SWCAA
Southwest Clean Air Agency

Notice of Intent to Remove Asbestos

Case #: 24-145
Amendment: 0

11815 NE 99th Street, Suite 1294
Vancouver, WA 98662
Voice: 360-574-3058
Fax: 360-576-0925
Web: https://www.swcleanair.gov
Email: Tina@swcleanair.gov

Date Received: 3/8/2024
Date Paid: 3/8/2024
SWCAA Fee: $369.00
Receipt #: 152518526

This notification MUST be present at all times at the asbestos project sit

Quantity to be removed: 630 Square Feet 0 Linear Feet
Workshift days: M T W Th F
Project starting date: 3/18/2024 Project Completion date: 5/5/2024
Workshift hours: 7am - 3:30pm

Site Name: Float Crane / Boat
Site address: 6801 NW Old Lower River Rd
Location of Asbestos: Floor tile & Roof
City/State/Zip: Vancouver WA 98660
☐ Demolition of Structure (Notification of Demolition required)
County: CLARK COUNTY

☑ Asbestos survey conducted?
No survey reason:
AHERA Inspector: Ysabel E Perez
Certification #: 182826

Material to be Removed:

☐ Fireproofing ☐ Popcorn Ceiling ☐ CAB ☐ Sheet Vinyl ☐ Boiler Insulation ☐ Duct Tape
☐ Duct Paper ☐ Mag Pipe Insulation ☐ Air Cell ☐ CA Pipe ☑ VAT
☑ Other Built up Roofing

Control Methods:

☑ N.P Enclosure ☐ Glove Bag ☐ Mini Enclosure ☐ Wrap and Cut ☑ Water ☑ HEPA Vac
☑ Other Built up roofing will not have NPE.

Asbestos Contractor: IRS Environmental of Portland, Inc.
Phone: 503-693-6388
Mailing Address: 777 SW Armco Ave, Hillsboro, OR, 97123
Email: Nancy@irsenvironmental.com
Certification ##: ABCN00001384
Supervisor: Nancy Nguyen
Phone: 503-693-6388

Property Owner: HME Construction inc
Phone: 360-601-5758
Mailing Address: 6801 NW Old Lower River Rd,vancouver WA 98660

Asbestos Disposal Site: Hillsboro Landfill: 3205 SE Minter Bridge Rd, Hillsboro, OR, 97123-

I DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS NOTIFICATION IS, TO THE BEST OF MY KNOWLEDGE, ACCURATE AND COMPLETE.

Submitter Name: Nancy Nguyen
Representing: IRS Environmental of Portland
Submitter Title: CEO
Date Submitted: 3/8/2024

Reviewed by SWCAA: Brian Fallon
☑ Approved

SWCAA
Southwest Clean Air Agency

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North American
Marine Consultants, LLC

GENERAL CONDITION SURVEY

DERRICK BARGE "BD-6065"

OFFICIAL NUMBER: UNDOCUMENTED

**OWNED BY: STATE OF OREGON, PORT OF PORTLAND
DIVISION OF NAVIGATION**

At the request of Mr. Paul Freeman, Dredge Captain with the Port of Portland, the undersigned independent marine surveyor inspected the subject vessel as it lay afloat and moored at the fleeting facility operated by the Port of Portland, Division of Navigation, across from Swan Island in Portland, Oregon.

The purpose of the attendance was to determine, to the extent possible, the general condition of the vessel and to prepare a record of same.

Date of Survey:	April 14, 2020
Persons in Attendance:	Mr. Paul Freeman Port of Portland Division of Navigation
Independent Marine Surveyor:	Capt. Steven J. Bahnsen, NAMS-CMS

GENERAL DESCRIPTION

The subject vessel was an all steel, welded derrick barge built during 1951 by Wellman Engineering for the United States Army, in Cincinnati, Ohio. The barge was fitted with a Dravo, Model 28, pedestal mounted, revolving gantry crane with a lifting capacity of 67 tons at a 40' radius. The hull was divided by three longitudinal and seven transverse, watertight bulkheads into a raked bow, raked stern and 28 midbody compartments.

Approximate hull dimensions were 140' x 58' x 12'.

BOW COMPARTMENT

The port bow side plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The port bow side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The port bow rake knuckle plates contained scattered abrasions and minor indentations from 0-1", with no one area worthy of specific mention.

The port bow corner plates contained scattered abrasions and minor indentations from 0-1/2", with no one area worthy of specific mention.

The port bow corner was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The headlog plates were contained scattered abrasions and minor indentations from 0-1/2", with no one area worthy of specific mention.

The starboard bow corner plates contained scattered abrasions and minor indentations from 0-1/2", with no one area worthy of specific mention.

The starboard bow corner was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The starboard bow rake knuckle plates contained scattered abrasions and minor indentations from 0-1", with no one area worthy of specific mention.

The starboard bow side plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The starboard bow side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The deck plates contained scattered abrasions and minor indentations from 0-1/2", with no one area worthy of specific mention.

STARBOARD SIDE

The starboard side and gunwale plates in way of the midbody tanks contained scattered abrasions and minor indentations from 0-1/2" and random indentations from 0-3/4", with no one area worthy of specific mention.

The starboard side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level. Vertical, double formed rub rails extended between the upper and lower rails at approximately 15' spacing.

The deck plates contained scattered abrasions and minor indentations from 0-1/2" with no one area worthy of specific mention.

STERN COMPARTMENT

The starboard stern side plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The starboard stern side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The starboard stern rake knuckle plates contained scattered abrasions and minor indentations from 0-1", with no one area worthy of specific mention.

The starboard stern corner plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The starboard stern corner was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The sternlog plates contained scattered abrasions and minor indentations from 0-3/4" with random indentations from 0-1.5" with no one area worthy of specific mention.

The sternlog was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The port stern corner plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The port stern corner was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The port stern rake knuckle plates contained scattered abrasions and minor indentations from 0-1", with no one area worthy of specific mention.

The port stern side plates contained scattered abrasions and minor indentations from 0-3/4", with no one area worthy of specific mention.

The port stern side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level.

The deck plates contained scattered abrasions and minor indentations from 0-1/2", with no one area worthy of specific mention.

PORT SIDE

The port side and gunwale plates in way of the midbody tanks contained scattered abrasions and minor indentations from 0-1/2" and random indentations from 0-3/4" with no one area worthy of specific mention.

The port side was fitted with double formed rub rails at deck level and at a point approximately 5' below deck level. Vertical, double formed rub rails extended between the upper and lower rails at approximately 15' spacing.

The deck plates contained scattered abrasions and minor indentations from 0-1/2" with no one area worthy of specific mention.

DECK FITTINGS

The vessel was equipped with an assortment of typical deck fittings as follows:

Bow:

- 10" H-bitts, to port and starboard
- Berger anchor fairleads, to port and starboard
- 28" open chocks to port, starboard and at centerline
- Boom rest with four 8" x 8" steel I-beam legs and 3" steel angle diagonal bracing

Midbody (each side):

- (3) 48" cleats

- (4) 28" open chocks
- Multiple center bolt access hatches

Stern:

- 10" H-bitts, to port and starboard
- Berger, anchor fairlead to starboard only
- (6) center bolt access hatches

All deck fittings appeared to be in good condition.

DECK

A 15' x 15' x 8', painted steel deck house with plexi-glass windows in all four bulkheads was located to starboard on the barge deck. Inside the winch house, a Skagit, triple-drum, waterfall type anchor winch was mounted to the deck. The winch was powered by a 75 horsepower electric motor through a chain drive.

DERRICK

The derrick superstructure was mounted on a 28' ring circle atop a 30' x 30' x 3' pedestal constructed of 36" x 12" steel I-beams. The derrick machinery space was accessible via ladders on the port and starboard sides of the derrick pedestal and superstructure.

The overhead and bulkheads in the interior of the derrick superstructure were sheathed with white painted, insulating panels and the steel, diamond plate deck was painted red. LED light fixtures with translucent safety covers were fitted overhead.

The derrick swing gear was located forward on centerline in the derrick house, and was powered by a Westinghouse, 230 Volt, 45 horsepower, DC electric motor through a Jones reduction gear. A caged tool room containing a tool bench, parts bins and steel lockers was situated to port, and to starboard were the electric contact panel and resistor bank.

Along the aft bulkhead on an elevated deck was a Kohler, 350 kW / 438 KVA, 230 volt, DC generator with a Cummins, NTT 8855, six-cylinder, turbocharged, radiator cooled generator motor rated at 535 horsepower @ 1,800 RPM.

At the center of the derrick house interior was a Dravo, three-drum, draw works powered by a Westinghouse 135 horsepower DC electric motor. The main hoist wire drum, auxiliary drum

and boom hoist wire were all spooled with 1.25" steel cable. The main, boom and auxiliary hoist brake drums were clean with no rust scale, and the brake pads appeared to be in good condition.

Operator's Cab:

A steel stairway led up from the starboard side of the machinery space to the crane operator's cab.

The exposed steel overhead and bulkheads in operator's cab were painted black and the steel deck was painted red. Opening windows were set into the forward, port and starboard bulkheads and overhead. An incandescent light fixture with a glass globe and bronze safety cage lit the cab.

Consoles along the port and starboard sides of the cab and were equipped with controls and gauges for operation of the derrick. The operator's cab was further equipped with the following:

- Motorola, company radio
- Standard Horizon, Quest, VHF marine radio
- Load cell

INTERNAL HULL COMPARTMENTS

No rake or midbody compartments were opened for inspection however, the internal framing in the compartments was expected to be generally distorted to conform to the exterior hull conditions described previously except as otherwise noted below. The following descriptions of the compartment interiors were taken from a previously issued report.

Starboard Bow Rake Compartment:

The compartment was found to be dry and clean, and the coatings on the side shell, deck, bottom plating and framing all appeared to be in very good condition. No excessive damage was noted in the compartment.

Starboard No. 2 Midbody Compartment:

The compartment was found to contain approximately 4" of water. Coatings on the side shell, deck, bottom plating and framing all appeared to be in very good condition. No excessive damage was noted in the compartment.

Starboard Stern Rake Compartment:

The compartment was dry and clean, and the coatings on the side shell, deck, bottom plating and framing all appeared to be in very good condition. No excessive damage was noted in the compartment.

COATINGS

The black exterior hull coatings appeared to be in fair condition, with multiple areas of red primer paint showing through the black paint.

The gray coatings on the derrick superstructure appeared to be in fair condition and approximately 75% intact.

Coatings on the decks were in good condition and approximately 90% intact.

SURVEYOR'S COMMENTS

The derrick barge "B-6065" was utilized by the dredge "Oregon" crew to support dredging operations. In the opinion of the undersigned, the vessel appeared to be in good condition and was suitable for its current utilization.

No ultra-sonic gauging or other accurate measurements of hull plate thickness were made by the undersigned.

The above survey report is submitted by the undersigned independent marine surveyor without prejudice to the rights of all parties concerned.

NORTH AMERICAN MARINE CONSULTANTS, LLC

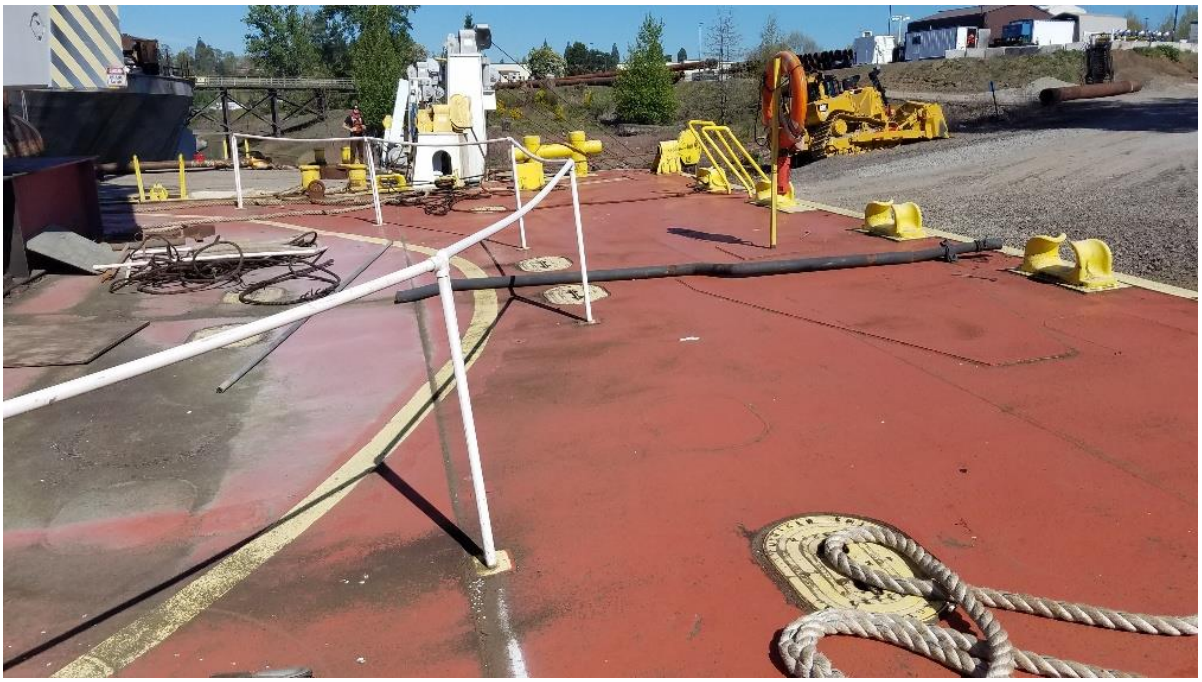
Capt. Steven J. Bahnsen, NAMS-CMS
Independent Marine Surveyor

Anchor winch

Bow deck, looking to starboard

Derrick machinery house

Deck, looking aft



Stern deck

Winch house

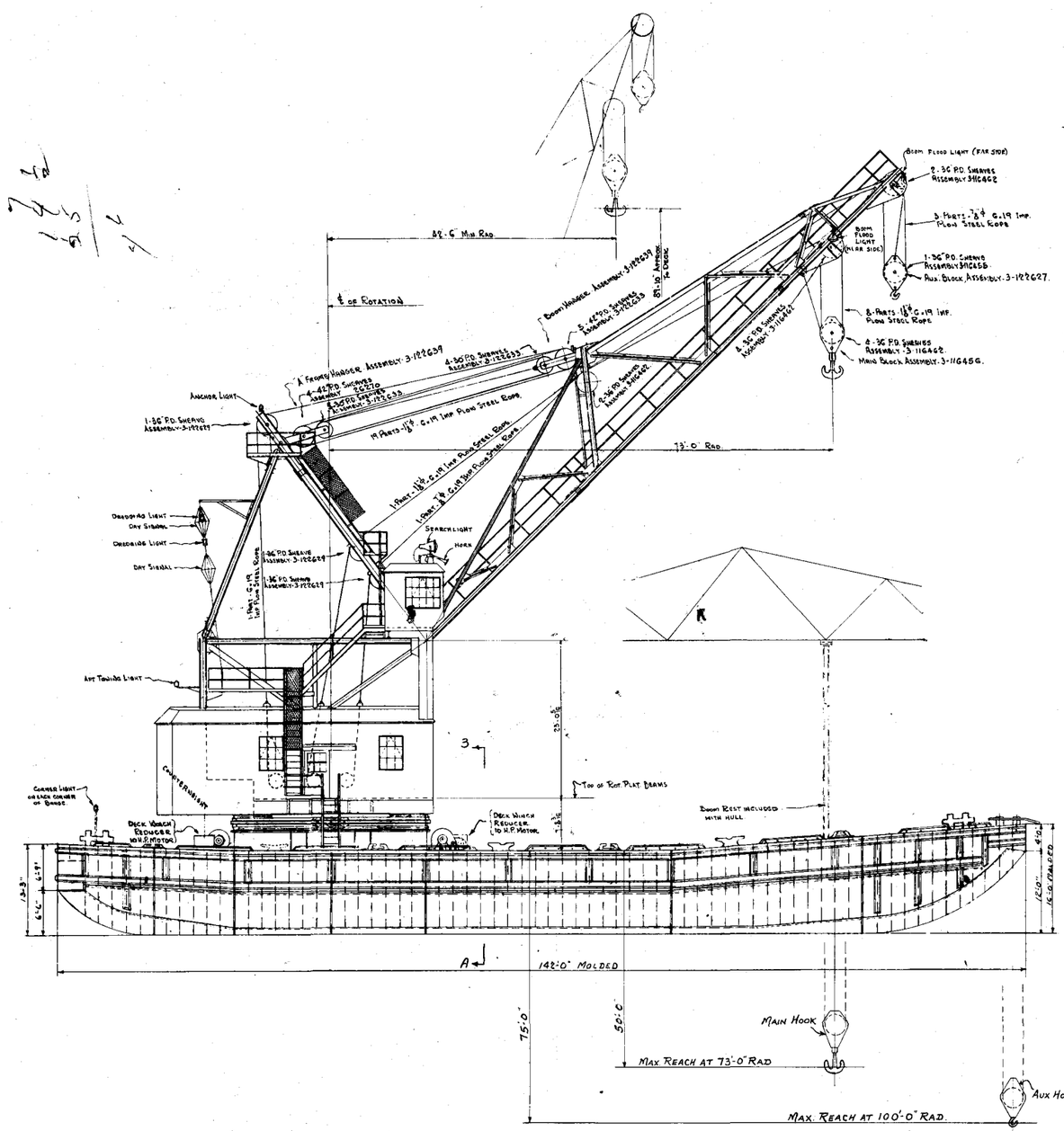
Main engine

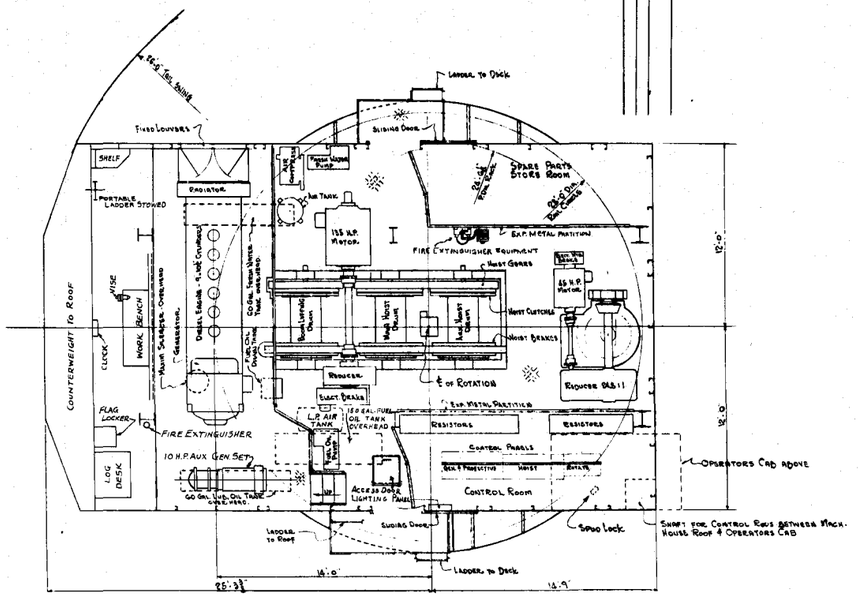
Swing gear

Tool room

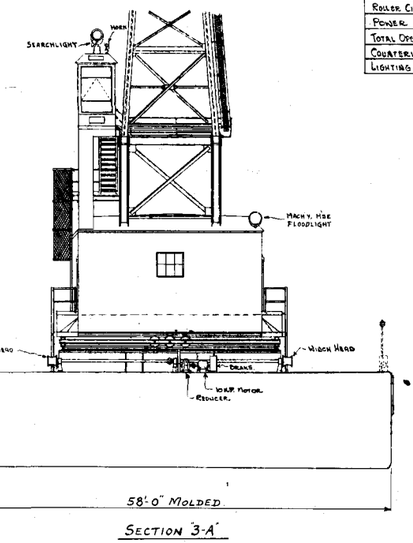
Draw works

REV. ITEM	PANEL	ALTERATIONS DESCRIPTION	DATE	AUTH'D.





MACHINERY PLAN
SCALE: 1/8" = 1'-0"



SECTION 3-A

CAPACITY - WEIGHTS & OPERATING DATA

FUNCTION	CAPACITY	RADIUS	SPEED	MOTOR	CONTROL	REEVING	DRUM
MAIN HOIST	136,600#	82'-6" MIN. 73'-0" MIN.	225 F.P.M. Av.	3 DRUM FRICTION HOIST WITH 135 H.P. 440 R.P.M. D.C. MOTOR. SERIES WOUND	MAGNETIC & DYNAMIC BRAKING WITH CONTROLLED FRICTIONS	8 PARTS OF 1" ROPE	24" P.D. FIRST LAYER.
BOOM LUFFING	136,600#	82'-6" TO 73'-0"	1.5 MIN. APPROX.		ELECTRIC & FOOT BRAKES	14 PARTS OF 1" ROPE	Do.
AUX. HOIST	33,600#	47'-0" MIN. 100'-0" MAX.	60 F.P.M. Av.			8 PARTS OF 1" ROPE	24" P.D. FIRST LAYER.
ROTATE	—	—	ONE REVOLUTION IN 2½ MIN.	45 H.P. 525 R.P.M.	MAGNETIC DRY FLUSHERS	—	—
DECK WINCHES	SINGLE LINE PULL 5000# @ 55 F.P.M. 10,000 @ 25 F.P.M.	TWO DRUMS SIMULTANEOUS OPERATION		10 H.P. EACH 1050 R.P.M.	REV. DRUM CONTR. INTERNAL PARTS	SINGLE LINE CAP. RATING	12 DIA. WINCH HEADS.

ROLLER CIRCLE - 28'-0" DIA. WITH 44 DOUBLE FLANGED ROLLED STEEL ROLLERS.
POWER - DIESEL ELECTRIC - 150 K.W. GENERATOR - 230 VOLT D.C.
TOTAL OPERATING WEIGHT OF CRANE ABOVE ROLLER CIRCLE - 665,000# CRANE PASS - 80,000#
COUNTERWEIGHT - 280,000# CONCRETE @ 140# PER CU. FT.
LIGHTING GENERATOR - DIESEL ELECTRIC - 5 K.W. GEN. - 230 VOLT D.C.

DRAVO CORPORATION DR. PHILLIPS CHK. GORMAN APP'D. E. WILLISON	60 TON FLOATING CRANE HULL 142'x58'x12'0" GENERAL ARRANGEMENT SCALE	DRAVO CORPORATION (E.W.D.) PITTSBURGH, PA DRAWING NO. 3-122675 Y&D No 546351

MAUL FOSTER ALONGI
3140 NE Broadway Street | Portland, OR 97232 | 971 544-2139 | www.maulfoster.com

March 18, 2022
Project No. M0232.25.027

Erin Anderson
Port of Portland
7200 Northeast Airport Way
Portland, Oregon 97218

Re: Navigation Base Float Crane—Pre-Renovation Hazardous Building Materials Survey

Dear Ms. Anderson:

On December 13 and 14, 2021, at the request of the Port of Portland (Port), Maul, Foster, & Alongi, Inc. (MFA) conducted a pre-renovation assessment of suspected asbestos-containing materials (ACM) and lead-based paint (LBP) of the float crane located at the Navigation Base at 6208 N Ensign Street (the Property). The assessment included below deck areas including the former crew quarters and the interior and exterior of the portable job trailer. The Port requested this assessment in support of proposed renovation activities at the Property.

The assessment was conducted consistent with federal standards, Oregon Department of Environmental Quality building survey requirements, and Oregon Administrative Rules pertaining to ACM. Sampling was conducted by Emily Curtis, Connor Anderson, and Ysabel Perez, Asbestos Hazard Emergency Response Act (AHERA) accredited asbestos building inspectors. The samplers AHERA building inspector certificates are included in Attachment A. Access to the Property was coordinated with the Port.

SAMPLING PROCEDURES

Confined-Space Entry

The below deck crew quarters is only accessible via a hatch and semi-vertical ladder and is a confined space subject to 29 Code of Federal Regulations 1915 Subpart B, Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment. As part of this assessment, MFA completed a confined space evaluation and provided a mechanical retrieval tripod above the hatch while sampling for potential rescue purposes.

Both entrants to the space were equipped with a harness and MFA had one designated attendant present for each entrant during the sampling. Before entering the confined space, MFA evaluated the space using a combustible gas monitor. MFA prepared a safe work plan describing these procedures that was approved by the Port before completing the assessment.

Asbestos-Containing Materials

The asbestos sampling procedure was consistent with the AHERA protocol outlined in 40 Code of Federal Regulations (CFR) 763. The survey consisted of a pre-renovation assessment of building materials that, as identified by the Port, might be disturbed during renovation.

MFA collected 30 samples of suspected ACM-containing materials and submitted them for laboratory analysis. The sampling procedures included appropriate work practices to minimize the release of asbestos fibers, such as using water to minimize dust generation.

Samples were sent to NVL Laboratories Inc., located in Seattle, Washington, for analysis by polarized light microscopy, consistent with U.S. Environmental Protection Agency (EPA) Method 600/R-93/116.

Lead-Based Paint

At the request of the Port, MFA conducted a survey for interior and exterior paint coatings of the float crane, including X-ray fluorescence (XRF) readings of each color and/or layer identified. For quality assurance, MFA collected 4 paint chips samples from representative XRF sampling locations. Paint with a detectable amount of lead is considered "lead-containing." EPA (40 CFR 745) and the Oregon Health Authority define LBP as paint containing lead concentrations of over 5,000 parts per million (higher than 0.5 percent).

The paint chip samples were placed in labeled sample bags and sent to NVL Laboratories, Inc., for analysis by EPA Method 3051/7000B.

RESULTS AND DISCUSSION

Field sampling information, as well as photographs documented ACM and LBP are included in Attachment B. Certified laboratory reports for all samples collected are included in Attachment D. The attached Table 1 summarizes asbestos laboratory results, and the attached Table 2 summarizes the XRF and laboratory results for the lead paint samples.

Asbestos was detected above one percent in the following materials:

- White coating material on the roof of the job trailer (9-ROOF-JT-14)
- Silver roof penetration sealant on the job trailer (10-ROOF-JT-15 and 9-ROOF-JT-16)
- Brown floor tile with black mastic in the former crew quarters (1-FTM-BD6065-1 and 1-FTM-BD6065-2)

Many of the painted surfaces evaluated on the float crane are considered to be lead-containing. For the purposes of renovation or reuse, the lead-containing paint should be abated by a licensed abatement contractor or safely managed in place consistent with EPA's Renovation,

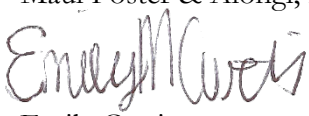
Repair and Painting Rule, which, in Oregon, is administered by the Oregon Health Authority. Painted surfaces with lead content above the EPA-regulated definition of LBP include the following:

- Gray paint on the circuit breaker in the former crew quarters
- Red paint on the west wall support beam in the northwest room of the former crew quarters
- Black paint on the back of the stairs and stair railing in the former crew quarters
- Orange paint on the doorway between the south and northwest rooms of the former crew quarters
- White paint on the center support beam in the south room of the former crew quarters
- Red paint on the northeast portion of the float crane deck
- Yellow paint on the rope tie downs located on the northeast portion and the west end of the float crane deck
- Pale yellow paint on the float crane deck adjacent to foot of crane (on east end)
- Pale yellow/gray paint on the stripes on the bottom of the gray structure on the deck of the float crane

Prior to any disturbance activities at the Property, identified hazardous materials should be abated by a licensed abatement contractor or safely managed in place consistent with a written operations and maintenance plan. The Port should inform contractors that other hazardous materials or conditions may be discovered during the renovation and/or demolition activities, which may warrant remediation and/or corrective actions.

Sincerely,

Maul Foster & Alongi, Inc.



Emily Curtis
Project Environmental, Health, and Safety Specialist

Attachments: Limitations
Tables
A—AHERA Certificates
B—Field Sampling Data Report
C—Laboratory Reports

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

TABLES

Table 1
Summary of Asbestos Sample Results
Navigation Base Float Crane - Pre-Renovation Survey
Portland, Oregon

Sample Name	Sample Date	Material Description	Location	Bulk Asbestos	Condition if Detected	Estimated Quantity if Detected
Job Trailer						
1-CM-JT-1	12/13/2021	Green carpet with mastic	Along west wall	ND	--	--
1-CM-JT-2	12/13/2021	Green carpet with mastic	Room on south end	ND	--	--
2-IN-JT-3	12/13/201	Fibrous insulation	West wall of room on south end	ND	--	--
2-IN-JT-4	12/13/201	Fibrous insulation	East wall of room on south end	ND	--	--
3-CP-JT-5	12/13/201	Wood ceiling panel with white vinyl covering	Ceiling of south end room	ND	--	--
2-IN-JT-6	12/13/201	Fibrous insulation	Ceiling of south end room	ND	--	--
3-CP-JT-7	12/13/201	Wood ceiling panel with white vinyl covering	Ceiling above kitchen area	ND	--	--
4-VC-JT-8	12/13/201	Brown vinyl covering with clear mastic	Shelves in south end room	ND	--	--
5-VFT-JT-9	12/13/201	Brown/tan speckled vinyl floor tile with black/brown mastic	South end room	ND	--	--
5-VFT-JT-10	12/13/201	Brown/tan speckled vinyl floor tile with black/brown mastic	West wall	ND	--	--
6-VC-JT-11	12/13/201	Orange vinyl covering with yellow mastic	Kitchen counter	ND	--	--
7-SM-JT-12	12/13/201	White sealant material	South exterior wall	ND	--	--
8-SM-JT-13	12/13/201	Gray sealant material	South exterior wall	ND	--	--
9-ROOF-JT-14	12/13/201	White coating material on metal roof	Roof on east side	4%	Poor	600 sq. ft.
10-ROOF-JT-15	12/13/201	Silver penetration sealant	Roof on west side	7%	Poor	Less than 5 sq. ft.
9-ROOF-JT-16	12/13/2021	Silver penetration sealant	Roof on west side	4%	Poor	Less than 5 sq. ft.

Table 1
Summary of Asbestos Sample Results
Navigation Base Float Crane - Pre-Renovation Survey
Portland, Oregon

Sample Name	Sample Date	Material Description	Location	Bulk Asbestos	Condition if Detected	Estimated Quantity if Detected
Former Crew Quarters						
1-FTM-BD6065-1	12/14/2021	9x9 inch brown floor tile with black mastic	South room, southeast corner	Vinyl floor tile: 2% Mastic: 3%	Poor	375 sq. ft.
1-FTM-BD6065-2	12/14/2021	9x9 inch brown floor tile with black mastic	South room, southwest corner	Vinyl floor tile: 3% Mastic: 4%	Poor	375 sq. ft.
2-WI-BD6065-3	12/14/2021	Yellow insulation with woven white fabric	South room, northeast corner	ND	--	--
3-MCT-BD6065-4	12/14/2021	Multicolored tile with green mastic	Northwest room, southwest corner	ND	--	--
3-MCT-BD6065-5	12/14/2021	Multicolored tile with green mastic	Northwest room, northeast corner	ND	--	--
2-WI-BD6065-6	12/14/2021	Yellow insulation with woven fabric	Northwest room, northeast corner	ND	--	--
4-WT-BD6065-7	12/14/2021	White 6x6 inch wall tile with gray mastic	Northeast room, northwest corner	ND	--	--
5-HFT-BD6065-8	12/14/2021	White hexagonal floor tile with white mastic	Northeast room, northwest corner	ND	--	--
6-SWT-BD6065-9	12/14/2021	White 4x4 inch wall tile with gray mastic	Northeast room, southeast corner	ND	--	--
7-WC-BD6065-10	12/14/2021	White wall coating	Northeast room, northeast ceiling	ND	--	--
8-ST-BD6065-11	12/14/2021	Gray metallic seam tape	Northwest room, east wall	ND	--	--
9-SFT-BD6065-12	12/14/2021	White 1x1 inch floor tile with white mastic	Central room, west floor	ND	--	--
10-WCF-BD6065-13	12/14/2021	White ceiling fabric with white coating	Central room, west ceiling	ND	--	--
11-BDG-BD6065-14	12/14/2021	Black door gasket	Door between south room and northwest room	ND	--	--

NOTES:
Samples were analyzed consistent with polarized light microscopy U.S. Environmental Protection Agency Method 600/R-93-116.
ND = none detected.
PLM = polarized light microscopy.
sq. ft. = square feet.

Table 2
Summary of Lead-Based Paint Sample Results
Navigation Base Float Crane—Pre-Renovation Survey
Portland, Oregon

Sample Name	Sample Date	Material Description	Location	XRF Lead Result (mg/cm^2)	Laboratory Lead Result (%)	Estimated Quantity if LBP
Job Trailer						
1-PB-JT-1	12/13/2021	Off-white paint	West interior wall	0.032	--	--
1-PB-JT-2	12/13/2021	Off-white paint	West interior wall	0.036	--	--
2-PB-JT-3	12/13/2021	Brown paint	East interior wall	0.032	--	--
2-PB-JT-4	12/13/2021	Brown paint	East interior wall	0.039	--	--
3-PB-JT-5	12/13/2021	Gray paint	Lockers	ND	--	--
4-PB-JT-6	12/13/2021	Light brown paint	Exit door on east wall	0.017	--	--
4-PB-JT-7	12/13/2021	Light brown paint	Exit door on east wall	0.0036	--	--
5-PB-JT-8	12/13/2021	Blue paint	East exterior wall	ND	--	--
5-PB-JT-9	12/13/2021	Blue paint	West exterior wall	ND	--	--
6-PB-JT-10	12/13/2021	White paint	East exterior wall	ND	--	--
6-PB-JT-11	12/13/2021	White paint	East exterior wall	ND	<0.0050	--
Former Crew Quarters and Below Deck Areas						
1-PB-BD6065-1	12/14/2021	White paint	South room, east wall	0.086	--	--
1-PB-BD6065-2	12/14/2021	White paint	South room, west wall	0.043	--	--
2-PB-BD6065-3	12/14/2021	Dark green paint	South room, northwest bottom wall	0.855	--	--
2-PB-BD6065-4	12/14/2021	Dark green paint	Northwest room, bottom north wall	0.51	--	--
3-PB-BD6065-5	12/14/2021	Dark green paint	Door frame between northwest and northeast rooms	0.618	--	--
4-PB-BD6065-6	12/14/2021	Gray paint	Storage room	0.703	--	--
4-PB-BD6065-7	12/14/2021	Gray paint	Storage room wall	0.241	--	--
5-PB-BD6065-8	12/14/2021	Gray paint	Circuit breaker in northwest room	1.343	--	6 sq. ft.
5-PB-BD6065-9	12/14/2021	Gray paint	Circuit breaker in northwest room	0.991	--	--
6-PB-BD6065-10	12/14/2021	Red paint	Northwest room, west wall support beam	2.535	--	2 sq. ft.
7-PB-BD6065-11	12/14/2021	Black paint	Back of stairs	4.532	0.95	80 sq. ft.
7-PB-BD6065-12	12/14/2021	Black paint	Stair railing	5	--	80 sq. ft.
8-PB-BD6065-13	12/14/2021	White paint	Support beam in center of northwest room	0.581	--	--
9-PB-BD6065-14	12/14/2021	Orange paint	Doorway between south and northwest rooms	3.029	--	4 sq. ft.

Table 2
Summary of Lead-Based Paint Sample Results
Navigation Base Float Crane—Pre-Renovation Survey
Portland, Oregon

Sample Name	Sample Date	Material Description	Location	XRF Lead Result (mg/cm^2)	Laboratory Lead Result (%)	Estimated Quantity if LBP
9-PB-BD6065-15	12/14/2021	White paint	Center support beam in south room	5	0.44	450 sq. ft.
10-PB-BD6065-16	12/14/2021	Yellow paint	Interior south small hatch on deck	ND	--	--
10-PB-BD6065-17	12/14/2021	Yellow paint	Interior north small hatch on deck	ND	--	--
11-PB-BD6065-18	12/14/2021	Red paint	Northeast deck	1.1	--	1,750 sq. ft.
12-PB-BD6065-19	12/14/2021	Yellow paint	Tie down, northeast	5	--	200 sq. ft.
13-PB-BD6065-20	12/14/2021	Pale yellow paint	Adjacent to foot of crane, east end	1.631	0.077	400 sq. ft.
14-PB-BD6065-21	12/14/2021	Beige yellow paint	Crane beam, east end	0.089	--	--
15-PB-BD6065-22	12/14/2021	Blue paint	Blue building, southeast end	ND	--	--
16-PB-BD6065-23	12/14/2021	White paint	Blue building, southeast end, top	ND	--	--
17-PB-BD6065-24	12/14/2021	Bright yellow paint	East end, yellow horizontal beam	ND	--	--
18-PB-BD6065-25	12/14/2021	Gray paint	Gray structure, west end	0.279	--	--
19-PB-BD6065-26	12/14/2021	Black paint	Stripes on bottom of gray structure	0.003	--	--
20-PB-BD6065-27	12/14/2021	Pale red paint	Bottom of gray structure	0.007	--	--
21-PB-BD6065-28	12/14/2021	Dark blue/gray paint	Stairs on gray structure	ND	--	--
22-PB-BD6065-29	12/14/2021	Pale yellow paint	Southwest interior hatch	0.026	--	--
11-PB-BD6065-30	12/14/2021	Red paint	West end, deck	0.808	--	--

Table 2
Summary of Lead-Based Paint Sample Results
Navigation Base Float Crane—Pre-Renovation Survey
Portland, Oregon

Sample Name	Sample Date	Material Description	Location	XRF Lead Result (mg/cm^2)	Laboratory Lead Result (%)	Estimated Quantity if LBP
12-PB-BD6065-31	12/14/2021	Yellow paint	West end, rope tie	4.915	--	200 sq. ft.
13-PB-BD6065-32	12/14/2021	Pale gray/yellow	Stripes on bottom of gray structure	2.572	--	32 sq. ft.
18-PB-BD6065-33	12/14/2021	Gray paint	Gray structure, west end	0.028	--	--

NOTES:
Sample was analyzed consistent with U.S. Environmental Protection Agency Method 3050B/7000B.
-- = not applicable.
% = percent (milligrams per kilogram/10000)
LBP = lead-based paint.
ln. ft. = linear feet.
mg/cm^2 = milligrams per square centimeter.
ND = none detected.
sq. ft. = square feet.
XRF = X-ray fluorescence.

ATTACHMENT A

AHERA CERTIFICATES

THIS IS TO CERTIFY THAT

CONNOR ANDERSON

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR INITIAL COURSE

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

Course Date: 8/16/2021 - 8/18/2021

Course Location: Portland, OR

Certificate: IN-21-9554B

CCB #SRA0614 24-Hr Training

24-Hour AHERA Inspector Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 08/18/2022

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, Oregon 97239
503.248.1939

Andy Fridley, Instructor

Certificate of Completion

This is to certify that

Emily Curtis

has satisfactorily completed
4 hours of refresher training as an

AHERA Building Inspector

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

EPA Provider # 1085

183511
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Jan 19, 2022 Expires in 1 year.
Date(s) of Training

Exam Score: N/A
(if applicable)

Instructor: Ed Edinger

ARGUS PACIFIC, INC / 21905 64th AVE W, SUITE 100 / MOUNTLAKE TERRACE, WASHINGTON 98043 / 206.285.3373 / ARGUSPACIFIC.COM

Certificate of Completion

This is to certify that

Ysabel E. Perez

has satisfactorily completed
24 hours of training as an

AHERA Building Inspector

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

EPA Provider # 1085

182826
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Nov 1 - 3, 2021 — Expires in 1 year.
Date(s) of Training

Exam Score: 92
(if applicable)

Instructor: Ed Edinger

ARGUS PACIFIC, INC / 21905 64th AVE W, SUITE 100 / MOUNTLAKE TERRACE, WASHINGTON 98043 / 206.285.3373 / ARGUSPACIFIC.COM

ATTACHMENT B

FIELD SAMPLING DATA REPORT

Field Sampling Data Report
Summary of Identified Asbestos and Lead-Containing Materials
Project: Navigation Base Float Crane
Client Name: Port of Portland

Field Personnel: Emily Curtis, Connor Anderson, and Ysabel Perez
Survey Type: Asbestos and Lead Paint

Sample Information

Sample Name: 9-ROOF-JT-14
Sample Date: 12/13/2021
Sample Location: Roof of job trailer on eastside
Type of Sample: White coating material
Is it friable?: Yes
Assessment Category: Asbestos-containing building material (ACBM) with potential for damage
Quantity: 600 square feet

Sample Photo:

Sample Name: 10-ROOF-JT-15
Sample Date: 12/13/2021
Sample Location: West side of job trailer roof
Type of Sample: Gray patching material
Is it friable?: No
Assessment Category: ACBM with potential for damage
Quantity: Less than 5 square feet

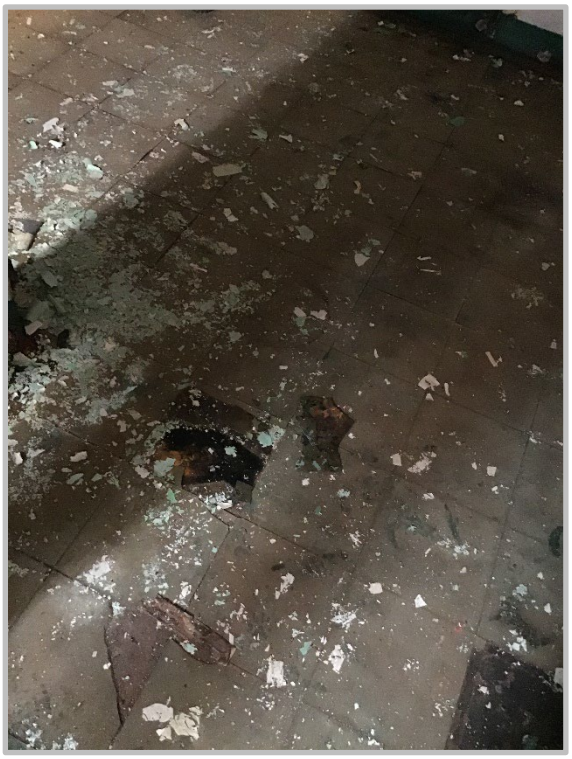
Sample Photo:

Sample Name: 9-ROOF-JT-16
Sample Date: 12/13/2021
Sample Location: West side of job trailer roof
Type of Sample: Gray patching material
Is it friable?: No
Assessment Category: ACBM with potential for damage
Quantity: Less than 5 square feet

Sample Photo:

Sample Name: 1-FTM-BD6065-1
Sample Date: 12/14/2021
Sample Location: South room, southeast corner of former crew quarters
Type of Sample: Brown floor tile with black mastic
Is it friable?: No
Assessment Category: ACBM with potential for damage
Quantity: 375 square feet

Sample Photo:



Sample Name: 1-FTM-BD6065-2
Sample Date: 12/14/2021
Sample Location: South room, southwest corner of former crew quarters
Type of Sample: Brown floor tile with black mastic
Is it friable?: No
Assessment Category: ACBM with potential for damage
Quantity: 375 square feet

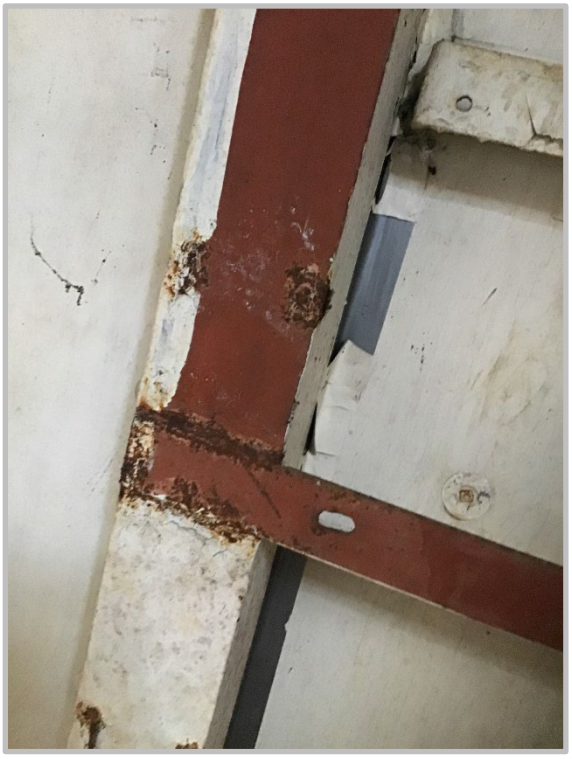
Sample Photo:

Sample Name: 5-PB-BD6065-8
Sample Date: 12/14/2021
Sample Location: Circuit breaker in northwest room of former crew quarters
Type of Sample: Lead paint chip
Sample Description: Gray paint
Quantity: 6 square feet

Sample Photo:

Sample Name: 6-PB-BD6065-10
Sample Date: 12/14/2021
Sample Location: Northwest room, west wall support beam in former crew quarters
Type of Sample: Lead paint chip
Sample Description: Red paint
Quantity: 2 square feet

Sample Photo:



Sample Name: 7-PB-BD6065-11
Sample Date: 12/14/2021
Sample Location: Back of stairs in former crew quarters
Type of Sample: Lead paint chip
Sample Description: Black paint
Quantity: 80 square feet

Sample Photo:

Sample Name: 7-PB-BD6065-12
Sample Date: 12/14/2021
Sample Location: Stair railing in former crew quarters
Type of Sample: Lead paint chip
Sample Description: Black paint
Quantity: 80 square feet

Sample Photo:

Sample Name: 9-PB-BD6065-14
Sample Date: 12/14/2021
Sample Location: Doorway between south and northwest rooms of former crew quarters
Type of Sample: Lead paint chip
Sample Description: Orange paint
Quantity: 4 square feet

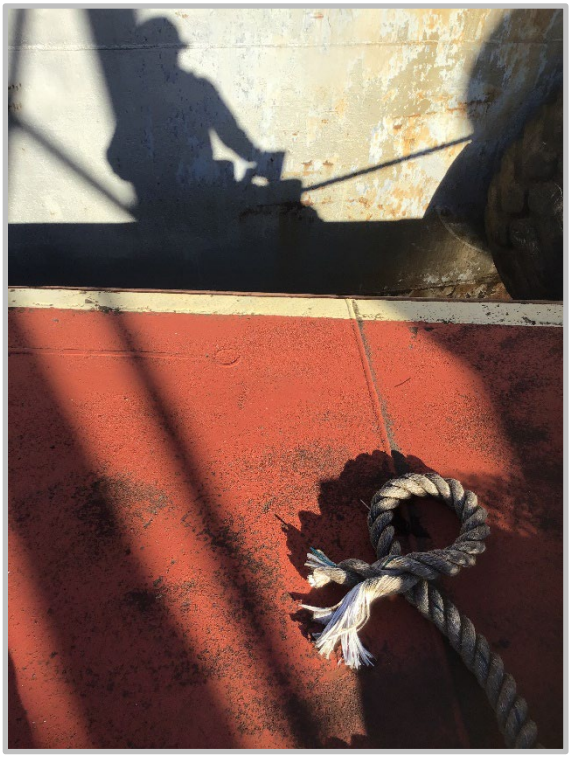
Sample Photo:

Sample Name: 9-PB-BD6065-15
Sample Date: 12/14/2021
Sample Location: Center support beam in south roof of former crew quarters
Type of Sample: Lead paint chip
Sample Description: White paint
Quantity: 450 square feet

Sample Photo:

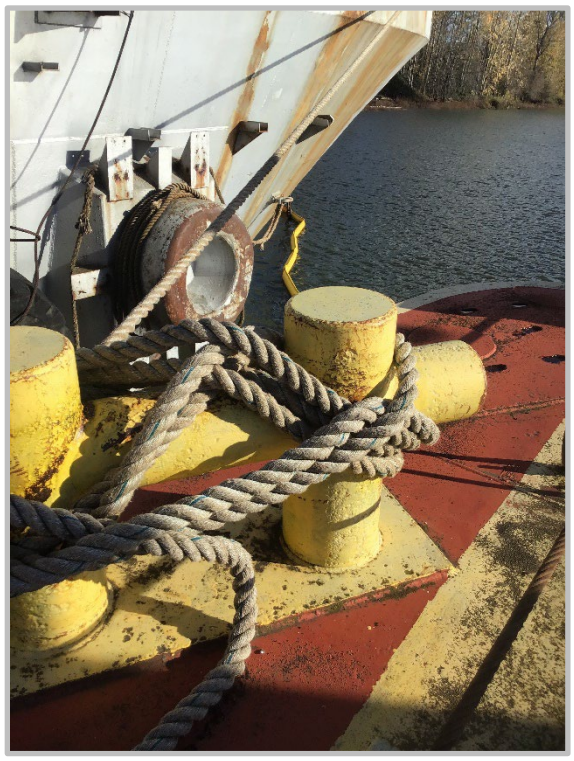
Sample Name: 11-PB-BD6065-18
Sample Date: 12/14/2021
Sample Location: Northeast deck of float crane
Type of Sample: Lead paint chip
Sample Description: Red paint
Quantity: 1,750 square feet

Sample Photo:



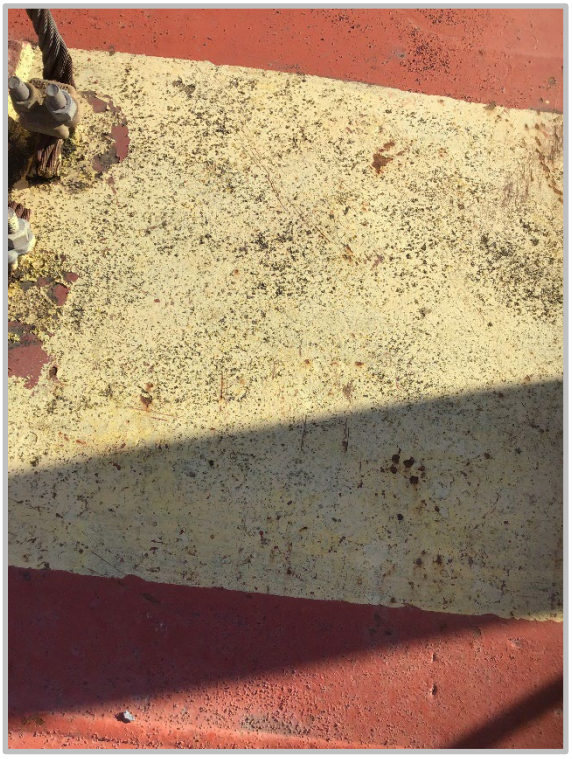
Sample Name: 12-PB-BD6065-19
Sample Date: 12/14/2021
Sample Location: Tie down on northeast portion of float crane deck
Type of Sample: Lead paint chip
Sample Description: Yellow paint
Quantity: 200 square feet

Sample Photo:



Sample Name: 13-PB-BD6065-20
Sample Date: 12/14/2021
Sample Location: Adjacent to foot of crane, east end of float crane deck
Type of Sample: Lead paint chip
Sample Description: Pale yellow paint
Quantity: 400 square feet

Sample Photo:

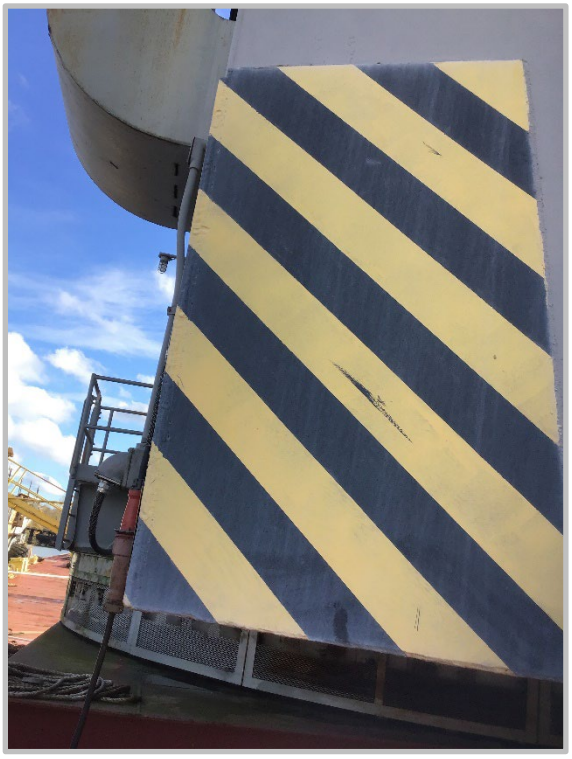


Sample Name: 12-PB-BD6065-31
Sample Date: 12/14/2021
Sample Location: Rope tie down on west end of float crane deck
Type of Sample: Lead paint chip
Sample Description: Yellow paint
Quantity: 200 square feet

Sample Photo:

Sample Name: 13-PB-BD6065-32
Sample Date: 12/14/2021
Sample Location: Stipes on bottom of gray structure on float crane deck
Type of Sample: Lead paint chip
Sample Description: Pale gray/yellow paint
Quantity: 32 square feet

Sample Photo:



ATTACHMENT C

LABORATORY REPORTS

December 21, 2021

Emily Curtis
Maul Foster & Alongi, Inc.
109 E 13th St.
Vancouver, WA 98660

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2121928.00

Client Project: 0232.25.27
Location: Portland, OR

Dear Mrs. Curtis,

Enclosed please find test results for the 30 sample(s) submitted to our laboratory for analysis on 12/16/2021.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Lab Code: 102063-0

Enc.: Sample Results

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Lab ID: 21145692 **Client Sample #: 1-CM-JT-1**

Location: Portland, OR

Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** Tan woven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Synthetic fibers 72%		**None Detected ND**
Layer 2 of 3	**Description:** Light brown woven fibrous mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose 70%		**None Detected ND**
Layer 3 of 3	**Description:** Tan fluffy fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose 59%		**None Detected ND**
		Synthetic fibers 20%		

Lab ID: 21145693 **Client Sample #: 1-CM-JT-2**

Location: Portland, OR

Layer 1 of 3	**Description:** Tan woven fibrous material with beige mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Mastic/Binder	Synthetic fibers 68%		**None Detected ND**
Layer 2 of 3	**Description:** Light brown woven fibrous mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose 72%		**None Detected ND**
Layer 3 of 3	**Description:** Tan fluffy fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose 43%		**None Detected ND**
		Synthetic fibers 38%		

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Lab ID: 21145694 **Client Sample #: 2-IN-JT-3**
Location: Portland, OR

Layer 1 of 1 **Description:** Yellow fluffy fibrous material with wood debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass debris, Debris	Glass fibers 95%	**None Detected ND**
Insect parts, Wood flakes		

Lab ID: 21145695 **Client Sample #: 2-IN-JT-4**
Location: Portland, OR

Layer 1 of 1 **Description:** Pink fluffy fibrous material with wood debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass debris, Wood flakes	Glass fibers 97%	**None Detected ND**
Debris		

Lab ID: 21145696 **Client Sample #: 3-CP-JT-5**
Location: Portland, OR

Layer 1 of 1 **Description:** Thin gray crumbly material with paint on wood with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint	Cellulose <1%	**None Detected ND**
Wood, Debris		

Lab ID: 21145697 **Client Sample #: 2-IN-JT-6**
Location: Portland, OR

Layer 1 of 1 **Description:** Pink fluffy fibrous material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass debris, Debris	Cellulose 96%	**None Detected ND**

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Lab ID: 21145698 **Client Sample #: 3-CP-JT-7**
Location: Portland, OR
Comments: Small amount for analysis.

Layer 1 of 1 **Description:** Trace gray crumbly material with paint on wood with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint Debris, Wood	Cellulose 1%	**None Detected ND**

Lab ID: 21145699 **Client Sample #: 4-VC-JT-8**
Location: Portland, OR

Layer 1 of 2 **Description:** Brown flat hard compressed fibrous material with brown patterned surface

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles	Cellulose 54%	**None Detected ND**

Layer 2 of 2 **Description:** Thin yellow mastic with wood debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine particles, Debris	Cellulose <1%	**None Detected ND**

Lab ID: 21145700 **Client Sample #: 5-VFT-JT-9**
Location: Portland, OR

Layer 1 of 2 **Description:** Tan vinyl material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains, Fine particles	Cellulose 13%	**None Detected ND**

Layer 2 of 2 **Description:** Black asphaltic fibrous backing with brown mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Adhesive/Binder, Fine particles, Mastic/Binder	Cellulose 55%	**None Detected ND**

Lab ID: 21145701 **Client Sample #: 5-VFT-JT-10**
Location: Portland, OR

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Layer 1 of 2	**Description:** Tan vinyl material with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Vinyl/Binder, Fine grains, Fine particles	Cellulose 15%	**None Detected ND**
	Debris		
Layer 2 of 2	**Description:** Black asphaltic fibrous backing with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles, Debris	Cellulose 53%	**None Detected ND**

Lab ID: 21145702 **Client Sample #: 6-VC-JT-11**
Location: Portland, OR

Layer 1 of 2	**Description:** Brown flat hard compressed fibrous material with orange surface		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose 54%	**None Detected ND**
Layer 2 of 2	**Description:** Tan soft mastic with wood debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder, Fine particles, Wood flakes	Cellulose <1%	**None Detected ND**

Lab ID: 21145703 **Client Sample #: 7-SM-JT-12**
Location: Portland, OR

Layer 1 of 1	**Description:** White foamy material with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Synthetic foam, Debris	None Detected ND	**None Detected ND**

Lab ID: 21145704 **Client Sample #: 8-SM-JT-13**
Location: Portland, OR

Layer 1 of 1	**Description:** Clear rubbery material with thin paint and debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	Cellulose <1%	**None Detected ND**

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Debris

Lab ID: 21145705 **Client Sample #: 9-ROOF-JT-14**
Location: Portland, OR

Layer 1 of 2 **Description:** White soft coating with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Debris	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Silver paint with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint/Binder, Metallic paint, Debris	Cellulose <1%	**Chrysotile 4%**

Lab ID: 21145706 **Client Sample #: 10-ROOF-JT-15**
Location: Portland, OR

Layer 1 of 1 **Description:** Silver crumbly rubbery material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**Chrysotile 7%**

Lab ID: 21145707 **Client Sample #: 9-ROOF-JT-16**
Location: Portland, OR

Comments: Wet sample was dried prior to analysis. Unsure of correct layer sequence.

Layer 1 of 4 **Description:** White soft rubbery coating with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Debris	None Detected ND	**None Detected ND**

Layer 2 of 4 **Description:** Silver paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint/Binder, Metallic paint	None Detected ND	**Chrysotile 4%**

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Layer 3 of 4	**Description:** Black asphaltic crumbly material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles, Fine grains	Cellulose 12%	**None Detected ND**
Layer 4 of 4	**Description:** Thin silver paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Paint/Binder, Metallic paint	Cellulose 1%	**Chrysotile 3%**

Lab ID: 21145708 **Client Sample #: 1-FTM-BD6065-1**

Location: Portland, OR

Layer 1 of 2	**Description:** Green vinyl tile with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	**Chrysotile 2%**
	Debris		
Layer 2 of 2	**Description:** Black asphaltic mastic with paint and debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles, Paint	None Detected ND	**Chrysotile 3%**
	Debris		

Lab ID: 21145709 **Client Sample #: 1-FTM-BD6065-2**

Location: Portland, OR

Comments: Unable to separate mastics for analysis, asbestos concentrated in black mastic.

Layer 1 of 2	**Description:** Green vinyl tile with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Vinyl/Binder, Fine grains, Fine particles	None Detected ND	**Chrysotile 3%**
	Debris		

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Layer 2 of 2	**Description:** Black asphaltic mastic with thin yellow mastic and debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles, Mastic/Binder Debris	Cellulose <1%	**Chrysotile 4%**

Lab ID: 21145710 **Client Sample #: 2-WI-BD6065-3**
Location: Portland, OR

Layer 1 of 2	**Description:** White woven fibrous material with paint and yellow soft mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Glass debris, Paint Mastic/Binder	Glass fibers 75%	**None Detected ND**
Layer 2 of 2	**Description:** Yellow fluffy fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Glass debris	Glass fibers 96%	**None Detected ND**

Lab ID: 21145711 **Client Sample #: 3-MCT-BD6065-4**
Location: Portland, OR

Layer 1 of 2	**Description:** Tan ceramic material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Ceramic/Binder, Fine particles	None Detected ND	**None Detected ND**
Layer 2 of 2	**Description:** Green crumbly mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 21145712 **Client Sample #: 3-MCT-BD6065-5**
Location: Portland, OR

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Layer 1 of 2	**Description:** Tan ceramic material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Ceramic/Binder, Fine particles	None Detected ND	**None Detected ND**
Layer 2 of 2	**Description:** Green crumbly mastic with debris		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder, Fine particles, Debris	Cellulose <1%	**None Detected ND**

Lab ID: 21145713 **Client Sample #: 2-WI-BD6065-6**
Location: Portland, OR

Layer 1 of 2	**Description:** White woven fibrous material with paint and yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Paint	Glass fibers 77%	**None Detected ND**
Layer 2 of 2	**Description:** Yellow fluffy fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Glass debris	Glass fibers 97%	**None Detected ND**

Lab ID: 21145714 **Client Sample #: 4-WT-BD6065-7**
Location: Portland, OR
Comments: Small amount of layer 2 for analysis.

Layer 1 of 2	**Description:** Off-white ceramic tile		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Ceramic/Binder, Fine particles, Fine grains	None Detected ND	**None Detected ND**
Layer 2 of 2	**Description:** Trace gray brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	None Detected ND	**None Detected ND**

Lab ID: 21145715 **Client Sample #: 5-HFT-BD6065-8**
Location: Portland, OR

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Layer 1 of 2	**Description:** Off-white ceramic tile with tan surface			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Ceramic/Binder, Fine particles, Fine grains	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Thin white crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	None Detected	ND	**None Detected ND**

Lab ID: 21145716 **Client Sample #: 6-SWT-BD6065-9**
Location: Portland, OR

Layer 1 of 2	**Description:** Off-white ceramic tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Ceramic/Binder, Fine particles, Fine grains	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Thin gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains, Fine particles	None Detected	ND	**None Detected ND**

Lab ID: 21145717 **Client Sample #: 7-WC-BD6065-10**
Location: Portland, OR

Layer 1 of 1	**Description:** Off-white crumbly material with paint and debris			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint Debris	None Detected	ND	**None Detected ND**

Lab ID: 21145718 **Client Sample #: 8-ST-BD6065-11**
Location: Portland, OR

Layer 1 of 1	**Description:** Off-white woven fibrous mesh with off-white mastic and gray plastic coating			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Plastic	Cellulose	65%	**None Detected ND**

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: Mrs. Emily Curtis
Project Location: Portland, OR

Batch #: 2121928.00
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116

Lab ID: 21145719 **Client Sample #: 9-SFT-BD6065-12**
Location: Portland, OR

Layer 1 of 2 **Description:** Off-white ceramic tile with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Ceramic/Binder, Fine particles, Debris	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** White fibrous material with off-white mastic and debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mastic/Binder, Fine particles	Cellulose 50%	**None Detected ND**

Lab ID: 21145720 **Client Sample #: 10-WCF-BD6065-13**
Location: Portland, OR

Layer 1 of 1 **Description:** Pale green fibrous material with layered paint and debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Paint Debris	Cellulose 76%	**None Detected ND**

Lab ID: 21145721 **Client Sample #: 11-BDG-BD6065-14**
Location: Portland, OR

Layer 1 of 1 **Description:** Black rubbery material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Debris	Cellulose <1%	**None Detected ND**

Sampled by: Client
Analyzed by: Hilary Crumley **Date:** 12/21/2021
Reviewed by: Nick Ly **Date:** 12/21/2021

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

NVL

Company Maul Foster & Alongi, Inc.
Address 109 E 13th St.
Vancouver, WA 98660
Project Manager Mrs. Emily Curtis
Phone (971) 544-2139

NVL Batch Number **2121928.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 12/23/2021 **Time** 9:00 AM
Email ecurtis@maulfoster.com
Fax

Project Name/Number: 0232.25.27 **Project Location:** Portland, OR

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	21145692	1-CM-JT-1		A
2	21145693	1-CM-JT-2		A
3	21145694	2-IN-JT-3		A
4	21145695	2-IN-JT-4		A
5	21145696	3-CP-JT-5		A
6	21145697	2-IN-JT-6		A
7	21145698	3-CP-JT-7		A
8	21145699	4-VC-JT-8		A
9	21145700	5-VFT-JT-9		A
10	21145701	5-VFT-JT-10		A
11	21145702	6-VC-JT-11		A
12	21145703	7-SM-JT-12		A
13	21145704	8-SM-JT-13		A
14	21145705	9-ROOF-JT-14		A
15	21145706	10-ROOF-JT-15		A
16	21145707	9-ROOF-JT-16		A
17	21145708	1-FTM-BD6065-1		A
18	21145709	1-FTM-BD6065-2		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	12/16/21	900
Analyzed by	Hilary Crumley		NVL	12/21/21	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 12/16/2021
Time: 9:22 AM
Entered By: Kelly AuVu

ASBESTOS LABORATORY SERVICES

NVL

Company Maul Foster & Alongi, Inc.
Address 109 E 13th St.
Vancouver, WA 98660
Project Manager Mrs. Emily Curtis
Phone (971) 544-2139

NVL Batch Number **2121928.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 12/23/2021 **Time** 9:00 AM
Email ecurtis@maulfoster.com
Fax

Project Name/Number: 0232.25.27 **Project Location:** Portland, OR

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	21145710	2-WI-BD6065-3		A
20	21145711	3-MCT-BD6065-4		A
21	21145712	3-MCT-BD6065-5		A
22	21145713	2-WI-BD6065-6		A
23	21145714	4-WT-BD6065-7		A
24	21145715	5-HFT-BD6065-8		A
25	21145716	6-SWT-BD6065-9		A
26	21145717	7-WC-BD6065-10		A
27	21145718	8-ST-BD6065-11		A
28	21145719	9-SFT-BD6065-12		A
29	21145720	10-WCF-BD6065-13		A
30	21145721	11-BDG-BD6065-14		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	12/16/21	900
Analyzed by	Hilary Crumley		NVL	12/21/21	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 12/16/2021
Time: 9:22 AM
Entered By: Kelly AuVu

2121928

NVL INDUSTRIAL HYGIENE SERVICES LABORATORY + MANAGEMENT + TRAINING

ASBESTOS CHAIN OF CUSTODY

Turn Around Time Standard TAT
- ❑ 1 Hour ❑ 24 Hours ❑ 4 Days
- ❑ 2 Hours ❑ 2 Days ❑ 5 Days
- ❑ 4 Hours ❑ 3 Days ☒ 10 Days

Please call for TAT less than 24 Hours

Company Maul Foster & Alongi
Address 3140 NE Broadway
Portland, OR 97232
Phone 971-544-2139

Project Manager Emily Curtis
Cell (503) 501-5233
Email ecurtis@maulfoster.com
Fax ( ) -

Project Name/Number 0232.25.27 Project Location Portland, OR

- ❑ PCM Air (NIOSH 7400) ❑ TEM (NIOSH 7402) ❑ TEM (AHERA) ❑ TEM (EPA Level II Modified)
- ☒ PLM (EPA 600/R-93-116) ❑ EPA 400 Points (600/R-93-116) ❑ EPA 1000Points (600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116) ❑ Asbestos in Vermiculite (EPA 600/R-04/004) ❑ Asbestos in Sediment (EPA 1900 Points)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116) ❑ Other

Reporting Instructions Report to Emily Curtis
❑ Call ( ) - ❑ Fax ( ) - ☒ Email ecurtis@maulfoster.com

Total Number of Samples 30

	Sample ID	Description	A/R
1	1-CM-JT-1	Green carpet with uniden tifiable mastic	
2	1-CM-JT-2	Green carpet with unidentifiable mastic	
3	2-IN-JT-3	Insulation	
4	2-IN-JT-4	Insulation	
5	3-CP-JT-5	Wood ceiling panel with vinyl covering	
6	2-IN-JT-6	Insulation	
7	3-CP-JT-7	Wood Ceiling panel with vinyl covering	
8	4-VC-JT-8	Brown Vinyl covering with clear mastic	
9	5-VFT-JT-9	Brown/tan speckles vinyl floor tile with black/brown mastic	
10	5-VFT-JT-10	Brown/tan speckled vinyl floor tile with Brown/black mastic	
11	6-VC-JT-11	Orange vinyl covering with yellow mastic	
12	7-SM-JT-12	White sealant material	
13	8-SM-JT-13	Gray Sealant Material	
14	9-ROOF-JT-14	White Coating material on metal roof	
15	10-ROOF-JT-15	Silver Penetration Sealant	

	Print Name	Signature	Company	Date	Time
Sampled by	Connor Anderson	[signature]	MFA	12/14/21 (corrected, initialed CA)	1330
Relinquish by	Connor Anderson	[signature]	MFA	12/15/21	1130

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	[signature]	[signature]	NVL	12/16/21	900 [illegible]
Analyzed by					
Called by					
Faxed/Email by					

4708 Aurora Ave N, Seattle, WA 98103 | p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

2121928

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

ASBESTOS CHAIN OF CUSTODY

Standard TAT

- ☐ 1 Hour
- ☐ 2 Hours
- ☐ 4 Hours
- ☐ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☐ 5 Days
- ☒ 10 Days

Please call for TAT less than 24 Hours

Company: Maul Foster & Alongi
Address: 3140 NE Broadway, Portland, OR 97232
Phone: 971 - 544 - 2139

Project Manager: Emily Curtis
Cell: (503) 501 - 5233
Email: ecurtis@maulfoster.com
Fax: ( ) -

Project Name/Number: 0232.25.27
Project Location: Portland, OR

- ☐ PCM Air (NIOSH 7400)
- ☒ PLM (EPA 600/R-93-116)
- ☐ PLM Gravimetry (600/R-93-116)
- ☐ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ☐ TEM (NIOSH 7402)
- ☐ EPA 400 Points (600/R-93-116)
- ☐ Asbestos in Vermiculite (EPA 600/R-04/004)
- ☐ TEM (AHERA)
- ☐ Other
- ☐ TEM (EPA Level II Modified)
- ☐ EPA 1000Points (600/R-93-116)
- ☐ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: Report to Emily Curtis
☐ Call ( ) -
☐ Fax ( ) -
☒ Email ecurtis@maulfoster.com

Total Number of Samples 30

	Sample ID	Description	A/R
1	9-ROOF-JT-16	Silver Penetration Sealant	
2	1-FTM-BD160065-1	Floor tile with black mastic	
3	1-FTM-BD160065-2	Floor tile with black mastic	
4	2-WI-BD160065-3	Yellow insulation with woven white fabric	
5	3-MCT-BD160065-4	Multicolored tile with teal mastic	
6	3-MCT-BD160065-5	Multicolored ~~tile~~ tile with teal mastic	
7	2-WI-BD160065-6	Yellow insulation with woven fabric	
8	4-WT-BD160065-7	White 6"x6" wall tile with gray mastic	
9	5-HFT-BD160065-8	White hexagonal floor tile with white mastic	
10	6-SWT-BD160065-9	White 4"x4" wall tile with gray mastic	
11	7-WC-BD160065-10	White wall coating	
12	8-ST-BD160065-11	Gray Metallic seam tape	
13	9-SFT-BD160065-12	White 1"x1" floor tile with white mastic	
14	10-WCF-BD160065-13	White ceiling fabric with white coating	
15	11-BDG-BD160065-14	Black door gasket	

	Print Name	Signature	Company	Date	Time
Sampled by	Connor Anderson		MFA	12/14/21	1330
Relinquish by	Connor Anderson		MFA	12/15/21	1130

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by					
Analyzed by					
Called by					
Faxed/Email by					

December 23, 2021

Emily Curtis
Maul Foster & Alongi, Inc.
109 E 13th St.
Vancouver, WA 98660

NVL Batch # 2121932.00

RE: Total Metal Analysis
Method: EPA 7000B Lead by FAA <paint>
Item Code: FAA-02

Client Project: 0232.25.27
Location: Portland, OR

Dear Mrs. Curtis,

NVL Labs received 4 sample(s) for the said project on 12/16/2021. Preparation of these samples was conducted following protocol outlined in EPA 3051/7000B , unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with EPA 7000B Lead by FAA <paint>. The results are usually expressed in mg/Kg and percentage (%). Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample results

Analysis Report

Total Lead (Pb)

Client: Maul Foster & Alongi, Inc.
Address: 109 E 13th St.
Vancouver, WA 98660

Attention: **Mrs. Emily Curtis**
Project Location: Portland, OR

Batch #: 2121932.00
Matrix: Paint
Method: EPA 3051/7000B
Client Project #: 0232.25.27
Date Received: 12/16/2021
Samples Received: 4
Samples Analyzed: 4

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
21145736	6-PB-JT-11	0.2010	50	< 50	<0.0050
21145737	7-PB-BD6065-11	0.2239	45	9500	0.95
21145738	9-PB-BD6065-15	0.2018	50	4400	0.44
21145739	13-PB-BD6065-20	0.2070	48	770	0.077

Sampled by: Client
Analyzed by: Yasuyuki Hida
Reviewed by: Nick Ly

Date Analyzed: 12/22/2021
Date Issued: 12/23/2021

Nick Ly, Technical Director

mg/ Kg =Milligrams per kilogram
Percent = Milligrams per kilogram / 10000
Note : Method QC results are acceptable unless stated otherwise.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit
'<' = Below the reporting Limit

Bench Run No: 2021-1222-10
FAA-02

LEAD LABORATORY SERVICES

Company	Maul Foster & Alongi, Inc.	**NVL Batch Number**	**2121932.00**
Address	109 E 13th St.	**TAT**	10 Days **AH** No
	Vancouver, WA 98660	**Rush TAT**	
Project Manager	Mrs. Emily Curtis	**Due Date**	1/3/2022 **Time** 9:00 AM
Phone	(971) 544-2139	**Email**	ecurtis@maulfoster.com
		Fax	

Project Name/Number: 0232.25.27 **Project Location:** Portland, OR

Subcategory Flame AA (FAA)

Item Code FAA-02 EPA 7000B Lead by FAA <paint>

Total Number of Samples 4 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	21145736	6-PB-JT-11		A
2	21145737	7-PB-BD6065-11		A
3	21145738	9-PB-BD6065-15		A
4	21145739	13-PB-BD6065-20		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	12/16/21	900
Analyzed by	Yasuyuki Hida		NVL	12/22/21	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 12/16/2021
Time: 9:41 AM
Entered By: Kelly AuVu

2121932

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

METALS CHAIN OF CUSTODY

Standard TAT

☐ 2 Hour ☐ 4 Hours ☐ 24 Hours
☐ 2 Days ☐ 3 Days ☐ 4 Days
☐ 5 Days ☒ 5-10 Days
Please call for TAT less than 24 Hours

Company Maul Foster & Alongi
Address 3140 NE Broadway
Portland, OR. 97232
Phone 971-544-2139

Project Manager Emily Curtis
Cell (503) 501-5233
Email ecurtis@maulfoster.com
Fax ( ) -

Project Name/Number 0232.25.27 | Project Location Portland, OR

☒ Total Metals ☐ TCLP
☐ FAA (ppm) ☐ ICP (PPM) ☐ GFAA (ppb) ☐ CVAA (ppb)
☐ Air Filter ☒ Paint Chips (%) ☐ Soil ☐ Paint Chips (cm) ☐ Dust Wipes ☐ Drinking Water ☐ Waste Water ☐ Other
RCRA 8: ☐ Barium ☐ Chromium ☐ Silver ☐ Arsenic ☐ Mercury ☒ Lead ☐ Selenium ☐ Cadmium
RCRA 11: ☐ Copper ☐ Zinc ☐ Other

Reporting Instructions Report to Emily Curtis
☐ Call ( ) - ☐ Fax ( ) - ☒ Email ecurtis@maulfoster.com

Total Number of Samples 4

	Sample ID	Description	A/R
1	6-PB-JT-11	White paint	
2	7-PB-BD60605-11	Black paint	
3	9-PB-BD60605-15	White paint	
4	13-PB-BD60605-20	Pale yellow paint	
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Connor Anderson		MFA	12/14/21	1330
Relinquish by	Connor Anderson		MFA	12/15/21	1130

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by					
Analyzed by					
Called by					
Faxed/Email by					

MARINE SURVEYORS
And Consultants

CERTIFICATE OF INSPECTION

NUMBER 23-03-81

EQUIPMENT PARTICULARS

Name of Equipment:	Dravo/Wellman
Type:	Barge Mounted Crane
Manufacturer:	Dravo
Model Number:	BD 6065
Serial Number:	NOY 24308
Owner:	Port of Portland
Date of Inspection:	14 March 2023
Inspection Due:	***No Later Than One Year from Inspection Date***

The above equipment was inspected under the purview of the regulations found in 29 CFR 1919 and ANSI B 30.8 (Standards for Floating Cranes & Floating Derricks.)

The unit was tested with an operational load of 16,000 pounds, at an 88 Foot Radius, 98 Feet of boom, as per mfg. Four-degree list load charts.

Charles Streeter
Surveyor

Marine Surveyors and Consultants
Accredited by USDL / OSHA

Marine Surveyors and Consultants
P.O. Box 22123
Milwaukie, OR 97269-2123

Portland 503-227-0287
Fax 503-908-7796
E-mail: office@testyourcrane.com

MARINE SURVEYORS AND CONSULTANTS

COMPREHENSIVE CRANE INSPECTION AND CERTIFICATION P.O. BOX 22123, MILWAUKIE, OR 97269-2123
PHONE: (503) 227-0287 FAX: (503) 908-7796 EMAIL: office@testyourcrane.com

REPORT OF EXAMINATION AND/OR TEST

JOB NO. 23-03-81 EQUIPMENT ID: #28 LAST ANNUAL: 4/28/2022 LAST QUAD: 1/24/2019
INSPECTIONDATE: 14 MARCH 2023 ☒ THIRD PARTY ☐ WISHA #: ☐ OSHA LAST #: ☒ ANNUAL ☐ QUAD

OWNER IDENTIFICATION:

OWNER: PORT OF PORTLAND CONTACT NAME: MR. MARK WRIGHT
ADDRESS: 6208 N. ENSIGN ST CITY: PORTLAND STATE: OR ZIP: 97217 PHONE: 503-679-9794
LEASED/RENTED ☐ YES ☒ NO LESSEE: ☐ LESSOR ☐ COMPANY NAME:

EQUIPMENT DESCRIPTION:

TYPE: ☐ CRANE ☒ DERRICK DESCRIPTION: BARGE MOUNTED
MANUFACTURER: DRAVO/WELLMAN MODEL #: BP-6065 SERIAL #: NOY 24308
TEST LOCATION: 6208 N. ENSIGN ST., PORTLAND, OREGON
POWERED BY: ☐ SUPPLIED ELECTRIC ☐ ELECTRO-HYDRAULIC ☐ DIESEL-HYDRAULIC ☒ DIESEL OTHER: ☐
SERVICE STATUS: ☒ LIFTING ☐ CLAMSHELL ☐ MAGNET ☐ OTHER:
BOOM TYPE: LATTICE CHORDS: I BEAM LACINGS: ANGLE
BOOM LENGTH: MAIN HOIST: 97'10" WHIP: XXX JIB: XXX
MAX LIFT CAPACITY: 134,400 MAINTENANCE RECORDS SITED: ☒ YES ☐ NO HOURS:

NAVAL ARCHITECT/RPME:

WIRE ROPE:

APPLICATION	PARTS	DIAM	CONSTRUCT	GRADE	RR	CORE	LAY	STRENGTH	WIRE ROPE CERTS
Main Hoist	8	1 1/8	6x26	EIPS	NO	IWRC	RRL	130,000	☐ YES ☒ NO
Aux. Hoist	1	7/8	8x25	EIPS	NO	IWRC	RRL	70,000	☐ YES ☒ NO
3rd Drum									☐ YES ☐ NO
Boom	19	1 1/8	6x26	EIPS	NO	IWRC	RRL	130,000	☐ YES ☒ NO
Boom Pendants									☐ YES ☐ NO

TESTING: SEE 22-TMS-1060 FOR LOAD TEST WEIGHTS

	BOOM (ft)	RADIUS (ft)	ANGLE (°)	CHART(lbs)	DEDUCTS	NET CAPACITY	TEST WEIGHT
MAIN 360	98'	88'		82,000		11,000	16,000
WHIP							

OPERATIONAL TEST: ☒ FULL ☐ OTHER
LOAD APPLICATION: ☐ CERTIFIED ☒ OTHER
STEEL TEST WEIGHTS, CUSTOMER ONLY HAD ENOUGH WEIGHT ON SITE FOR A 16,000 LBS TEST PICK
LOAD DESCRIPTION: (2023)
BASIS FOR LOAD RATING: ☐ OWNER ☒ MANUFACTURER WINCH PULL:

MARINE SURVEYORS AND CONSULTANTS

JOB NO: 23-03-81

INSPECTION CHECK-LIST

EQUIPMENT ID: #28 DRAVO

	ITEM (AS PER 29CFR1919.71)	SAT.	N/A	DISCREPANCY / COMMENT:
A)	BOOM	☒	☐	☐
B)	BOOM EXTENSIONS, JIB	☐	☒	☐
C)	BOOM SHEAVES	☒	☐	☐
D)	FIRE EXTINGUISHER	☒	☐	☐
E)	FLUID LEVELS	☒	☐	☐
F)	GUARDS	☒	☐	☐
G)	HOIST DRUM (S)	☒	☐	☐
H)	HOOK (S)	☒	☐	☐
I)	HOOK LATCH (S)	☒	☐	☐
J)	OUTRIGGERS, STABILIZERS, PADS	☐	☒	☐
K)	STRUCTURAL WELDS	☒	☐	☐
L)	ROTATION BEARINGS	☐	☒	☐
M)	WIRE ROPE, BECKETS, PINS	☒	☐	☐
N)	ANTI-TWO-BLOCK DEVICE(S)	☒	☐	☐
O)	BACKUP ALARM	☐	☒	☐
P)	BRAKES	☒	☐	☐
Q)	CONTROLS/FUNCTIONS LABELED	☒	☐	☐ AIR LEAK IN CAB BEHIND CONTROLS
R)	ELECTRICAL EQUIPMENT	☒	☐	☐
S)	LADDERS, HAND RAILS, WINDOWS	☒	☐	☐
T)	GAUGES WORKING	☒	☐	☐
U)	DATA PLATES, WARNING DECALS	☒	☐	☐
V)	HOUSEKEEPING	☒	☐	☐
W)	LIGHTS, SIGNALS, HORNS	☒	☐	☐
X)	LIMIT SWITCHES	☒	☐	☐ UPPER BM. LIMIT70 DEG.
Y)	PENNANT BARS, CABLES, LINKS	☐	☒	☐
Z)	LOAD CHART AND OP. MANUAL	☒	☐	☐
AA)	OPERATIONAL AIDS	☒	☐	☐
BB)	HOOK AND LOAD ROLLERS	☒	☐	☐
CC)	CHASSIS, TIRES, STEERING	☐	☒	☐
DD)	SWING LOCK AND BRAKES	☒	☐	☐

Additional Remarks:

	NEED TO KEEP OPERATOR INSPECTIONS ON FILE2023
	SMALL AIR LEAK IN CAB2023

Date: 3/14/2023	**Accredited Certifier's Name** *(please print)* Charles Streeter / Marine Surveyors and Consultants	**Signature of Accredited Certifier**
Certifier's Phone # 503-227-0287	**Address** P. O. Box 22123, Milwaukie, Oregon 97269-2123	

WW Quality Management Systems are registered to ISO9001:2015 & API-Q1.

Certificate

of

Examination and Test of Wire Rope
Before Being Taken into Use

Reel No: 0241262

This Certificate when properly executed by a competent person, in accordance with 29CFR 1919.37, is accepted by the Government of the United States of America as being in accordance with the requirements of 29CFR 1918.12 and 1919.33.

Name and address of maker or supplier:

WIREROPE WORKS, INC.
100 MAYNARD STREET
WILLIAMSPORT, PA 17701

Name and address of customer:

WOODS LOGGING
PO BOX K

LONGVIEW, WA 98632

PO: 1083134

Date Tested: March 25, 2020

Actual Break Strength in Pounds: 139,500

Catalog Break Strength in Pounds: 130,000

Description: 1 1/8 0626 BR EIP RR IW

Size: 1 1/8 (in inches, unless otherwise specified.)

Number of Strands: 06 **Number of Wires per Strand:** 26

Finish: Bright (Uncoated)

Grade: Extra Improved Plow

Lay: Right Regular Lay

Core: Wire Rope

Design load, subject to any stated qualifying conditions such as minimum pulley diameter, direct tensile load, etc. :
"Using a design factor of 5, the design working load would be one-fifth of the rated catalog breaking strength."

Manufactured in accordance with RRW410-E, F, G or H; ASTM A1023; or API9A specification where applicable.

Name and address of public service, association, company, or firm making the examination and test:

Wirerope Works, Inc.
100 Maynard Street
Williamsport, PA 17701

Position of signatory in public service, association, company, or firm making the examination and test:

Quality Engineer

I certify that the above particulars are correct and that the examination and test were carried out by a competent person.

Certificate No. 025351

Signature: _____ **Date:** 12/08/2020

per authority of Roger Gilliland
Director of Engineering
and Technical Services

In substantial agreement with I.L.O. Form No. 4

FUNK