	26.78	250	45.24	8.32	18.46	PASS	STEM at 27 EDX M
SH	F62510	11/24/2020	33.09	26.78	250	45.13	8.43	18.35	PASS	STEM at 27 EDX M
SH	F62655	1/5/2021	26.64	26.78	250	44.86	8.70	18.08	PASS	STEM at 27 EDX M
SH	F63519	4/5/2021	28.16	26.92	250	44.76	9.09	17.83	PASS	STEM at 27 EDX M
SH	F65359	7/15/2021	24.80	26.64	250	44.23	9.06	17.59	PASS	STEM at 27 EDX M
SH	F66552	10/6/2021	27.56	27.35	250	44.70	9.99	17.36	PASS	STEM at 27 EDX M



Na Crocidolite Std. Calibration

Date	Analyst	EDS #	Fiber Size >5.0um	Peak Counts**	Background Counts***	Signal/ Nosie Ratio	Signal/ Nosie Min. Limit	Pass/Fail
1/9/2017	SL	F52337	Y	965	183	5.273224044	2	Pass
3/28/2017	JH	F52905	Y	412	49	8.408163265	2	Pass
6/1/2017	JH	F53352	Y	948	128	7.40625	2	Pass
7/27/2017	SL	F53845	Y	1805	229	7.88209607	2	Pass
8/18/2017	SL	F54018	Y	1717	280	6.132142857	2	Pass
11/3/2017	SL	F54694	Y	279	36	7.75	2	Pass
12/18/2017	SL	F55174	Y	723	124	5.830645161	2	Pass
1/4/2018	SL	F55255	Y	1211	162	7.475308642	2	Pass
2/1/2018	SL	F55404	Y	1465	239	6.129707113	2	Pass
3/5/2018	SH	F55546	Y	1624	205	7.92195122	2	Pass
4/3/2018	SH	F55786	Y	695	143	4.86013986	2	Pass
5/3/2018	SH	F56059	Y	303	46	6.586956522	2	Pass
6/16/2018	SL	F56290	Y	1359	174	7.810344828	2	Pass
7/2/2018	SL	F56424	Y	1004	110	9.127272727	2	Pass
8/1/2018	SH	F56744	Y	1644	246	6.682926829	2	Pass
9/4/2018	SH	F56950	Y	880	108	8.148148148	2	Pass
10/8/2018	SH	F57243	Y	282	33	8.545454545	2	Pass
11/14/2018	SH	F57518	Y	136	18	7.555555556	2	Pass
12/26/2018	SH	F57744	Y	498	64	7.78125	2	Pass
1/2/2019	SL	F57753	Y	455	68	6.691176471	2	Pass
2/20/2019	SH	F58164	Y	692	105	6.59047619	2	Pass
3/1/2019	SH	F58226	Y	275	47	5.85106383	2	Pass
4/1/2019	SH	F58400	Y	278	30	9.266666667	2	Pass
5/7/2019	SH	F58645	Y	444	50	8.88	2	Pass
10/14/2019	SH	F59663	Y	145	31	4.677419355	2	Pass
12/16/2019	SH	F59898	Y	375	85	4.411764706	2	Pass
1/16/2020	SH	F60024	Y	1155	157	7.356687898	2	Pass
2/14/2020	SH	F60152	Y	374	41	9.12195122	2	Pass
3/9/2020	SH	F60415	Y	569	101	5.633663366	2	Pass
4/7/2020	SH	F60531	Y	1369	229	5.978165939	2	Pass
5/5/2020	SH	F60754	Y	1497	189	7.920634921	2	Pass
6/3/2020	SH	F60950	Y	8802	83	106.0481928	2	Pass
7/28/2020	SH	F61679	Y	494	64	7.71875	2	Pass
8/17/2020	SH	F61855	Y	730	91	8.021978022	2	Pass
10/21/2020	SH	F62252	Y	503	62	8.112903226	2	Pass
11/24/2020	SH	F62505	Y	429	67	6.402985075	2	Pass
12/9/2020	SH	F62566	Y	310	40	7.75	2	Pass
1/5/2021	SH	F62654	Y	1801	251	7.175298805	2	Pass
2/1/2021	SH	F62780	Y	1290	368	3.505434783	2	Pass
3/1/2021	SH	F63041	Y	1947	207	9.405797101	2	Pass
4/5/2021	SH	F63517	Y	2298	136	16.89705882	2	Pass
5/5/2021	SH	F63718	Y	654	71	9.211267606	2	Pass
7/15/2021	SH	F65357	Y	1111	147	7.557823129	2	Pass
8/11/2021	SH	F65628	Y	1334	240	5.558333333	2	Pass
9/30/2021	SH	F66302	Y	1751	284	6.165492958	2	Pass
10/6/2021	SH	F66544	Y	1945	220	8.840909091	2	Pass

*ND - Not Done

** Peak count is the maximum Na peak count

***Background peak count is the base, right of the Na peak

Statistical Function	ImageID	2D Object Area
Base Unit		mm²
Count	294	294
Mean		0.011814773
Minimum	1	0.011061
Maximum	20	0.012701
Standard Deviation	5.35675	0.000297

Image Name	ID	2D Object Area mm²	2D Object Perimeter mm
GridCal V1G1 9_15_2021 J65979BF	1	0.012186	0.470157
GridCal V1G1 9_15_2021 J65979BF	2	0.012105	0.47032
GridCal V1G1 9_15_2021 J65979BF	3	0.012132	0.471432
GridCal V1G1 9_15_2021 J65979BF	4	0.01181	0.465048
GridCal V1G1 9_15_2021 J65979BF	5	0.011731	0.463313
GridCal V1G1 9_15_2021 J65979BF	6	0.011735	0.463706
GridCal V1G1 9_15_2021 J65979BF	7	0.011881	0.466064
GridCal V1G1 9_15_2021 J65979BF	8	0.011839	0.465115
GridCal V1G1 9_15_2021 J65979BF	9	0.011713	0.462201
GridCal V1G1 9_15_2021 J65979BF	10	0.0117	0.462364
GridCal V1G1 9_15_2021 J65979BF	11	0.011773	0.464492
GridCal V1G1 9_15_2021 J65979BF	12	0.012004	0.468748
GridCal V1G1 9_15_2021 J65979BF	13	0.012352	0.475525
GridCal V1G1 9_15_2021 J65979BF	14	0.012094	0.472055
GridCal V1G1 9_15_2021 J65979BF	15	0.011986	0.467636
GridCal V1G1 9_15_2021 J65979BF	16	0.012015	0.468029
GridCal V1G1 9_15_2021 J65979BF	17	0.012457	0.476705
GridCal V1G2 9_15_2021 J65980BF	1	0.011697	0.454688
GridCal V1G2 9_15_2021 J65980BF	2	0.011638	0.458417
GridCal V1G2 9_15_2021 J65980BF	3	0.011648	0.45881
GridCal V1G2 9_15_2021 J65980BF	4	0.011394	0.453767
GridCal V1G2 9_15_2021 J65980BF	5	0.011286	0.452032
GridCal V1G2 9_15_2021 J65980BF	6	0.011294	0.451639
GridCal V1G2 9_15_2021 J65980BF	7	0.011415	0.454553
GridCal V1G2 9_15_2021 J65980BF	8	0.011371	0.453211
GridCal V1G2 9_15_2021 J65980BF	9	0.011257	0.451246
GridCal V1G2 9_15_2021 J65980BF	10	0.011284	0.451639
GridCal V1G2 9_15_2021 J65980BF	11	0.011398	0.453767
GridCal V1G2 9_15_2021 J65980BF	12	0.011974	0.463852
GridCal V1G2 9_15_2021 J65980BF	13	0.01174	0.460152
GridCal V1G2 9_15_2021 J65980BF	14	0.011616	0.458024
GridCal V1G2 9_15_2021 J65980BF	15	0.011572	0.456519
GridCal V1G2 9_15_2021 J65980BF	16	0.011961	0.463689
GridCal V2G1 9_15_2021 J65981BF	1	0.011839	0.455486
GridCal V2G1 9_15_2021 J65981BF	2	0.011609	0.451786
GridCal V2G1 9_15_2021 J65981BF	3	0.011704	0.453521
GridCal V2G1 9_15_2021 J65981BF	4	0.011713	0.453195
GridCal V2G1 9_15_2021 J65981BF	5	0.011489	0.448939
GridCal V2G1 9_15_2021 J65981BF	6	0.01182	0.4547
GridCal V2G1 9_15_2021 J65981BF	7	0.011456	0.449427
GridCal V2G1 9_15_2021 J65981BF	8	0.011391	0.448085
GridCal V2G1 9_15_2021 J65981BF	9	0.011559	0.450606
GridCal V2G1 9_15_2021 J65981BF	10	0.011541	0.451162
GridCal V2G1 9_15_2021 J65981BF	11	0.011333	0.447692
GridCal V2G1 9_15_2021 J65981BF	12	0.011401	0.448478
GridCal V2G1 9_15_2021 J65981BF	13	0.011416	0.44776
GridCal V2G1 9_15_2021 J65981BF	14	0.011557	0.450444
GridCal V2G1 9_15_2021 J65981BF	15	0.011536	0.450213
GridCal V2G1 9_15_2021 J65981BF	16	0.011507	0.449658
GridCal V2G1 9_15_2021 J65981BF	17	0.012037	0.450781
GridCal V2G1 9_15_2021 J65981BF	18	0.011685	0.453128
GridCal V5G1 9_15_2021 J65987BF	16	0.011715	0.447025
GridCal V5G1 9_15_2021 J65987BF	17	0.011591	0.443296
GridCal V5G1 9_15_2021 J65987BF	18	0.011571	0.446306
GridCal V5G1 9_15_2021 J65987BF	19	0.011686	0.445031
GridCal V5G2 9_15_2021 J65988BF	1	0.012033	0.455009
GridCal V5G2 9_15_2021 J65988BF	2	0.011821	0.451865
GridCal V5G2 9_15_2021 J65988BF	3	0.011623	0.449343
GridCal V5G2 9_15_2021 J65988BF	4	0.011822	0.452421
GridCal V5G2 9_15_2021 J65988BF	5	0.01186	0.452651
GridCal V5G2 9_15_2021 J65988BF	6	0.011609	0.44895
GridCal V5G2 9_15_2021 J65988BF	7	0.011913	0.453044
GridCal V5G2 9_15_2021 J65988BF	8	0.012089	0.454846
GridCal V5G2 9_15_2021 J65988BF	9	0.011678	0.448625
GridCal V5G2 9_15_2021 J65988BF	10	0.011928	0.453274
GridCal V5G2 9_15_2021 J65988BF	11	0.011802	0.451634
GridCal V5G2 9_15_2021 J65988BF	12	0.011935	0.453993
GridCal V5G2 9_15_2021 J65988BF	13	0.011754	0.451079
GridCal V5G2 9_15_2021 J65988BF	14	0.011604	0.448557
GridCal V5G2 9_15_2021 J65988BF	15	0.011571	0.447771
GridCal V5G2 9_15_2021 J65988BF	16	0.011744	0.450523
GridCal V5G2 9_15_2021 J65988BF	17	0.011819	0.452027
GridCal V5G2 9_15_2021 J65988BF	18	0.011649	0.44895
GridCal V6G1 9_15_2021 J65989BF	1	0.012267	0.472055
GridCal V6G1 9_15_2021 J65989BF	2	0.01212	0.470483
GridCal V6G1 9_15_2021 J65989BF	3	0.01213	0.470483
GridCal V6G1 9_15_2021 J65989BF	4	0.012094	0.469534
GridCal V6G1 9_15_2021 J65989BF	5	0.011939	0.467013
GridCal V6G1 9_15_2021 J65989BF	6	0.011964	0.467406
GridCal V6G1 9_15_2021 J65989BF	7	0.012047	0.469141
GridCal V6G1 9_15_2021 J65989BF	8	0.012238	0.472448
GridCal V6G1 9_15_2021 J65989BF	9	0.012526	0.478602
GridCal V6G1 9_15_2021 J65989BF	10	0.012308	0.474183
GridCal V6G1 9_15_2021 J65989BF	11	0.012115	0.47032
GridCal V6G1 9_15_2021 J65989BF	12	0.012009	0.467243
GridCal V6G1 9_15_2021 J65989BF	13	0.012036	0.468355
GridCal V6G1 9_15_2021 J65989BF	14	0.012142	0.470483
GridCal V6G1 9_15_2021 J65989BF	15	0.012701	0.480568
GridCal V6G1 9_15_2021 J65989BF	16	0.012419	0.475525
GridCal V6G1 9_15_2021 J65989BF	17	0.012416	0.475525
GridCal V6G1 9_15_2021 J65989BF	18	0.012282	0.473397
GridCal V6G1 9_15_2021 J65989BF	19	0.012258	0.472448
GridCal V6G1 9_15_2021 J65989BF	20	0.012328	0.471567
GridCal V6G2 9_15_2021 J65990BF	1	0.012026	0.461477
GridCal V6G2 9_15_2021 J65990BF	2	0.011839	0.457614
GridCal V6G2 9_15_2021 J65990BF	3	0.011727	0.455649
GridCal V6G2 9_15_2021 J65990BF	4	0.01192	0.458956
GridCal V6G2 9_15_2021 J65990BF	5	0.011912	0.458956
GridCal V6G2 9_15_2021 J65990BF	6	0.012011	0.461084
GridCal V6G2 9_15_2021 J65990BF	7	0.011693	0.455649
GridCal V6G2 9_15_2021 J65990BF	8	0.011803	0.457221
GridCal V6G2 9_15_2021 J65990BF	9	0.012044	0.460528

GridCal V2G1 9_15_2021 J65981BF	19	0.01188	0.456272
GridCal V2G2 9_15_2021 J65982BF	1	0.011648	0.454363
GridCal V2G2 9_15_2021 J65982BF	2	0.011366	0.450039
GridCal V2G2 9_15_2021 J65982BF	3	0.011399	0.450595
GridCal V2G2 9_15_2021 J65982BF	4	0.011299	0.448304
GridCal V2G2 9_15_2021 J65982BF	5	0.011611	0.453739
GridCal V2G2 9_15_2021 J65982BF	6	0.011442	0.451544
GridCal V2G2 9_15_2021 J65982BF	7	0.011118	0.444441
GridCal V2G2 9_15_2021 J65982BF	8	0.011152	0.446339
GridCal V2G2 9_15_2021 J65982BF	9	0.011061	0.443492
GridCal V2G2 9_15_2021 J65982BF	10	0.011351	0.449646
GridCal V2G2 9_15_2021 J65982BF	11	0.011385	0.449876
GridCal V2G2 9_15_2021 J65982BF	12	0.011131	0.445783
GridCal V2G2 9_15_2021 J65982BF	13	0.01122	0.447125
GridCal V2G2 9_15_2021 J65982BF	14	0.01118	0.446176
GridCal V2G2 9_15_2021 J65982BF	15	0.011486	0.45233
GridCal V2G2 9_15_2021 J65982BF	16	0.011686	0.455081
GridCal V2G2 9_15_2021 J65982BF	17	0.011695	0.455474
GridCal V2G2 9_15_2021 J65982BF	18	0.011597	0.453577
GridCal V3G1 9_15_2021 J65983BF	1	0.01242	0.476991
GridCal V3G1 9_15_2021 J65983BF	2	0.01202	0.467922
GridCal V3G1 9_15_2021 J65983BF	3	0.0119	0.466187
GridCal V3G1 9_15_2021 J65983BF	4	0.011844	0.465564
GridCal V3G1 9_15_2021 J65983BF	5	0.011913	0.467529
GridCal V3G1 9_15_2021 J65983BF	6	0.012235	0.472572
GridCal V3G1 9_15_2021 J65983BF	7	0.01209	0.469495
GridCal V3G1 9_15_2021 J65983BF	8	0.011921	0.466743
GridCal V3G1 9_15_2021 J65983BF	9	0.011819	0.462717
GridCal V3G1 9_15_2021 J65983BF	10	0.011751	0.463273
GridCal V3G1 9_15_2021 J65983BF	11	0.011855	0.465794
GridCal V3G1 9_15_2021 J65983BF	12	0.012473	0.477547
GridCal V3G1 9_15_2021 J65983BF	13	0.012138	0.470444
GridCal V3G1 9_15_2021 J65983BF	14	0.011947	0.466973
GridCal V3G1 9_15_2021 J65983BF	15	0.011949	0.466418
GridCal V3G1 9_15_2021 J65983BF	16	0.012029	0.468708
GridCal V3G1 9_15_2021 J65983BF	17	0.012446	0.476991
GridCal V3G1 9_15_2021 J65983BF	18	0.012236	0.472572
GridCal V3G1 9_15_2021 J65983BF	19	0.01221	0.473914
GridCal V3G2 9_15_2021 J65984BF	1	0.01194	0.4595
GridCal V3G2 9_15_2021 J65984BF	2	0.01186	0.462999
GridCal V3G2 9_15_2021 J65984BF	3	0.011857	0.463392
GridCal V3G2 9_15_2021 J65984BF	4	0.011968	0.465913
GridCal V3G2 9_15_2021 J65984BF	5	0.011781	0.462605
GridCal V3G2 9_15_2021 J65984BF	6	0.011627	0.458973
GridCal V3G2 9_15_2021 J65984BF	7	0.011628	0.459528
GridCal V3G2 9_15_2021 J65984BF	8	0.011719	0.460708
GridCal V3G2 9_15_2021 J65984BF	9	0.012004	0.465357
GridCal V3G2 9_15_2021 J65984BF	10	0.011645	0.458973
GridCal V3G2 9_15_2021 J65984BF	11	0.011567	0.4574
GridCal V3G2 9_15_2021 J65984BF	12	0.011589	0.457793
GridCal V3G2 9_15_2021 J65984BF	13	0.011737	0.461819
GridCal V3G2 9_15_2021 J65984BF	14	0.012169	0.469776
GridCal V3G2 9_15_2021 J65984BF	15	0.011884	0.463229
GridCal V3G2 9_15_2021 J65984BF	16	0.011727	0.46087
GridCal V3G2 9_15_2021 J65984BF	17	0.011709	0.460314
GridCal V3G2 9_15_2021 J65984BF	18	0.011776	0.461331
GridCal V4G1 9_15_2021 J65985BF	1	0.012117	0.464036
GridCal V4G1 9_15_2021 J65985BF	2	0.011197	0.43184
GridCal V4G1 9_15_2021 J65985BF	3	0.011583	0.451335
GridCal V4G1 9_15_2021 J65985BF	4	0.011711	0.454805
GridCal V4G1 9_15_2021 J65985BF	5	0.011678	0.453463
GridCal V4G1 9_15_2021 J65985BF	6	0.011432	0.447472
GridCal V4G1 9_15_2021 J65985BF	7	0.011324	0.444232

GridCal V6G2 9_15_2021 J65990BF	10	0.012234	0.464229
GridCal V6G2 9_15_2021 J65990BF	11	0.011791	0.457384
GridCal V6G2 9_15_2021 J65990BF	12	0.011709	0.455649
GridCal V6G2 9_15_2021 J65990BF	13	0.01169	0.4547
GridCal V6G2 9_15_2021 J65990BF	14	0.011745	0.45447
GridCal V6G2 9_15_2021 J65990BF	15	0.011901	0.457844
GridCal V6G2 9_15_2021 J65990BF	16	0.011828	0.457614
GridCal V6G2 9_15_2021 J65990BF	17	0.011908	0.459512
GridCal V6G2 9_15_2021 J65990BF	18	0.012051	0.461084
GridCal V7G1 9_15_2021 J65991BF	1	0.012192	0.462494
GridCal V7G1 9_15_2021 J65991BF	2	0.011894	0.458007
GridCal V7G1 9_15_2021 J65991BF	3	0.012047	0.460528
GridCal V7G1 9_15_2021 J65991BF	4	0.011759	0.456828
GridCal V7G1 9_15_2021 J65991BF	5	0.011768	0.456272
GridCal V7G1 9_15_2021 J65991BF	6	0.012033	0.461708
GridCal V7G1 9_15_2021 J65991BF	7	0.011875	0.457844
GridCal V7G1 9_15_2021 J65991BF	8	0.012124	0.460433
GridCal V7G1 9_15_2021 J65991BF	9	0.011727	0.454767
GridCal V7G1 9_15_2021 J65991BF	10	0.011624	0.453751
GridCal V7G1 9_15_2021 J65991BF	11	0.011622	0.453914
GridCal V7G1 9_15_2021 J65991BF	12	0.011783	0.456665
GridCal V7G1 9_15_2021 J65991BF	13	0.011949	0.451337
GridCal V7G1 9_15_2021 J65991BF	14	0.011863	0.457844
GridCal V7G1 9_15_2021 J65991BF	15	0.011748	0.455323
GridCal V7G1 9_15_2021 J65991BF	16	0.011727	0.455323
GridCal V7G1 9_15_2021 J65991BF	17	0.011748	0.455323
GridCal V7G1 9_15_2021 J65991BF	18	0.011845	0.45634
GridCal V7G1 9_15_2021 J65991BF	19	0.012393	0.465475
GridCal V7G1 9_15_2021 J65991BF	20	0.012333	0.463903
GridCal V7G2 9_15_2021 J65992BF	1	0.01184	0.458708
GridCal V7G2 9_15_2021 J65992BF	2	0.011779	0.458084
GridCal V7G2 9_15_2021 J65992BF	3	0.011813	0.459263
GridCal V7G2 9_15_2021 J65992BF	4	0.011622	0.455007
GridCal V7G2 9_15_2021 J65992BF	5	0.011566	0.452323
GridCal V7G2 9_15_2021 J65992BF	6	0.011609	0.454614
GridCal V7G2 9_15_2021 J65992BF	7	0.011753	0.457921
GridCal V7G2 9_15_2021 J65992BF	8	0.012064	0.464306
GridCal V7G2 9_15_2021 J65992BF	9	0.011668	0.455237
GridCal V7G2 9_15_2021 J65992BF	10	0.011516	0.451211
GridCal V7G2 9_15_2021 J65992BF	11	0.011482	0.450425
GridCal V7G2 9_15_2021 J65992BF	12	0.011569	0.453109
GridCal V7G2 9_15_2021 J65992BF	13	0.011767	0.456972
GridCal V7G2 9_15_2021 J65992BF	14	0.012273	0.468495
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GridCal V7G2 9_15_2021 J65992BF	17	0.011637	0.454844
GridCal V7G2 9_15_2021 J65992BF	18	0.011658	0.455468
GridCal V7G2 9_15_2021 J65992BF	19	0.012228	0.462773
GridCal V8G1 9_15_2021 J65993BF	1	0.012106	0.468304
GridCal V8G1 9_15_2021 J65993BF	2	0.01204	0.467748
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GridCal V8G1 9_15_2021 J65993BF	7	0.01191	0.464115
GridCal V8G1 9_15_2021 J65993BF	8	0.011711	0.459466
GridCal V8G1 9_15_2021 J65993BF	9	0.011617	0.457731
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GridCal V8G1 9_15_2021 J65993BF	12	0.012252	0.471218
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GridCal V8G1 9_15_2021 J65993BF	14	0.011755	0.459466
GridCal V8G1 9_15_2021 J65993BF	15	0.011722	0.459303

GridCal	V4G1	9_15_2021	J65985BF	8	0.01127	0.443446
GridCal	V4G1	9_15_2021	J65985BF	9	0.011392	0.446523
GridCal	V4G1	9_15_2021	J65985BF	10	0.011644	0.452514
GridCal	V4G1	9_15_2021	J65985BF	11	0.012034	0.461745
GridCal	V4G1	9_15_2021	J65985BF	12	0.011736	0.455361
GridCal	V4G1	9_15_2021	J65985BF	13	0.011452	0.448258
GridCal	V4G1	9_15_2021	J65985BF	14	0.011344	0.445181
GridCal	V4G1	9_15_2021	J65985BF	15	0.011306	0.44495
GridCal	V4G1	9_15_2021	J65985BF	16	0.011401	0.447309
GridCal	V4G1	9_15_2021	J65985BF	17	0.011648	0.453856
GridCal	V4G1	9_15_2021	J65985BF	18	0.01156	0.441003
GridCal	V4G1	9_15_2021	J65985BF	19	0.011775	0.455754
GridCal	V4G2	9_15_2021	J65986BF	1	0.012176	0.469153
GridCal	V4G2	9_15_2021	J65986BF	2	0.012024	0.467418
GridCal	V4G2	9_15_2021	J65986BF	3	0.012052	0.469315
GridCal	V4G2	9_15_2021	J65986BF	4	0.012148	0.470725
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GridCal	V5G1	9_15_2021	J65987BF	1	0.011929	0.450725
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GridCal	V5G1	9_15_2021	J65987BF	15	0.011578	0.443296
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GridCal	V8G1	9_15_2021	J65993BF	18	0.012155	0.460359
GridCal	V8G2	9_15_2021	J65994BF	1	0.012266	0.47086
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GridCal	V8G2	9_15_2021	J65994BF	6	0.011782	0.46274
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GridCal	V8G2	9_15_2021	J65994BF	8	0.011882	0.463526
GridCal	V8G2	9_15_2021	J65994BF	9	0.01177	0.461561
GridCal	V8G2	9_15_2021	J65994BF	10	0.011754	0.461561
GridCal	V8G2	9_15_2021	J65994BF	11	0.011834	0.46274
GridCal	V8G2	9_15_2021	J65994BF	12	0.012072	0.467552
GridCal	V8G2	9_15_2021	J65994BF	13	0.012495	0.475116
GridCal	V8G2	9_15_2021	J65994BF	14	0.012267	0.471023
GridCal	V8G2	9_15_2021	J65994BF	15	0.012096	0.46739
GridCal	V8G2	9_15_2021	J65994BF	16	0.012109	0.46739
GridCal	V8G2	9_15_2021	J65994BF	17	0.012572	0.475183

Lab/Cor, Inc.

Equipment Maintenance Form

Equipment: Hitachi-7000FA
Model Number: 7000FA
Serial Number: 747-32-03

Installation Date: 2005
Location: Hitachi Room
Associated Software: CRISP
Thermo Pathfinder
Olympus iTEM

MonthNear: October-21

Scheduled Maintenance

	1	2	3	4	5	6	7	8	9	10	11
Daily	T			S\-\	\-\	IS.U		8\	--		IS\-\
Weekly				3K							
Monthly						S\.\					
As Needed						'5\\					
Yearly											
	12	13	14	15	16	17	18	19	20	21	22
Daily	\\	S\\					<;\-\				
Weekly											
Monthly											
As Needed											
Yearly											
	23	24	25	26	27	28	29	30	31		
Daily											
Weekly											
Monthly											
As Needed											
Yearly											

Daily (if date is blank equipment not in use):
Check for water/ air leaks. Check for vacuum leaks. Grease the specimen rod O' ring lightly. Daily scope alignment.

Weekly:
Drain air compressor tank. Check blow-off line for presence of water (behind microscpe column)
Press valve at the bottom of glass bulb to expel any residual water m air lines.
Weekly Gold Ring Calibration taken on iTEM

Monthly:
Full column alignment- done before monthly calibrations performed
Check Oil level and color in rotary pump behind scope. If level is below the 'fill' mark, add Hydrocarbon based oil only (NO SILICON OIL).

As Needed:
Clean water line filter when water chiller tank and filter and cleaned.

Describe Any As Needed or Additional Maintenance:

Associated Hardware: Olympus Illlegaview Camera. S/N A2433301-3C8543C5
Thermo UltraDry Detector: Modl: SIN

Image Name: Plasma Etch 0m 0 tilt F63060BF

Image Name: Plasma Etch 0m 25 tilt F63061BF

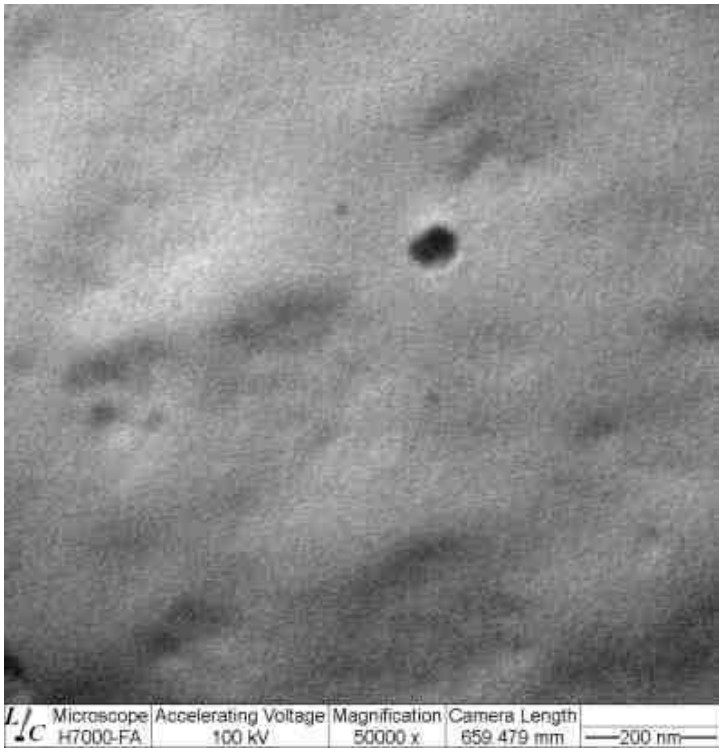
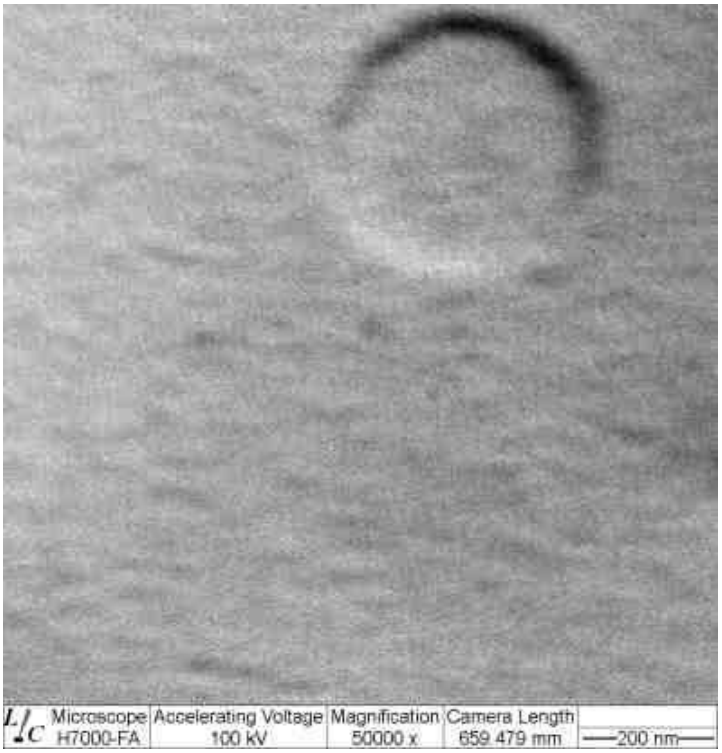


Image Name: Plasma Etch 2m 0 tilt F63062BF



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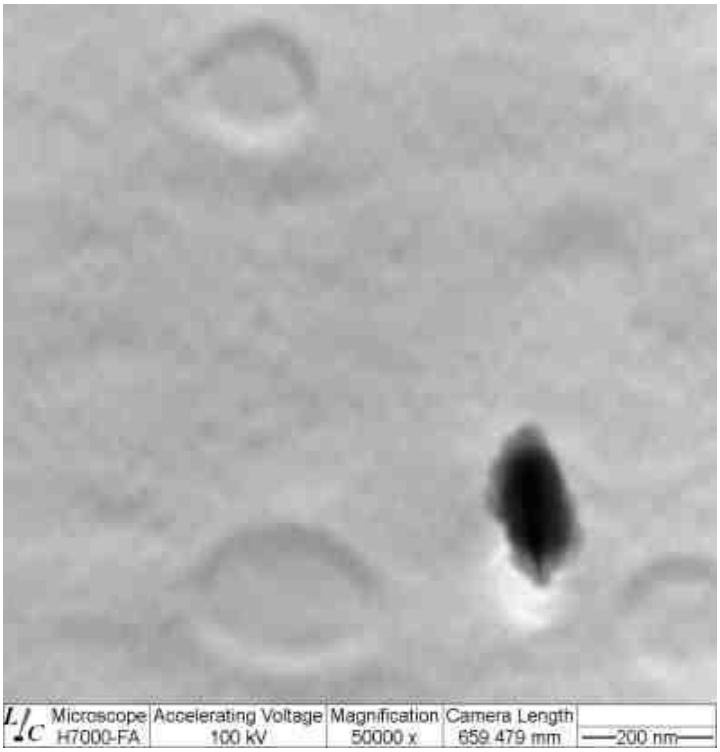


Image Name: Plasma Etch 4m 0 tilt F63064BF

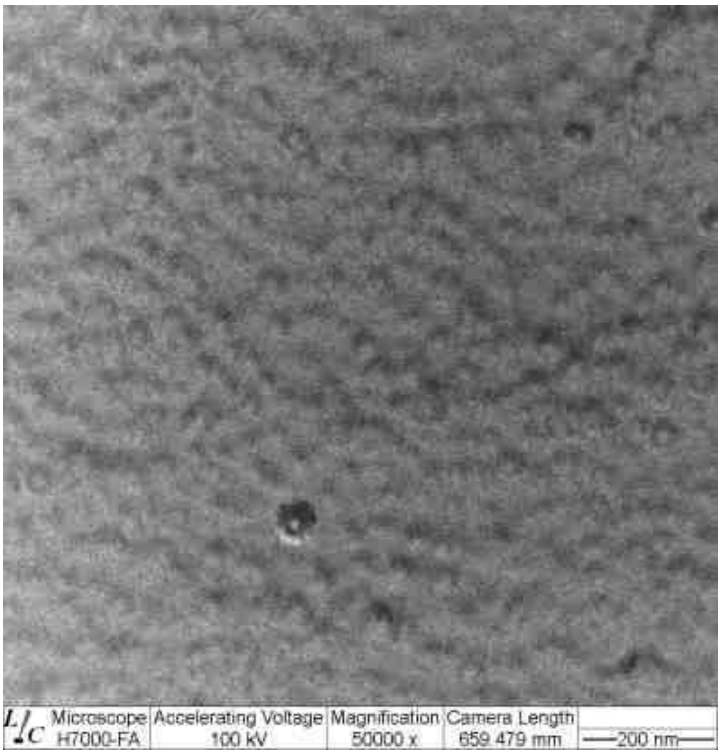
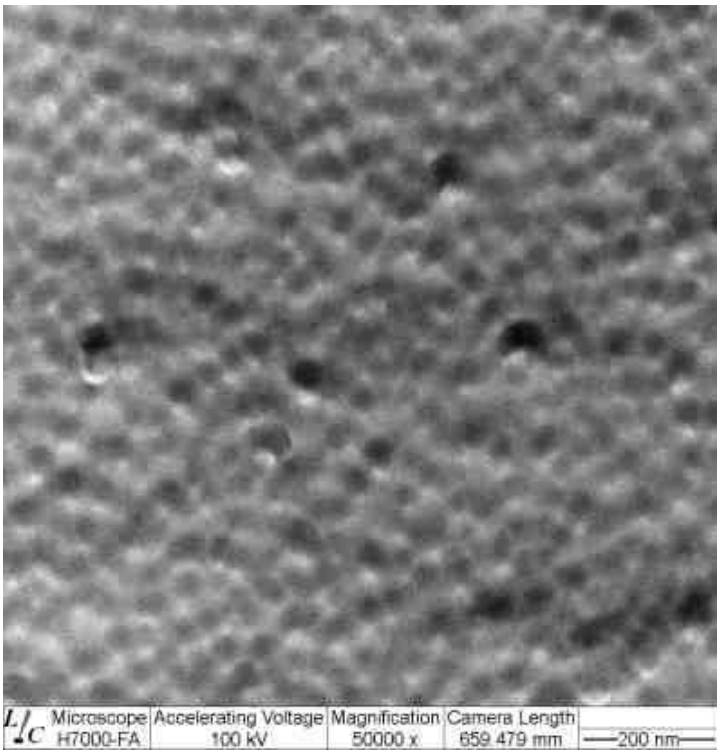


Image Name: Plasma Etch 4m 25 tilt F63065BF



Best Etch Rate: 5 Minutes

Image Name: Plasma Etch 5m 0 tilt F63066BF

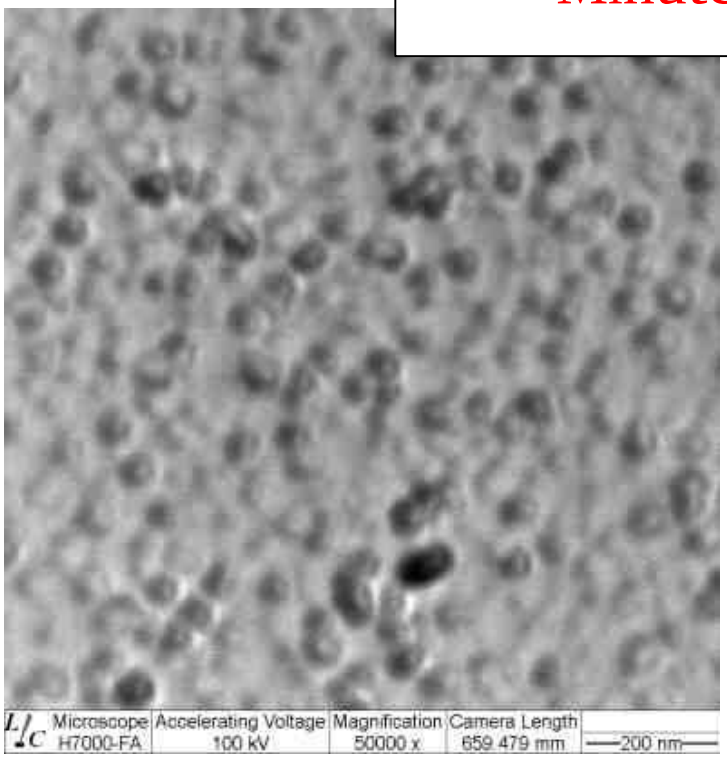


Image Name: Plasma Etch 5m 25 tilt F63067BF

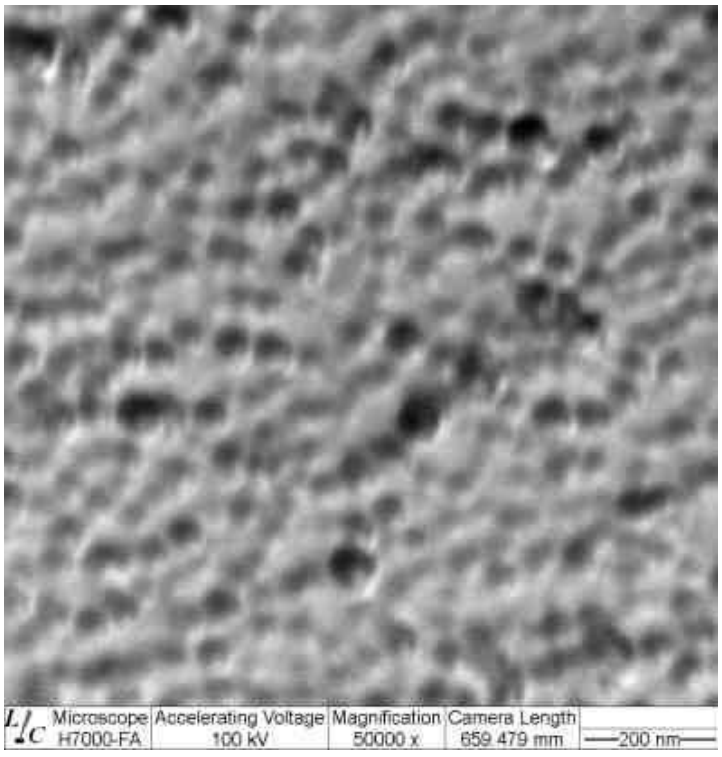


Image Name: Plasma Etch 6m 0 tilt F63068BF

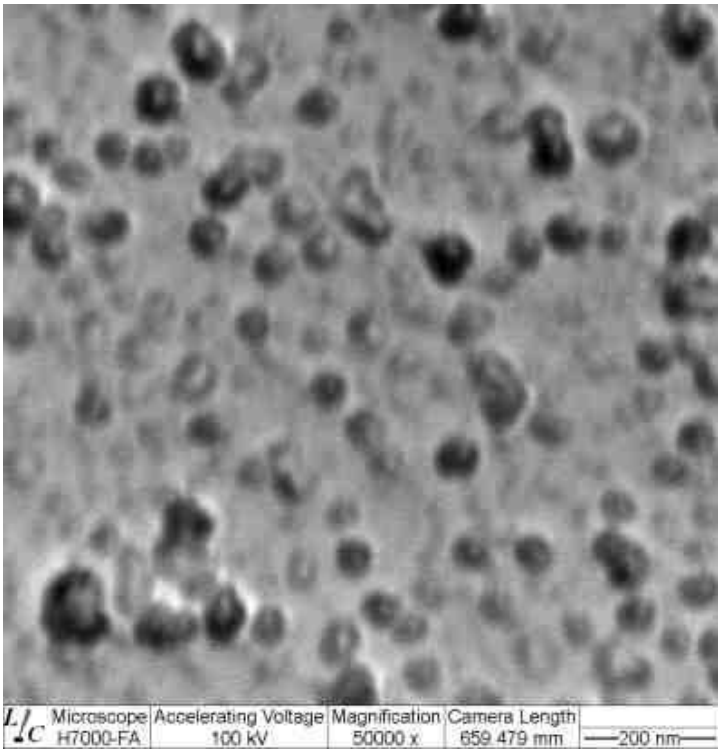
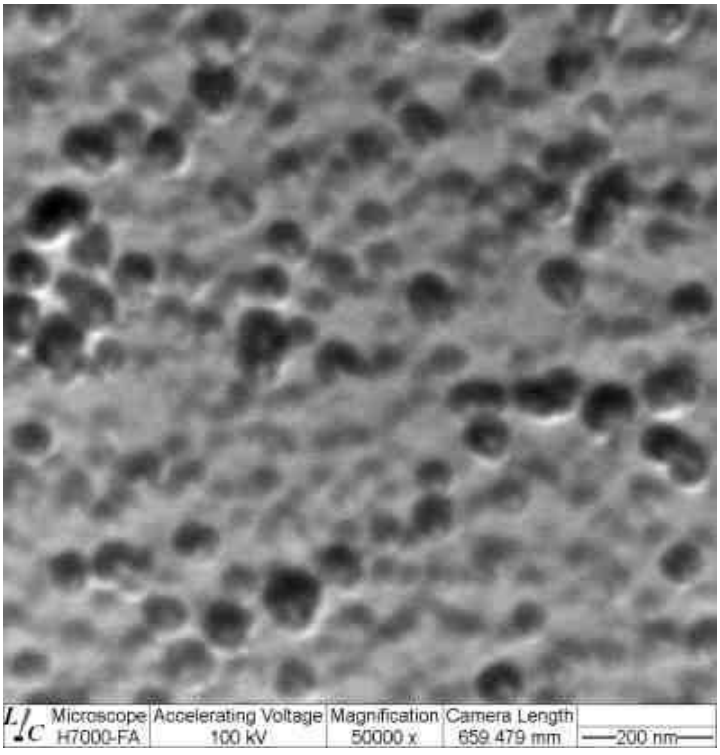


Image Name: Plasma Etch 6m 25 tilt F63069BF



ATTACHMENT C

Waste Disposal Documentation

November 18, 2021

Ms. Liz Smith, PO
U.S. EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

Reference: Contract No. 68HE0720D0002

Subject: CERCLA Off-Site Disposal Report for Price Street Asbestos
Task Order F0138, EQM Project No. 030343.0013

Dear Ms. Smith:

Environmental Quality Management, Inc. (EQM) is pleased to submit the enclosed CERCLA Off-Site Disposal Report for the subject Task Order. This report is submitted in accordance with the referenced contract section, Attachment 3, Reports of Work, CERCLA Off-Site Disposal Report.

Please review the reports and call me at (425) 673-2900 should you require further information.

Sincerely,

ENVIRONMENTAL QUALITY MANAGEMENT, INC.

Ron Mc Manamy
Program Manager

RM/lp

Enclosure

Cc: Mr. Eric Nuchims, OSC
File

CERCLA OFF-SITE DISPOSAL REPORT

EQM
AN ASRC INDUSTRIAL COMPANY

THE CERCLA OFF-SITE DISPOSAL REPORT

Information Required for CERCLA Off-Site Waste Management Activities

1. Superfund site name/State/CERCLIS number:
   Price Street Asbestos/WA/WAN001020665

2. Type of Action (check two)

X	Removal	___	Remedial
X	Fund-financed	___	Fund-financed
___	PRP-financed	___	PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheet for this and remaining questions for each type:
   Reference Attached Waste Profile

4. Quantity of waste:
   Reference Attached Waste Tracking Sheet

5. Range, average, and /or representative concentrations of the contaminates of concern:
   Reference Attached Waste Profile
   Waste Name: Waste Asbestos

6. Pre-treatment of waste before transportation: None
   ____ precipitation ____ neutralization ____ solidification ____ fixation
   ____ stabilization _____ other

7. Receiving RCRA facility name/location/ID number/unit(s)
   Reference Attached Manifest, Box 8

8. Receiving Region:
   Reference Attached Manifest, Box 8

9. Receiving Region Off-Site Contact (RROC). (note - this is the individual designed pursuant to the May 6, 1985 policy.)*
   Name: Xiangyu Chu **Date**: 9/22/2021

10. Date(s) of Shipments **(Reference Attached Manifest, Box 16),** Date disposal is completed (data that facility signs manifest for receipt of final shipment)
    Reference Attached Manifest, Box 18

11. Pre-treatment of waste at the site before final treatment or disposal: None

____ precipitation	____ neutralization
____ solidification	____ fixation
____ stabilization	____ other

12. Final method of treatment or disposal/unit receiving:

____ precipitation	____ neutralization
____ incineration	_X_ landfill
____ land treatment	____ injection
____ recovery/re-use	____ other

13. If wasteland filled:
-What disposal cell number or location?
-Type of liner in cell? (e.g. PVC, Clay hypalon)

14. Cost of activities: $19,261.44
-Cost based on treatment/disposal only (no transportation cost): $906.44
-Cost for transportation: $16,465.00
-Cost for other: $1,890.00

WASTE TRACKING SHEET

Price Street Asbestos
TO No. F0138-0013
EQM Project No. 030343.0013
Transportation and Disposal Tracking Sheet

Vendor Name: ACT Environmental
PO# 24081

Waste Name	Profile #	Facility	Ship Date	Manifest #	Line#	wt/tons	Trans Qty	Trans Unit	Transport Cost	Transport Total	Disposal Qty	Disposal Unit	Disposal Cost	Disposal Total	Other Cost	TOTAL
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385498	1	1.45	14.83	Hour	185	$2,743.55	1.45	Ton	$62.00	$89.90	325.00	$3,158.45
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385499	1	1.45	14.83	Hour	185	$2,743.55	1.45	Ton	$62.00	$89.90	325.00	$3,158.45
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385497	1	3.42	14.83	Hour	185	$2,743.55	3.42	Ton	$62.00	$212.04	325.00	$3,280.59
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385495	1	3.42	14.83	Hour	185	$2,743.55	3.42	Ton	$62.00	$212.04	325.00	$3,280.59
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385488	1	2.44	14.84	Hour	185	$2,745.40	2.44	Ton	$62.00	$151.28	295.00	$3,191.68
Waste Asbestos	116462WA	Waste Management	10/4/2021	D385496	1	2.44	14.84	Hour	185	$2,745.40	2.44	Ton	$62.00	$151.28	295.00	$3,191.68
TOTALS										**$16,465.00**				**$906.44**	**$1,890.00**	**$19,261.44**

WASTE PROFILE

EZ Profile™

Requested Facility: Greater Wenatchee Regional Landfill ❑ Unsure Profile Number: 116462WA
❑ Multiple Generator Locations (Attach Locations) ❑ Request Certificate of Disposal ❑ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: EPA
2. Generator Site Address: 111 Price Street
   (City, State, ZIP) Port Hadlock WA 98339
3. County: Jefferson
4. Contact Name: Pat Turina
5. Email: pturina01@gmail.com
6. Phone: (503) 969-7900 7. Fax: (425) 673-7511
8. Generator EPA ID: WAN001020665 ❑ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ❑ SAME AS GENERATOR

1. Billing Name: ACTenviro
2. Billing Address: 967 Mabury Road
   (City, State, ZIP) San Jose CA 95133
3. Contact Name: Tim Berrens
4. Email: tberrens@actenviro.com
5. Phone: (253) 777-6250 6. Fax: (408) 548-5052
7. WM Hauled? ❑ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☑ Credit Account ❑ Cash ❑ Credit Card

C. MATERIAL INFORMATION

1. Common Name: asbestos containing building material (ACBM)
   Describe Process(es) Generating Material: ❑ See Attached
   EPA site clean-up of dilapidated home / building
2. Material Composition and Contaminants: ❑ See Attached

1. Building Material containing Asbestos	80-100 %
2. Debris (wood, plastic, paper, dirt, metal)	1-20 %
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: Varies
5. Physical State at 70˚F: ☑ Solid ❑ Liquid ❑ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: _____ to _____ ☑ N/A
8. Strong Odor: ❑ Yes ☑ No Describe: _____
9. Flash Point: ❑ <140˚F ❑ 140˚–199˚F ☑ ≥200˚ ❑ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ❑ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ❑ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ❑ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ❑ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ❑ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ❑ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ❑ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ❑ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ❑ Yes ☑ No
   a. Regulated by 40 CFR 761? ❑ Yes ❑ No
   b. Remediation under 40 CFR 761.61 (a)? ❑ Yes ❑ No
   c. Were PCB imported into the US? ❑ Yes ❑ No
10. Regulated and/or Untreated Medical/Infectious Waste? ❑ Yes ☑ No
11. Contains Asbestos? ☑ Yes ❑ No
    → If Yes: ☑ Non-Friable ❑ Non-Friable – Regulated ❑ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   See asbestos report page 4 of 5
2. Other information attached (such as MSDS)? ❑ Yes

F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ❑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 80
   ❑ Tons ☑ Yards ❑ Drums ❑ Gallons ❑ Other: _____
3. Container Type and Size: 20 yard roll-off
4. USDOT Proper Shipping Name: ❑ N/A
   NA2212, ASBESTOS, 9, PG III

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☒ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Jennifer Goltz on behalf of US EPA Region 10 Date: 9/20/2021
Title: T&D Coordinator
Company: Environmental Quality Management

Certification Signature

Jennifer Goltz

Digitally signed by Jennifer Goltz
DN: cn=Jennifer Goltz, o=Environmental Quality Management, ou=ERRS, email=jgoltz@eqm.com, c=US
Date: 2021.09.20 09:50:07 -07'00'

WASTE MANIFEST

14004

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
WAN001020665	1	888-785-7225	D385498

GENERATOR

5. Generator's Name and Mailing Address
EPA Region 10
1200 6th Ave
Seattle, WA 98101
Generator's Phone:

Generator's Site Address (if different than mailing address)
EPA Region 10
111 Price Street
Port Hadlock, WA

6. Transporter 1 Company Name: MP Environmental Services — U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807
Facility's Phone: — U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NA2212, Waste Asbestos, 9, PGIII	1			P	6681
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Project Number 315606 Document #: D385498
1) ERG#171; 116462WA EPW-_____

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Eric Nichols for on behalf of USEPA — Signature — Month 10 Day 4 Year 2024

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Cary Walker — Signature — Month 10 Day 4 Year 21

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: J Isaacson — Signature: J Isaacson — Month 10 Day 5 Year 2024

GC Labels • Printed in the USA
1-800-997-6966

DESIGNATED FACILITY TO GENERATOR

Reorder Part# MANIFEST-C6NHWC
913-897-6966

14004

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAN001020665
2. Page 1 of: 1
3. Emergency Response Phone: 888-785-7225
4. Waste Tracking Number: D385499

5. Generator's Name and Mailing Address
EPA Region 10
1200 6th Ave
Seattle, WA 98101
Generator's Phone:

Generator's Site Address (if different than mailing address)
EPA Region 10
111 Price Street
Port Hadlock, WA

6. Transporter 1 Company Name: MP Environmental Services — U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807
Facility's Phone: — U.S. EPA ID Number:

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NA2212, Waste Asbestos, 9, PGIII	1			P	7320
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Project Number 315606 Document #: D385499
1) ERG#171; 116462WA EPW-

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Eric Nuckols FOSC on behalf of USEPA — Signature — Month: 10 Day: 4 Year: 2021

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Matthew Clark — Signature — Month: 10 Day: 4 Year: 21

Transporter 2 Printed/Typed Name — Signature — Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: L Isaacson — Signature: L Isaacson — Month: 10 Day: 5 Year: 21

DESIGNATED FACILITY TO GENERATOR

Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98802 Ph: (509) 884-2802

Reprint
Ticket# 908899

Customer Name ACTENVIRO ACTENVIRO
Ticket Date 10/05/2021
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest D385498 D385499
Profile 116462WA (LF01 asbestos containing building material (ACBM))
Generator 168-EPA PORT HADLOCK EPA 111 PRICE STREET PORT HADLOCK WA 98339
PO#

Carrier MPE
Vehicle# 14004
Container
Driver
Check#
Billing# 0508844
Grid

	Time	Scale	Operator	Inbound		
In	10/05/2021 06:04:54	Inbound	Janelle		Gross	49400 lb
Out	10/05/2021 08:31:34	Outbound	Janelle		Tare	43600 lb
					Net	5800 lb
					Tons	2.90

Comments

Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1 Asb Non Fri-Tons-Asbest	100	2.90	Tons				JEFFERSON
2 EVF-P10-Environmental F	100		%				
3 CDHD FEE-Chelan Douglas	100	2.90	Tons				

Total Tax/Fees
Total Ticket

Driver`s Signature JH Hogan MPE 14004

The total amount includes fees and taxes that may not all be listed on this ticket due to technic
limitation.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

171

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
WAN001020665	1	888-785-7225	D385497

GENERATOR

5. Generator's Name and Mailing Address
EPA Region 10
1200 6th Ave
Seattle, WA 98101
Generator's Phone:

Generator's Site Address (if different than mailing address)
EPA Region 10
111 Price Street
Port Hadlock, WA

6. Transporter 1 Company Name: MP Environmental Services — U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807
Facility's Phone: — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NA2212, Waste Asbestos, 9, PGIII	1		5684	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Project Number 315606 Document #: D385497
1) ERG#171; 116462WA EPW-_____

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Brian Nuchins for the USEPA — Signature: [signature] — Month: 10 Day: 4 Year: 2021

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Joseph A. McDaniel — Signature: [signature] — Month: 10 Day: 4 Year: 21

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: J Isaacson — Signature: [signature] — Month: 10 Day: 5 Year: 2021

DESIGNATED FACILITY TO GENERATOR

747

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAN001020665
2. Page 1 of: 1
3. Emergency Response Phone: 888-785-7225
4. Waste Tracking Number: D385495

GENERATOR

5. Generator's Name and Mailing Address
EPA Region 10
1200 6th Ave
Seattle, WA 98101
Generator's Phone:

Generator's Site Address (if different than mailing address)
EPA Region 10
111 Price Street
Port Hadlock, WA

6. Transporter 1 Company Name: MP Environmental Services
U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807
Facility's Phone:
U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NA2212, Waste Asbestos, 9, PGIII	1		6175	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Project Number 315606 Document #: D385495
1) ERG#171; 116462WA EPW-_____

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
Generator's/Offeror's Printed/Typed Name: Eric Worthington FBO on behalf of USEPA
Signature:
Month 10 Day 8 Year 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Joseph A. McDaniel
Signature:
Month 10 Day 9 Year 21
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: J Isaacson
Signature: J Isaacson
Month 10 Day 5 Year 21

DESIGNATED FACILITY TO GENERATOR

Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98802 Ph: (509) 884-2802

Reprint
Ticket# 908900

Customer Name ACTENVIRO ACTENVIRO
Ticket Date 10/05/2021
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest D385497 D385495
Profile 116462WA (LF01 asbestos containing building material (ACBM))
Generator 168-EPA PORT HADLOCK EPA 111 PRICE STREET PORT HADLOCK WA 98339
PO#

Carrier MPE
Vehicle# 747
Container
Driver
Check#
Billing# 0508844
Grid

	Time	Scale	Operator	Inbound		
In	10/05/2021 06:07:40	Inbound	Janelle		Gross	59520 lb
Out	10/05/2021 09:58:49	Outbound	Janelle		Tare	45840 lb
					Net	13680 lb
					Tons	6.84

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	Asb Non Fri-Tons-Asbest	100	6.84	Tons				JEFFERSON
2	EVF-P10-Environmental F	100		%				JEFFERSON
3	CDHD FEE-Chelan Douglas	100	6.84	Tons				JEFFERSON

Total Tax/Fees
Total Ticket

Driver`s Signature JH for MPE 747

The total amount includes fees and taxes that may not all be listed on this ticket due to technic
limitation.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
WAN001020665	1	888-785-7225	D385488

GENERATOR

5. Generator's Name and Mailing Address

EPA Region 10
1200 6th Ave
Seattle, WA 98101

Generator's Phone:

Generator's Site Address (if different than mailing address)

EPA Region 10
111 Price Street
Port Hadlock, WA

6. Transporter 1 Company Name: MP Environmental Services — U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807

Facility's Phone: — U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NA2212, Waste Asbestos, 9, PGIII				P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

Project Number 315606 Document #: D385488

1) ERG#171; 116462WA EPW

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Bruce Hedrick for POSC on behalf of US EPA — Signature — Month 10 Day 4 Year 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: PAUL SADLER — Signature — Month 10 Day 4 Year 21

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: J ISAACSON — Signature: J Isaacson — Month 10 Day 6 Year 21

GC Labels • Printed in the USA
1-800-997-6966

DESIGNATED FACILITY TO GENERATOR

Reorder Part# MANIFEST-C6NHWC
913-897-6966

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAN001020665
2. Page 1 of: 1
3. Emergency Response Phone: 888-785-7225
4. Waste Tracking Number: D385496

GENERATOR

5. Generator's Name and Mailing Address:
EPA Region 10
1200 6th Ave
Seattle, WA 98101

Generator's Site Address (if different than mailing address):
EPA Region 10
111 Price Street
Port Hadlock, WA

Generator's Phone:

6. Transporter 1 Company Name: MP Environmental Services
U.S. EPA ID Number: CAT000624247

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
Waste Management - Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98807
U.S. EPA ID Number:

Facility's Phone:

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
				P
1. NA2212, Waste Asbestos, 9, PGIII				
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
Project Number 315606 Document #: D385496
1) ERG#171; 116462WA EPW-__________

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Eric Nuchims FOSC on behalf of USEPA
Signature: [signature]
Month 10 Day 4 Year 2021

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: PAUL SOLDIER
Signature: [signature]
Month 10 Day 4 Year 21

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: J Isaacson
Signature: [signature]
Month 10 Day 6 Year 2021

DESIGNATED FACILITY TO GENERATOR

Greater Wenatchee Regional Landfill
191 Webb Road
Wenatchee, WA 98802 Ph: (509) 884-2802

Reprint
Ticket# 909019

Customer Name ACTENVIRO ACTENVIRO
Ticket Date 10/06/2021
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest D385496 D385488
Profile 116462WA (LF01 asbestos containing building material (ACBM))
Generator 168-EPA PORT HADLOCK EPA 111 PRICE STREET PORT HADLOCK WA 98339
PO#

Carrier MPE
Vehicle# 747
Container
Driver
Check#
Billing# 0508844
Grid

	Time	Scale	Operator	Inbound		
In	10/06/2021 06:56:18	Inbound	Janelle		Gross	56320 lb
Out	10/06/2021 10:01:26	Outbound	Janelle		Tare	46560 lb
					Net	9760 lb
					Tons	4.88

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	Asb Non Fri-Tons-Asbest	100	4.88	Tons				JEFFERSON
2	EVF-P10-Environmental F	100		%				JEFFERSON
3	CDHD FEE-Chelan Douglas	100	4.88	Tons				JEFFERSON

Total Tax/Fees
Total Ticket

Driver`s Signature

The total amount includes fees and taxes that may not all be listed on this ticket due to technic
limitation.