

Limited Environmental Survey
Steam Lines Installed Post-1991
Naval Station Great Lakes
Great Lakes, Illinois

Prepared for:

Department of the Navy
Naval Station Great Lakes
Naval Facilities Engineering Command (NAVFAC), Midwest
201 Decatur Avenue, Building 1A
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Prepared by:



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EDI Project No. 1602.029.01

February 9, 2012 Approved for Release By

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Gary P. Flentge, MPH, LEHP, REA
Vice President, Industrial Hygiene

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Craig A. Chambers, PE
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February 9, 2012

Mr. Carlo Luciano
Naval Station Great Lakes
NAVFAC Midwest IPT
Building 1A
201 Decatur Avenue
Great Lakes, Illinois 60088

SUBJECT: Limited Environmental Survey— Steam Lines Installed Post 1991
Naval Station Great Lakes
Great Lakes, Illinois
EDI Project No. 1602.029.01

Dear Mr. Luciano:

Enclosed please find the Limited Environmental Survey for Steam Lines Installed Post-1991, located on the Naval Station Great Lakes in Great Lakes, Illinois, prepared by Environmental Design International inc. (EDI)

EDI performed the survey and identified and sampled suspect asbestos-containing materials (ACM) for the accessible steam pipe insulation materials and materials related to Steam Lines Targeted for Demolition. Asbestos samples were submitted to a National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory for analysis. Survey and laboratory results indicate that some of the suspect materials sampled were identified as ACM.

EDI performed a visual inspection of steam lines installed post-1991 and collected representative samples of suspect lead painted components. The samples were submitted to an Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory for analysis. The paint samples did not identify LBP; however they did identify lead containing paint. LBP abatement is not recommended.

Please feel free to contact me at (312) 345-1400 x136 or by email at pfeeley@envdesigni.com with any comments or questions regarding EDI's investigation and this report.

Sincerely,

Environmental Design International inc.


Patricia Feeley, P.G.
Project Manager

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Executive Summary

Environmental Design International inc. (EDI) was retained by the Department of the Navy, Naval Facilities Engineering Command (NAVFAC) Midwest, under Navy Contract Number N40083-07-A-0016, BPA Call Number 0030, to perform a limited environmental survey of the Steam Lines Targeted for Demolition located on the Naval Station Great Lakes in Great Lakes, Illinois. The environmental survey included inspection and sampling for the presence of asbestos, lead-containing paint, lead-based paint, and other potential hazardous materials observed. The base-wide steam line distribution system targeted for demolition included aboveground steam lines, underground steam lines, and associated Buildings (1709, 11B, 11G, 11H, 135, 811, 811A, 6501, 6502, 6503, 6509 and utility trestles S4 and S3). Portions of steam lines were accessed through steam pits open to the surface covered by a grate or manway. The underground steam lines were divided into categories: Installed post-1991, steam chases, and steam tunnels. This report addresses the limited environmental survey of underground steam lines identified as installed after 1991.

Every attempt was made to thoroughly evaluate and assess the presence and condition of suspect asbestos-containing materials (ACM), lead-based paint (LBP), and other hazardous materials. Any suspect ACM, LBP, or other environmental hazards identified during renovation that are not specifically listed in this report should be thoroughly evaluated, sampled, and analyzed prior to disturbance, in accordance with applicable regulatory standards.

EDI performed a visual inspection of steam lines installed post-1991, which included thermal system insulation (TSI) and related materials. The typical configuration observed along the steam line runs was 2 pipes, one of a greater diameter and one of a smaller diameter (typically an 18 inch pipe and 12 inch pipe, or 12 inch pipe and 8 inch pipe, with some combinations including a 10 inch pipe, sizes all estimated). Suspect materials along the pipe line included: elbows, expansion joints, paper, sealant, and black tar; non-suspect materials included foam and fiberglass insulation. Representative samples of homogeneous suspect ACM were collected from the pipe lines. The samples were submitted to a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for bulk analysis. Based on the visual inspection and bulk sample analysis results, the black tar 8" TSI from Pit 5 Maryland and Pit 9 Maryland tested positive for asbestos and were reported as ACM.

Any ACM that will be disturbed during planned renovation must be abated using licensed abatement contractors in accordance with federal, state and local regulations.

EDI performed a visual inspection of steam line materials and collected representative samples of suspect lead painted components. The samples were submitted to an Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory for analysis. The paint samples did not identify LBP; however, they did identify lead-containing paint. LBP abatement is not recommended.

EDI performed a visual survey of the steam lines installed post-1991 for potential hazardous materials. Suspect hazardous materials should be removed, handled, and disposed of or stored in accordance with applicable federal, state, and local regulations. No hazardous materials were identified along the Steam Lines Installed post-1991.

1.0 Introduction

Environmental Design International inc. (EDI) was retained by the Department of the Navy, Naval Facilities Engineering Command (NAVFAC) Midwest, under Navy Contract Number N40083-07-A-0016, BPA Call Number 0030, to perform a limited environmental survey of the steam line distribution system targeted for demolition located on the Naval Station Great Lakes in Great Lakes, Illinois. The environmental survey included inspection and sampling for the presence of asbestos, lead-based paint, and other potential hazardous materials observed. Portions of the steam line distribution system targeted for demolition included underground steam lines, which were divided into categories: installed post-1991, steam chases, and steam tunnels. This report addresses the limited environmental survey of the steam lines installed post-1991.

The field survey was performed by Mr. Jason Janssen, Mr. Jose Aguilera, Mr. John Wellman, Mr. John Feely and Ms. Alpana Chaudhary on June 6-10 and 13-15, 2011. EDI field personnel returned to the Steam Lines Installed Post-1991 to collect photographic documentation of the homogenous sampling areas (HAs) on September 6, 2011. Licenses and certifications for EDI staff are provided in Appendix G.

1.1 Scope of Work and Project Background

The purpose of this project (based on the statement of work provided by NAVFAC) is to conduct an Environmental Survey for base-wide steam lines (above ground steam lines, direct bury steam lines, steam tunnel and contents, steam pits and contents, associated buildings (1709, 11B, 11G, 11H, 135, 811, 811A, 6501, 6502, 6503, 6509), and utility trestles S4 and S3 scheduled for demolition. Areas (steam pipes) targeted for demolition were inspected and samples were collected to determine, the presence of asbestos, lead containing paint, and/or lead-based paint (LBP), and to identify other hazardous materials. Portions of the steam line distribution system which were located underground were assessed by utilizing accessible steam pits. Accessed steam pits were open to the surface, covered by a grate or man-way, and intercepted portions of the underground steam lines target for demolition.

The Work Plan (WP) was completed and approved by NAVFAC in May 2011 and defined the scope of activities, sampling and analysis to be conducted, and the standard health and safety procedures for completing the Environmental Survey. The quality assurance project plan (QAPP) for the base-wide steam lines targeted for demolition was also included in the Work Plan. The Environmental Survey focused on survey and sampling for asbestos containing materials (ACM) and lead in paint. The attached Naval Station Great Lakes drawing (Figure 1) was created by EDI to show the steam lines targeted for demolition. Steam heat is distributed to many of the buildings on the Naval Station through underground steam pipes that can be accessed through numbered steam pits. Associated buildings (1709, 11B, 11G, 11H, 135, 811, 811A, 6501, 6502, 6503, 6509) and utility trestles S4 and S3 were also inspected for ACM, lead paint, and potential hazardous materials. EDI conducted the initial Steam Line survey on June 6-

15 and provided preliminary draft reports of the asbestos and lead-paint chip findings. NAVFAC requested that EDI re-format the findings and sample results to better represent the HAs per steam line grouping: buildings, aboveground steam lines, steam lines installed post-1991 (located underground), steam chases (located underground), and steam tunnels (located underground). This report focuses on the findings from the visual and representative sampling of the steam lines installed post-1991. EDI was provided a drawing package titled "FY-12 MILCON# 1111695 Naval Station Great Lakes P-816 Steam Decentralization B-11" to review during the revisit on September 6, 2011.

1.2 Post-1991 Steam Line Descriptions

EDI was provided a Naval Station Great Lakes drawing dated October 2010, showing steam lines targeted for demolition.

This report focuses on steam lines installed post-1991, identifying the representative piping TSI and associated HAs. The typical configuration observed along the steam line runs was 2 pipes, one of a greater diameter and one of a smaller diameter (typically an 18 inch pipe and 12 inch pipe, or 12 inch pipe and 8 inch pipe, with some combinations including a 10 inch pipe, sizes all estimated). Piping was typically observed to be insulated; however bare piping was also observed. Suspect materials along the pipe line included TSI, elbows, expansion joints, paper, sealant, and black tar. Non-suspect materials along the pipe line included foam and fiberglass insulation. These materials were found similar along the pipe lines.

1.3 Safety

The steam lines are active and located above and below ground. Steam lines carry hot water steam and cold water condensate return. Underground steam lines were accessed through the steam pits and determined to be a permit-required confined space. Each pit was assessed for safe entry. Some pits were determined unsafe for entry due to high temperatures (over 120 degrees F) or flooding or other limiting restrictions. The HASP was provided in the WP dated May 2011.

Standard work consisted of the visual survey and sampling activities and was performed in a modified level D. Level C PPE was used for asbestos sampling, inclusive of a half or full face mask air purifying respirator. The respirator had HEPA filters. Tyvek suits were used for sampling activities. Confined space procedures were followed in the survey and sampling activities. See the WP for further details.

2.0 Asbestos Survey

2.1 Asbestos Survey Methodology

EDI representatives performed a visual inspection to identify suspect ACM on accessible areas of the steam lines installed post-1991 that might be affected by the Targeted Demolition of the Steam Lines. The ACM survey was performed in accordance with the United States Environmental Protection Agency (USEPA) *Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials* (USEPA 560/5085-030a, October 1985). The ACM survey included the following activities:

- Visual inspection of accessible areas of the steam lines installed post-1991;
- Collection of bulk samples of identified suspect ACM per homogeneous material in accessible areas of the Steam Lines;
- AIHA and NVLAP accredited laboratory analysis of suspect ACM bulk samples by polarized light microscopy (PLM) to first positive result per homogeneous material; and,
- Preparation of a final report that includes sample locations of representative ACM and the laboratory's analytical report.

HAs are areas containing materials that are similar in color, texture, and general appearance, and which appear to have been uniformly installed during the same time period. The homogenous areas identified for steam lines installed post-1991 included the following suspect materials:

- TSI on 18 inch pipe, 12 inch pipe, 10 inch pipe, and an 8 inch pipe
- Expansion joints;
- TSI Elbows on 18 inch pipes, 12 inch pipe, and 10 inch pipes;
- Paper between metal jackets;
- Gray pipe sealant; and
- Black Tar

The HAs associated with steam lines installed post-1991 included the following non-suspect materials:

- Foam insulation
- Fiberglass insulation;

Bulk samples of suspect ACM were collected using wet sampling methods with a coring device or a sample cutter, as appropriate, to collect a cross-section of the suspect ACM. Sample collection tools were decontaminated after each sample to avoid cross contamination. Bulk ACM samples were placed into clean unused sample containers marked with a unique sample identification number. For each sample, the identification number, brief material description, and location of suspect ACM were recorded on a sample log sheet. Chain-of-Custody (COC) procedures were followed for the ACM survey. These procedures provide a written tracking

mechanism that lists the person responsible for the sample from collection to delivery to the laboratory. Sample identification numbers, sample locations, and material descriptions were recorded on the chain-of-custody forms.

All bulk samples were analyzed by International Asbestos Testing Laboratory (IATL), Inc. in Mt. Laurel, New Jersey, a NVLAP accredited asbestos laboratory. IATL laboratory certifications are contained in Appendix C. Samples were analyzed by polarized light microscopy (PLM) using USEPA Method 600/R-93/116 (letter from laboratory attached in Appendix C with laboratory certification). PLM is a USEPA-approved method that utilizes a light microscope equipped with polarized filters. While the lab reports do not directly state "PLM," the laboratory report and letter indicates the use of USEPA Method 600/R-93/116 which is defined as PLM method.

2.2 Asbestos Results

The Asbestos Sample Summary Table (Table 1) and the Summary of HAs (Table 2) is presented in Appendix A with the September 6, 2011 Photo Logs of the steam lines installed post-1991. Drawings of suspect ACM sample locations are presented in Appendix B. Asbestos laboratory results and certifications are presented in Appendix C. Worker licenses and certifications are attached in Appendix G.

The following materials were non-detect for asbestos:

- TSI on 18 inch pipe, 12 inch pipe, 10 inch pipe, and an 8 inch pipe
- Expansion joints;
- TSI Elbows on 18 inch pipes, 12 inch pipe, and 10 inch pipes;
- Paper between metal jackets; and
- Gray pipe sealant.

Pit 5 Maryland: The black tar 8" TSI tested positive for asbestos, reported as 20% Chrysotile.

Pit 9 Maryland: The black tar 8" TSI tested positive for asbestos, reported as 15% Chrysotile.

The detection of asbestos within black tar TSI from Pits 5 and 9 along Maryland Street are believed to represent limited instances of these materials, as the black tar material was not observed elsewhere along the steam lines installed post-1991.

3.0 Paint Survey

3.1 Paint Survey Methodology

EDI conducted an inspection to identify representative painted components on the Steam Lines Installed Post 1991. EDI collected paint chip samples for analysis of lead from Pits 419, 422 423, and 239E. The paint chip samples represented Grey paint on 12” and 18” pipes, grey paint on valves, and green paint on valve fittings

Paint samples were placed into clean unused sample containers marked with a unique sample identification number. For each sample, the identification number, brief material description, location, condition, and estimated quantity of representative paint was recorded on a bulk sample log sheet. Chain-of-Custody (COC) procedures were followed for the lead survey. These procedures provide a written tracking mechanism that lists the person responsible for the sample from collection to delivery to the laboratory. Sample identification numbers, sample locations, and material descriptions were recorded on the chain-of-custody forms. COC forms are provided in Appendix E. The samples were analyzed by laboratory method AAS.

3.2 Paint Results

The paint sample log summary tables are presented in Appendix D with photographs of the representative painted components. Drawings of paint sample locations are presented in Appendix E. Laboratory results and certifications are presented in Appendix F.

Pit #423: The grey paint on 12” and 18” pipes is 0.017% lead by weight, which is a lead-containing paint. Lead-based paint (LBP) is defined as equal to or greater than 0.5% lead by weight.

Pit #419: The grey paint on valve is 0.043% lead by weight, which is a lead-containing paint. The green paint on valve fitting is <0.0075% lead by weight, which is non-detect for lead.

Pit #422: The pastel green paint is <0.0076% lead by weight, which is non-detect for lead.

Pit #239E: The pastel green paint is 0.019% lead by weight, which is a lead-containing paint.

No LBP was identified on the steam lines installed post-1991, based on the paint chip sample results. No LBP abatement is recommended.

4.0 Hazardous Materials Survey

4.1 Hazardous Materials Survey Methodology

EDI performed a visual survey of the pits associated with steam lines installed post-1991 for other potential hazardous materials.

4.2 Hazardous Materials Results

There were no hazardous materials observed. No tables or photographs were applicable. If found, suspect hazardous materials should be removed, handled, and disposed of or stored in accordance with applicable federal, state, and local regulations. The following were not observed associated with steam lines installed post-1991: USTs, ASTs, or gas cylinders.

5.0 Findings and Recommendations

5.1 Asbestos Survey

Based on the visual inspection and bulk sample analysis results, the black tar 8" TSI from Pit 5 Maryland and Pit 9 Maryland were reported as ACM. The detection of asbestos within the black tar from pits 5 and 9 along Maryland Street are believed to represent limited instances of these materials, as the black tar material was not observed elsewhere along steam lines installed post-1991.

Any ACM that will be disturbed during planned renovation/demolition must be abated using licensed abatement contractors in accordance with federal, state and local regulations.

5.2 Paint Survey

The laboratory analyses reveal that no LBP was detected in any of the paint chips sampled from the pits. No abatement is recommended based on these results.

5.3 Hazardous Materials Survey

No other suspect hazardous materials were identified in the environmental survey of steam lines installed post-1991.

6.0 Limitations

This report is based solely on the scope of work provided and the assumptions identified in this limited survey. Any new information that becomes available concerning the subject site should be provided to EDI so that our evaluations, conclusions, and recommendations may be revised and modified accordingly. All materials tested are assumed homogeneous throughout the proposed renovation areas. EDI staff walked the site area to identify accessible areas to be included in the limited survey. Every attempt was made to thoroughly evaluate and assess the presence and condition of suspect asbestos and lead containing materials. The insulation materials identified on the pipes were classified as being homogenous across pits and lines. EDI did not perform destructive sampling practices and suspect materials may exist within inaccessible areas. Any suspect material identified during renovation/demolition that is not specifically listed herein should be thoroughly assessed, sampled, and analyzed prior to disturbance, in accordance with applicable regulatory standards.

The findings and conclusions in this report are not specific certainties; rather they are probabilities based on professional judgment concerning the significance of the data collected. EDI claims to represent only the specific findings documented herein and does not claim knowledge of conditions beyond the scope of the limited survey.

The asbestos and lead survey was conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the environmental profession under similar conditions. No other warranty or guarantee, express or implied, is included or intended in this Report or otherwise.

7.0 Definitions

The following definitions are intended to provide the reader with a better understanding of the terminology used in this report.

Asbestos

The general name given to a number of naturally occurring hydrated silicate minerals that possess a unique crystalline structure, are incombustible in air, and are separable into fibers. Asbestos includes chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite.

Asbestos-Containing Material (ACM)

Asbestos-containing material (ACM) is material that is found to contain greater than one percent asbestos content as determined by polarized light microscopy (PLM) analysis (USEPA 560/5085-030a, October 1985).

Accessible Areas

An accessible area of the building is any area that the survey team is permitted to inspect and that can be inspected without the disassembly of complicated mechanical or rigid structural components of the building. Examples of accessible areas of the building are interior floors, walls, ceilings, areas above suspended ceilings, return air shafts (normally), mechanical piping exteriors, and equipment exteriors, etc.

Damaged material

A “damaged” material contains a few water stains or less than one-tenth of insulation with missing jackets and/or crushed insulation or water stains, gouges, punctures, or mars on surface up to one-tenth of the insulation if the damage is evenly distributed or up to one-quarter if the damage is localized.

Inaccessible Areas

An inaccessible area is any area where inspection access is not permitted or requires a considerable amount of mechanical or structural disassembly to inspect. Inaccessible areas normally only investigated prior to renovation or demolition activities. Examples of inaccessible areas are pipe chases behind solid walls, mechanically encased insulation, crawlspaces, or unsafe areas.

Friable Material

A material, that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure is a friable material. Examples of friable materials include: pipe insulation, boiler or tank insulation, or sprayed-on fireproofing.

Homogeneous Area

A homogeneous area is defined as a group of materials that is uniform in texture and appearance, was stalled at one time, and is likely to consist of more than one type or formation of material.

Lead-Based Paint (LBP)

Paint or surface coatings that contain lead levels greater than or equal to 1.0 milligram per square centimeter, or more than 0.5% lead by weight.

Lead-Containing Paint (LCP)

Paint or surface coatings that contain lead levels greater than the laboratory detection limit but less than 1.0 milligram per square centimeter (or less than 0.5% by weight). LCPs are not controlled under United States Environmental Protection Agency (USEPA) regulations. However, activities that may disturb LCPs may be regulated under Occupational Safety and Health Administration (OSHA) standards.

Non-friable Material

A material, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable materials may become friable through damage or deterioration. Examples of non-friable materials include: intact floor tile, transite building panels, or well maintained roofing materials.

Significantly Damaged Material

A “significantly damaged” material contains missing jackets on at least one-tenth of the piping or equipment and/or is crushed, heavily gouged, or punctured insulation on at least one-tenth of pipe runs/rises, boilers, tanks, ducts, etc., if the damage is evenly distributed or one-quarter of the damage is localized.

Appendices

Appendix A: Asbestos Summary Tables and Photographs

Table 1. Asbestos Sample Summary Table

Steam Lines Installed Post 1991

Naval Station Great Lakes

Great Lakes, Illinois

Location	Homogenous Area Description	Sampled Material Description	Sample ID	Results (% and type)	Test Method	Friability	Approx. Quantity Square feet (s.f) Linear feet (l.f.)	Condition
Post 1991, Pit 416	TSI 18" pipe	Insulation TSI	P-416-HA1-01	ND	PLM	F	14,000 lf	Good
Post 1991, Pit 410	TSI 18" pipe	Insulation TSI	P-410-HA1-02	ND	PLM	F		Good
Post 1991, Pit 417	TSI 18" pipe	Insulation TSI	P-417-HA1-03	ND	PLM	F		Good
Post 1991, Pit 416	TSI 12" pipe	Insulation TSI	P-416-HA2-04	ND	PLM	F	14,000 lf	Good
Post 1991, Pit 410	TSI 12" pipe	Insulation TSI	P-410-HA2-05	ND	PLM	F		Good
Post 1991, Pit 417	TSI 12" pipe	Insulation TSI	P-417-HA2-06	ND	PLM	F		Good
Post 1991, Pit 416	Expansion Joint	Expansion Joint	P-416-HA3-07	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 401A	Expansion Joint	Expansion Joint	P-401A-HA3-08	ND	PLM	F		Good
Post 1991, Pit 401	Expansion Joint	Expansion Joint	P-401-HA3-09	ND	PLM	F		Good
Post 1991, Pit 417	TSI Elbow 18" pipe	TSI Elbow	P-417-HA4-10	ND	PLM	F	400	Good
Post 1991, Pit 410	TSI Elbow 18" pipe	TSI Elbow	P-410-HA4-11	ND	PLM	F		Good
Post 1991, Pit 417	TSI Elbow 18" pipe	TSI Elbow	P-417-HA4-12	ND	PLM	F		Good

<u>Results</u>	<u>Type</u>	<u>Test Method</u>	<u>Friability</u>	<u>Condition</u>
ND: Not Detected	AC: Actinolite AM: Amosite AN: anthophyllite CH: Chrysotile CR: Crocidilite TR: Tremolite	PLM: Polarized Light Microscopy PC: Point Count Method TEM: Transmission Electron Microscopy	F: Friable NF: Non- Friable Category I NF-II: Non-Friable Category II	Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Table 1. Asbestos Sample Summary Table

Steam Lines Installed Post 1991

Naval Station Great Lakes

Great Lakes, Illinois

Location	Homogenous Area Description	Sampled Material Description	Sample ID	Results (% and type)	Test Method	Friability	Approx. Quantity Square feet (s.f) Linear feet (l.f.)	Condition
Post 1991, Pit 417	TSI Elbow 12" pipe	TSI Elbow	P-417-HA5-13	ND	PLM	F	400	Good
Post 1991, Pit 410	TSI Elbow 12" pipe	TSI Elbow	P-410-HA5-14	ND	PLM	F		Good
Post 1991, Pit 417	TSI Elbow 12" pipe	TSI Elbow	P-417-HA5-15	ND	PLM	F		Good
Post 1991, Pit 422	TSI 12" pipe	Insulation TSI	P-422-HA10-28	ND	PLM	F	380 lf	Good
Post 1991, Pit 422	TSI 12" pipe	Insulation TSI	P-422-HA10-29	ND	PLM	F		Good
Post 1991, Pit 422	TSI 12" pipe	Insulation TSI	P-422-HA10-30	ND	PLM	F		Good
Post 1991, Pit 422	TSI Elbow 12" pipe	TSI Elbow	P-422-HA11-31	ND	PLM	F	3	Good
Post 1991, Pit 422	TSI Elbow 12" pipe	TSI Elbow	P-422-HA11-32	ND	PLM	F		Good
Post 1991, Pit 422	TSI Elbow 12" pipe	TSI Elbow	P-422-HA11-33	ND	PLM	F		Good
Post 1991, Pit 429	TSI 12" pipe	Insulation TSI	P-429-HA12-34	ND	PLM	F	95 lf	Good
Post 1991, Pit 429	TSI 12" pipe	Insulation TSI	P-429-HA12-35	ND	PLM	F		Good
Post 1991, Pit 429	TSI 12" pipe	Insulation TSI	P-429-HA12-36	ND	PLM	F		Good
Results	Type	Test Method			Friability		Condition	
ND: Not Detected	AC: Actinolite AM: Amosite AN: anthophyllite CH: Chrysotile CR: Crocidilite TR: Tremolite	PLM: Polarized Light Microscopy PC: Point Count Method TEM: Transmission Electron Microscopy			F: Friable NF: Non- Friable Category I NF-II: Non-Friable Category II		Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area	

Table 1. Asbestos Sample Summary Table

Steam Lines Installed Post 1991

Naval Station Great Lakes

Great Lakes, Illinois

Location	Homogenous Area Description	Sampled Material Description	Sample ID	Results (% and type)	Test Method	Friability	Approx. Quantity Square feet (s.f) Linear feet (l.f.)	Condition
Post 1991, Pit 429	TSI Elbow 12" pipe	TSI Elbow	P-429-HA13-37	ND	PLM	F	3	Good
Post 1991, Pit 429	TSI Elbow 12" pipe	TSI Elbow	P-429-HA13-38	ND	PLM	F		Good
Post 1991, Pit 429	TSI Elbow 12" pipe	TSI Elbow	P-429-HA13-39	ND	PLM	F		Good
Post 1991, Pit 429	TSI 10" pipe	Insulation TSI	P-429-HA14-40	ND	PLM	F	95 lf	Good
Post 1991, Pit 429	TSI 10" pipe	Insulation TSI	P-429-HA14-41	ND	PLM	F		Good
Post 1991, Pit 429	TSI 10" pipe	Insulation TSI	P-429-HA14-42	ND	PLM	F		Good
Post 1991, Pit 429	TSI Elbow 10" pipe	TSI Elbow	P-429-HA15-43	ND	PLM	F	3	Good
Post 1991, Pit 429	TSI Elbow 10" pipe	TSI Elbow	P-429-HA15-44	ND	PLM	F		Good
Post 1991, Pit 429	TSI Elbow 10" pipe	TSI Elbow	P-429-HA15-45	ND	PLM	F		Good
Post 1991, Pit 411	Paper Between metal jackets	Paper Between metal jackets	P-411-HA16-46	ND	PLM	F		Good

<u>Results</u>	<u>Type</u>	<u>Test Method</u>	<u>Friability</u>	<u>Condition</u>
ND: Not Detected	AC: Actinolite AM: Amosite AN: anthophyllite CH: Chrysotile CR: Crocidilite TR: Tremolite	PLM: Polarized Light Microscopy PC: Point Count Method TEM: Transmission Electron Microscopy	F: Friable NF: Non- Friable Category I NF-II: Non-Friable Category II	Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Table 1. Asbestos Sample Summary Table

Steam Lines Installed Post 1991

Naval Station Great Lakes

Great Lakes, Illinois

Location	Homogenous Area Description	Sampled Material Description	Sample ID	Results (% and type)	Test Method	Friability	Approx. Quantity Square feet (s.f) Linear feet (l.f.)	Condition
Post 1991, Pit 410	Paper Between metal jackets	Paper Between metal jackets	P-410-HA16-41	ND	PLM	F	28,000 lf	Good
Post 1991, Pit 408	Paper Between metal jackets	Paper Between metal jackets	P-408-HA16-48	ND	PLM	F		Good
Post 1991, Pit 410	Gray pipe sealant	Gray pipe sealant	P-410-HA17-49	ND	PLM	NF	2,000 lf	Good
Post 1991, Pit 408	Gray pipe sealant	Gray pipe sealant	P-408-HA17-50	ND	PLM	NF		Good
Post 1991, Pit 405	Gray pipe sealant	Gray pipe sealant	P-405-HA17-51	ND	PLM	NF		Good
Post 1991, Pit 412	TSI 8" pipe	Insulation TSI	P-412-HA200-01	ND	PLM	F	160 lf	Good
Post 1991, Pit 83	TSI 12" pipe	Insulation TSI	P-83-HA215-01	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 88	TSI 12" pipe	Insulation TSI	P-88-HA215-02	ND	PLM	F		Good
Post 1991, Pit 83	TSI 18" pipe	Insulation TSI	P-83-HA216-01	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 83	TSI 18" pipe	Insulation TSI	P-83-HA216-02	ND	PLM	F		Good

<u>Results</u>	<u>Type</u>	<u>Test Method</u>	<u>Friability</u>	<u>Condition</u>
ND: Not Detected	AC: Actinolite AM: Amosite AN: anthophyllite CH: Chrysotile CR: Crocidilite TR: Tremolite	PLM: Polarized Light Microscopy PC: Point Count Method TEM: Transmission Electron Microscopy	F: Friable NF: Non- Friable Category I NF-II: Non-Friable Category II	Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

Table 1. Asbestos Sample Summary Table

Steam Lines Installed Post 1991

Naval Station Great Lakes

Great Lakes, Illinois

Location	Homogenous Area Description	Sampled Material Description	Sample ID	Results (% and type)	Test Method	Friability	Approx. Quantity Square feet (s.f) Linear feet (l.f.)	Condition
Post 1991, Pit 90	TSI 12" pipe	Insulation TSI	P-90-HA216-03	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 90	TSI 8" pipe	Insulation TSI	P-90-HA218-01	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 91	TSI 8" pipe	Insulation TSI	P-91-HA218-02	ND	PLM	F		Good
Post 1991, Pit 91	TSI 12" pipe	Insulation TSI	P-91-HA218-03	ND	PLM	F		Good
Post 1991, Pit 88	TSI 12" pipe	Insulation TSI	P-88-HA219-01	ND	PLM	F	1,200 lf	Good
Post 1991, Pit 5 M	Black tar TSI 8" pipe	Insulation TSI	P-5M-HA235-01	20% Chrysotile	PLM	F	25 lf	Good
Post 1991, Pit 9 M	Black tar TSI 8" pipe	Insulation TSI	P-9M-HA236-01	15% Chrysotile	PLM	F	25 lf	Good

<u>Results</u>	<u>Type</u>	<u>Test Method</u>	<u>Friability</u>	<u>Condition</u>
ND: Not Detected	AC: Actinolite AM: Amosite AN: anthophyllite CH: Chrysotile CR: Crocidilite TR: Tremolite	PLM: Polarized Light Microscopy PC: Point Count Method TEM: Transmission Electron Microscopy	F: Friable NF: Non- Friable Category I NF-II: Non-Friable Category II	Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

**Naval Station Great Lakes
 Basewide Steam Lines Targeted for Demolition
 Table 2: Summary of Homogenous Sampling Areas (HAs)
 Steam Lines Installed Post 1991**

HA	Description	Pit	Sample numbers	Sample IDs	ACM or ND	Notes
HA1	18" Pipe TSI	416	01	P-416-HA-1-01	ND	
	18" Pipe TSI	410	02	P-410-HA-1-02	ND	
	18" Pipe TSI	417	03	P-417-HA-1-03	ND	
HA2	12" Pipe TSI	416	04	P-416-HA-2-04	ND	
	12" Pipe TSI	410	05	P-410-HA-2-05	ND	
	12" Pipe TSI	417	06	P-417-HA-2-06	ND	
HA3	Expansion Joint	416	07	P-416-HA-3-07	ND	
	Expansion Joint	401A	08	P-401A-HA-3-08	ND	
	Expansion Joint	401	09	P-401-HA-3-09	ND	
HA4	18" pipe elbow TSI	417	10	P-417-HA-4-10	ND	
	18" pipe elbow TSI	410	11	P-410-HA-4-11	ND	
	18" pipe elbow TSI	417	12	P-417-HA-4-12	ND	
HA5	12" Pipe elbow TSI	417	13	P-417-HA-5-13	ND	
	12" Pipe elbow TSI	410	14	P-410-HA-5-14	ND	
	12" Pipe elbow TSI	417	15	P-417-HA-5-15	ND	
HA10	12" Pipe TSI	422	28	P-422-HA-10-28	ND	
	12" Pipe TSI	422	29	P-422-HA-10-29	ND	
	12" Pipe TSI	422	30	P-422-HA-10-30	ND	
HA11	12" Elbow TSI	422	31	P-422-HA-11-31	ND	
	12" Elbow TSI	422	32	P-422-HA-11-32	ND	
	12" Elbow TSI	422	33	P-422-HA-11-33	ND	
HA12	12" Pipe TSI	429	34	P-429-HA-12-34	ND	
	12" Pipe TSI	429	35	P-429-HA-12-35	ND	
	12" Pipe TSI	429	36	P-429-HA-12-36	ND	
HA13	12" Elbow TSI	429	37	P-429-HA-13-37	ND	
	12" Elbow TSI	429	38	P-429-HA-13-38	ND	
	12" Elbow TSI	429	39	P-429-HA-13-39	ND	
HA14	10" Pipe TSI	429	40	P-429-HA-14-40	ND	
	10" Pipe TSI	429	41	P-429-HA-14-41	ND	
	10" Pipe TSI	429	42	P-429-HA-14-42	ND	
HA15	10" Elbow TSI	429	43	P-429-HA-15-43	ND	
	10" Elbow TSI	429	44	P-429-HA-15-44	ND	
	10" Elbow TSI	429	45	P-429-HA-15-45	ND	
HA16	Paper between metal jackets	411	46	P-408-HA-16-46	ND	
	Paper between metal jackets	410	47	P-410-HA-16-41	ND	Sample number noted incorrectly as "41" and not "47"
	Paper between metal jackets	408	48	P-408-HA-16-48	ND	
HA17	Gray pipe sealant	410	49	P-410-HA-17-49	ND	
	Gray pipe sealant	408	50	P-408-HA-17-50	ND	
	Gray pipe sealant	405	51	P-405-HA-17-51	ND	
HA200	8" Pipe TSI	412	01	P-412-HA-200-01	ND	
HA215	12" Pipe TSI	83	01	P-83-HA-215-01	ND	

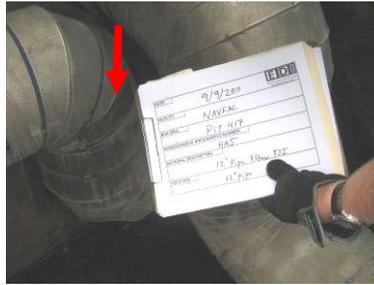
**Naval Station Great Lakes
 Basewide Steam Lines Targeted for Demolition
 Table 2: Summary of Homogenous Sampling Areas (HAs)
 Steam Lines Installed Post 1991**

HA	Description	Pit	Sample numbers	Sample IDs	ACM or ND	Notes
HA215	12" Pipe TSI	88	02	P-88-HA-215-02	ND	
HA216	18" Pipe TSI	83	01	P-83-HA-216-01	ND	
	18" Pipe TSI	83	02	P-83-HA-216-02	ND	
	12" Pipe TSI	90	03	P-90-HA-216-03	ND	Inspector notes on sample log, 12" TSI appears same as 18" TSI
HA218	8" Pipe TSI	90	01	P-90-HA-218-01	ND	
	8" Pipe TSI	91	02	P-91-HA-218-02	ND	
	12" Pipe TSI	91	03	P-91-HA-218-03	ND	Noted on COC shipped 6/16 as 8" TSI
HA219	12" Pipe TSI Black	88	1	P-88-HA-219-01	ND	
HA235	Black Tar 8" TSI Pit 5 Maryland	5 M	1	P-5M-HA-235-01	ACM	
HA236	Black Tar 8" TSI Pit 9 Maryland	9 M	1	P-9M-HA-236-01	ACM	

Naval Station Great Lakes
 Photo Log of Post 1991 Steam Lines
 August 6, 2011 & Paint Chip photographs from June 2011
 Photographed by Jose Aguilera & Jason Janssen



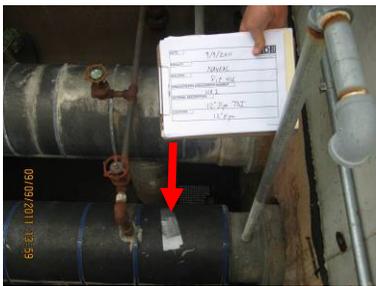
HA1: 18" pipe TSI, at pit 416



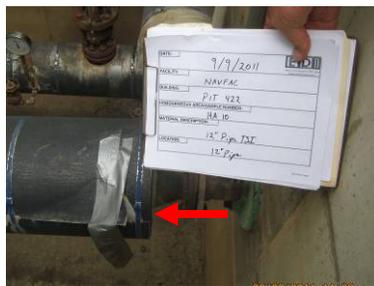
HA5: 12" pipe elbow TSI, at pit 416



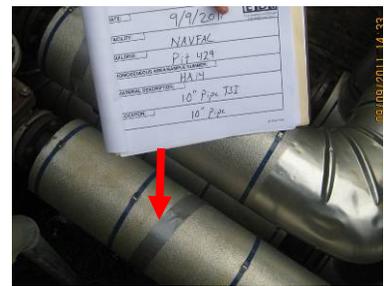
HA13: 12" elbow TSI, at pit 429



HA2: 12" pipe TSI, at pit 416



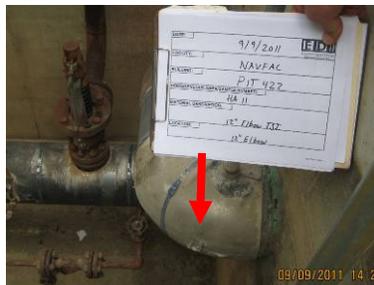
HA10: 12" pipe TSI, at pit 422



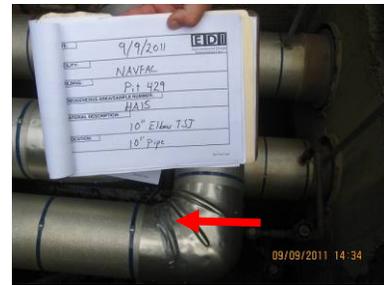
HA14: 10" pipe TSI, at pit 429



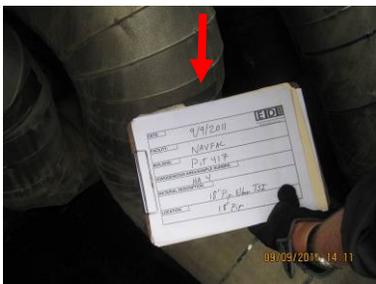
HA3: Expansion joint, at pit 416



HA11: 12" elbow TSI, at pit 422



HA15: 10" Elbow TSI, at pit 429



HA4: 18" pipe elbow TSI, at pit 417

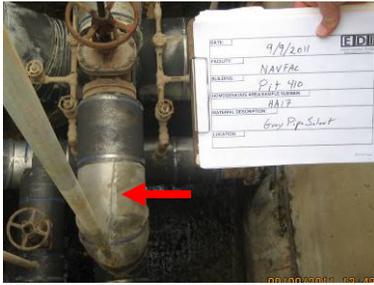


HA12: 12" pipe TSI, at pit 429

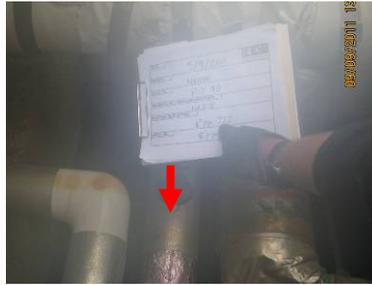


HA16: Paper between metal jackets, at pit 410

Naval Station Great Lakes
 Photo Log of Post 1991 Steam Lines
 August 6, 2011 & Paint Chip photographs from June 2011
 Photographed by Jose Aguilera & Jason Janssen



HA17: Gray pipe sealant, at pit 410



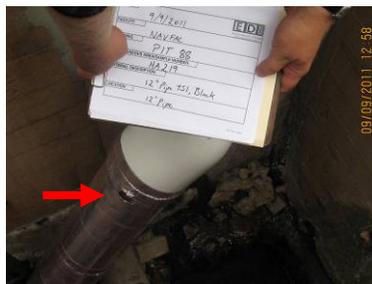
HA218: 8" pipe TSI, at pit 90



PC-P239E -HA4-11: Pit 239E, Pastel green paint



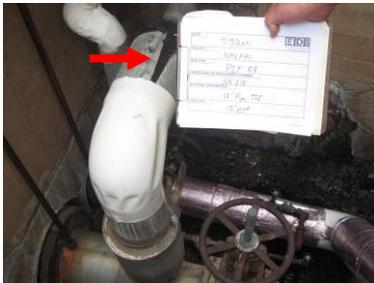
HA200: 8" pipe TSI, at pit 412



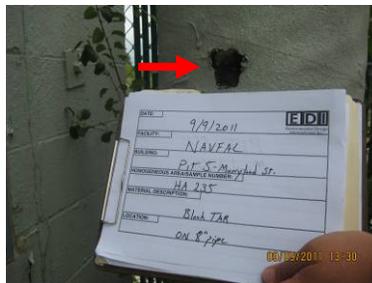
HA219: 12" pipe TSI, at pit 88



PC-419- HA-01-01 and PC-419 HA-2-04: Grey paint on valve and green paint on valve fitting



HA215: 12" pipe TSI, at pit 88



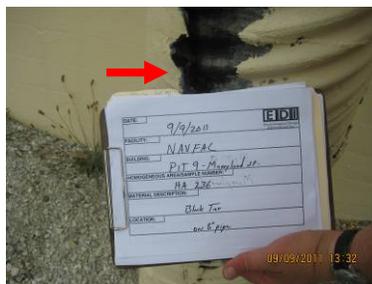
HA235: Black tar on 8" TSI, at pit 5 on Maryland Street



PC-423-HA-3-7: Grey paint on 12" and 18" pipes



HA216: 18" pipe TSI, at pit 90

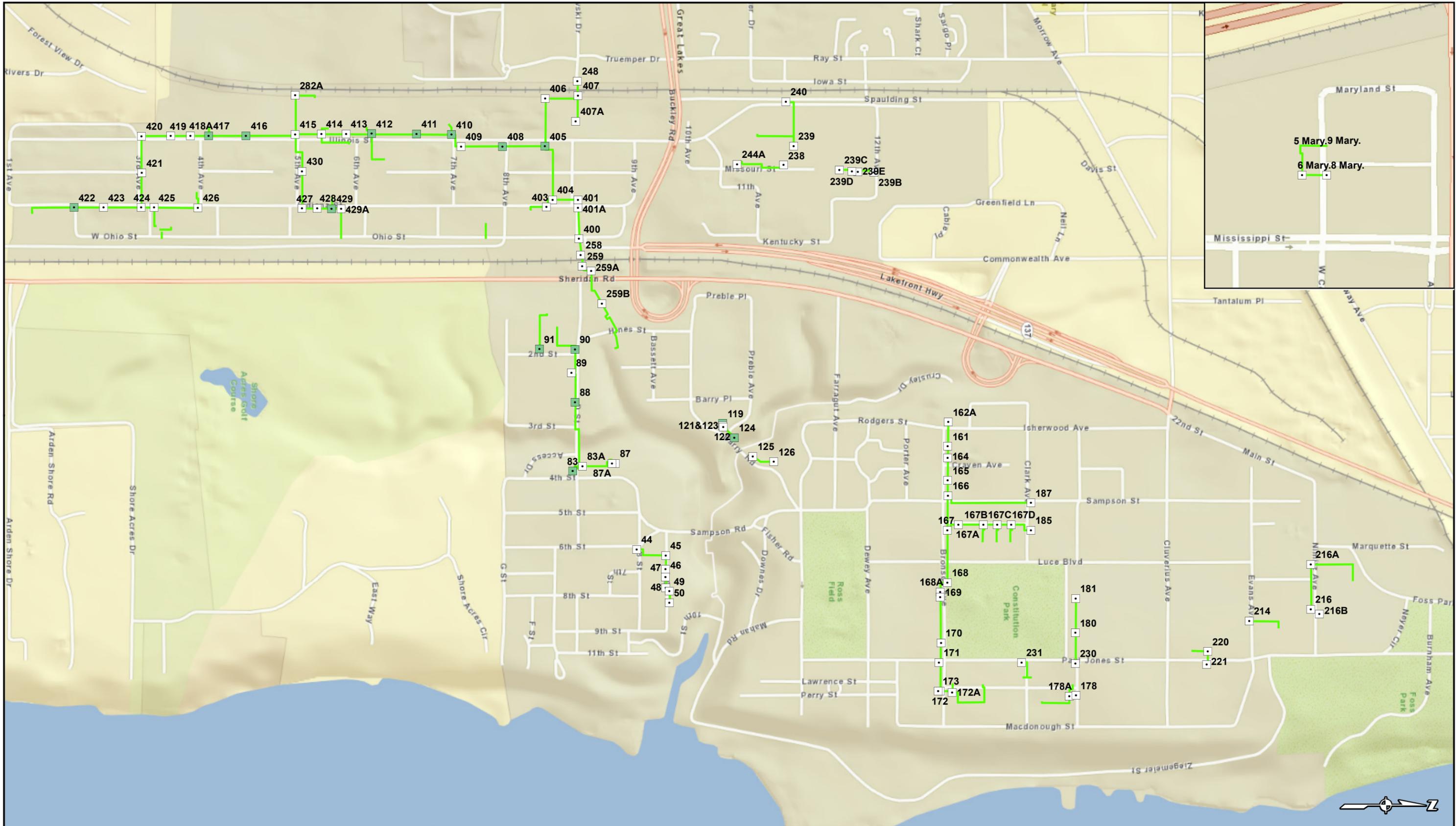


HA236: Black tar on 8" TSI, at pit 9 on Maryland Street



PC-422-HA-4-10: Pastel green paint

Appendix B: Asbestos Sample Location Drawings



EDI Environmental Design International inc.
 Civil, Survey, Environmental and Construction Inspection Services
 33 W. MONROE STREET, SUITE 1825, CHICAGO, IL 60603
 Ph. (312) 345-1400 Fax (312) 345-0529
 www.envdesigni.com
 Excellence, Dedication, Innovation

Legend

- Steam Lines Installed Post 1991
- Steam Pits Connected to Post 1991 Line(s)
 - No ACM Sample Taken
 - ACM Sample Taken, No ACM Found

Asbestos
 Post 1991 Steam Pit Sampling Locations
 Appendix B

PROJ. No: 1602.029
 DATE: 09/28/2011
 DRAWN BY: JRJ
 APPROVED BY: PF

Appendix C: Asbestos Laboratory Results and Certifications



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/14/2011
Report No.: 243029
Project: Naval Station Great Lakes
Project No.: 1602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4328468	Description / Location: White Insulation		
Client No.: P-410-HA-4-11	18" Pipe Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	15	85
		Cellulose	

Lab No.: 4328469	Description / Location: White Insulation		
Client No.: P-410-HA-5-14	12" Pipe Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Trace
		Fibrous Glass	

Lab No.: 4328470	Description / Location: Brown Fibrous		
Client No.: P-410-HA-16-41	Paper Between Metal Jackets		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Trace
		Cellulose	

Lab No.: 4328471	Description / Location: Brown Fibrous		
Client No.: P-411-HA-16-46	Paper Between Metal Jackets		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	100	Trace
		Cellulose	

Accreditations:

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA-LAP, LLC No. 100188

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method

EPA 600/R-93/116

Comments:

(PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: R. Caran



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/14/2011
Report No.: 243029
Project: Naval Station Great Lakes
Project No.: 1602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4328496	Description / Location: Brown/Black Wrap 12" Fitting			
Client No.: P-34-HA-34-101				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	80	Cellulose	20

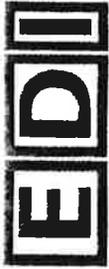
Lab No.: 4328497	Description / Location: White Insulation 8" Pipe			
Client No.: P-412-HA-200-01				
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Cellulose	98

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by-volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: R. Caran



**Environmental Design
International inc.**

33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

1. Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested											
J. Janssen / 1602-029		Naval Station Great Lakes																					
3. Sampled by (Signature)		5. Date of Sample Shipment				6. Date Results Needed						# of Containers	TIME (Minutes)	Laboratory Number									
<i>[Signature]</i>																							
Item No.	Sample Number	Sample Location/Description	Matrix				Method Preserved				Date	Sampling Time	VOLUME (L)										
			WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ SO ₄				ICE	NONE	OTHER							
1	P-410- HA-17-49	Gray Pipe Seals	X				X									X	4328473						
2	P-408- HA-17-50	Gray Pipe Seals															4328474						
3	P-405- HA-17-51	Gray Pipe Seals															4328475						
4	P-2- HA-18-52	TST															4328476						
5	P-2- HA-19-55	Black Pipe - Unif															4328477						
6	P-6- HA-20-58	Fiber Glass Wrap 12"															4328478						
7	P-6- HA-21-61	Fiber Glass Wrap 10"															4328479						
8	P-6- HA-22-64	18" Fittings															4328480						
9	P-6- HA-23-67	12" Fittings															4328481						
10	P-6- HA-24-70	10" Fittings															4328482						
Time In:		Time Out:		Total Hours:				Signature:				Print Name:											
Released by (Signature)		Date/Time Released		Delivery Method				Released by (Signature)				Date/Time Released				Company/Agency Affiliation				Condition Noted			
<i>[Signature]</i>		6/10/81 0600																					
Comments:																							
To Archive/Disposal																							



**Environmental Design
International inc.**

33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested					
Sampled by (Signature)		5. Date of Sample Shipment										6. Date Results Needed					
Item No	Sample Number	Sample Location/Description	Matrix				Method Preserved				Date	Sampling Time	VOLUME (L)	TIME (Minutes)	# of Containers	Laboratory Number	
			WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ O ₂							ICE
1	P-14- HA-32-95	12" Fitting	X				X									X	4328493
2	P-34- HA-32-96	12" Fitting TSI															4328494
3	P-14- HA-33-98	Pipe between metal sheets															4328495
4	P-34- HA-34-101	12" Fitting wrap.															4328496
5	P-412- HA-200-01	8" Pipe TSI	X				X									X	4328497
6																	
7																	
8																	
9																	
10																	

Time In:	Time Out:	Total Hours:	Signature:	Print Name:

Released by (Signature)	Date/Time Released	Delivery Method	Released by (Signature)	Date/Time Released	Company/Agency Affiliation	Condition Noted
	6/10/11 0800					
		To Archive/Disposal				



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325601	Description / Location: White Insulation			
Client No.: P-422-HA-11-32	TSI 12" Elbow			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

Lab No.: 4325602	Description / Location: White Insulation			
Client No.: P-422-HA-11-33	TSI 12" Elbow			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

Lab No.: 4325603	Description / Location: White Insulation			
Client No.: P-429-HA-14-42	13" Pipe			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

Lab No.: 4325604	Description / Location: White Insulation			
Client No.: P-429-HA-15-43	10" Elbow			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80

Accreditations:

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA-LAP, LLC No. 100188

*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
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Analytical Method

EPA 600/R-93/116

Comments:

(PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: R. Caran



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325605	Description / Location: White/Off-White Insulation		
Client No.: P-429-HA-15-44	10" Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	50	Fibrous Glass

Lab No.: 4325606	Description / Location: White Insulation		
Client No.: P-429-HA-15-45	10" Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose

Lab No.: 4325607	Description / Location: White Insulation		
Client No.: P-429-HA-12-34	12" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose

Lab No.: 4325608	Description / Location: White Insulation		
Client No.: P-429-HA-12-35	12" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbest fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: R. Caran



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325609	Description / Location: White Insulation		
Client No.: P-429-HA-12-36	12" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325610	Description / Location: White Insulation		
Client No.: P-429-HA-13-37	12" Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325611	Description / Location: White Insulation		
Client No.: P-429-HA-13-38	12" Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325612	Description / Location: White Insulation		
Client No.: P-429-HA-13-39	12" Elbow		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method: EPA 600/R-93/116

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Analysis Performed By: R. Caran



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CERTIFICATE OF ANALYSIS

Client: Environ. Design International
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Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325613	Description / Location: White Insulation		
Client No.: P-429-HA-14-40	10" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325614	Description / Location: White Insulation		
Client No.: P-429-HA-14-41	10" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325615	Description / Location: White Insulation		
Client No.: P-416-HA-1-01	18" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325616	Description / Location: White Insulation		
Client No.: P-416-HA-2-04	12" Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Accreditations:

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA-LAP, LLC No. 100188

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Analytical Method

EPA 600/R-93/116

Comments:

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CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325617	Description / Location: Black Insulation		
Client No.: P-416-HA-3-07	Expansion Joint		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	95
		Cellulose	

Lab No.: 4325618	Description / Location: White Insulation		
Client No.: P-417-HA-4-10	18" Elbow TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325619	Description / Location: White Insulation		
Client No.: P-417-HA-5-13	18" E-W Pipe TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Lab No.: 4325620	Description / Location: White Insulation		
Client No.: P-417-HA-1-3	18" E-W Pipe TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	80
		Cellulose	

Accreditations:

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA-LAP, LLC No. 100188

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Analytical Method

EPA 600/R-93/116

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Analysis Performed By: R. Caran



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Testing Laboratories**

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Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/12/2011
Report No.: 242558
Project: Naval Station Great Lake
Project No.: 1602.029.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4325621	Description / Location: White Insulation		
Client No.: P-417-HA-4-12	18" E-W Pipe TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	20	Cellulose
			<u>% Non-Fibrous Material</u>
			80

Lab No.: 4325622	Description / Location: White Insulation		
Client No.: P-417-HA-2-6	12" E-W Pipe TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	20	Cellulose
			<u>% Non-Fibrous Material</u>
			80

Lab No.: 4325623	Description / Location: White Insulation		
Client No.: P-417-HA-5-15	12" E-W Elbow TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	20	Cellulose
			<u>% Non-Fibrous Material</u>
			80

Accreditations:

NIST-NVLAP No. 101165-0

NY-DOH No. 11021

AIHA-LAP, LLC No. 100188

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Analytical Method

EPA 600/R-93/116

Comments:

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Analysis Performed By: R. Caran



Environmental Design International inc.

33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested							
Sampled by (Signature)		5. Date of Sample Shipment				6. Date Results Needed						TIME (Minutes)	# of Containers	Laboratory Number					
Sample Location/Description		COMP	GRAB	WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ O ₂				ICE	NONE	OTHER	Date	Time
Jensen / 1602-029-01		Naval Station Great Lakes																	
31		3-Day FAX																	
P-429 -	10" pipe	X											X		4/6				4325613
HA-17-40																			4325614
P-429 -	10" pipe																		4325615
HA-19-41																			
P-416 -	18" pipe																		
HA-1-01																			
P-416 -	12" pipe																		
HA-2-04																			
P-416 -	Exposure joint																		
HA-3-07																			
P-417 -	18" Elbow tsi																		
HA-4-10																			
P-417 -	12" Elbow tsi																		
HA-5-13																			
P-417 -	18" E-W pipe tsi																		
HA-6-16																			
P-417 -	18" E-W Elbow tsi																		
HA-7-18																			
P-417 -	12" E-W pipe tsi																		
HA-8-20																			
P-417 -	-2-6																		
HA-9-21																			
Time In: -2-6		Time Out:		Total Hours:		Signature:		Print Name:		Date/Time Released		Company/Agency Affiliation		Condition Noted					
Released by (Signature)		Date/Time Released		Delivery Method		Released by (Signature)		Date/Time Released		Company/Agency Affiliation		Condition Noted							
[Signature]		6/18/00		To Archive/Disposal		[Signature]													



**Environmental Design
International inc.**

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No. <i>Jesse E. / 1602-029-01</i>		2. Sampling Site Address/Contact Telephone No. <i>New Station Great Lakes</i>		Indicate Analysis Requested		Laboratory Number 4325623
4. # of Samples in Shipment <i>31</i>		5. Date of Sample Shipment <i>3-29-97</i>		TIME (Minutes)	# of Containers	
Sample Number <i>P-417-5-D 12" E-W elbow tsi</i>	Sample Location/Description	6. Date Results Needed		VOLUME (L)	Date	Time
		<i>3-29-97</i>				
Matrix		Method Preserved		OTHER	NONE	ICE
COMP		GRAB				
WATER		SLUDGE		AIR	SOIL	WATER
SLUDGE		OTHER				
AIR		OTHER		Total Hours:		
SOIL		OTHER		Time Out:		
WATER		OTHER		Released by (Signature): <i>[Signature]</i>		
GRAB		OTHER		Date/Time Released: <i>6/17/11 1600</i>		
COMP		OTHER		Delivery Method: <i>6/17/11</i>		
WATER		OTHER		To Archive/Disposal		
SLUDGE		OTHER		Company/Agency Affiliation		
AIR		OTHER		Condition Noted		
SOIL		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
WATER		OTHER		Signature: <i>[Signature]</i>		
SLUDGE		OTHER		Date/Time Released		
AIR		OTHER		Delivery Method		
SOIL		OTHER		To Archive/Disposal		
WATER		OTHER		Company/Agency Affiliation		
GRAB		OTHER		Condition Noted		
COMP		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Company/Agency Affiliation		
AIR		OTHER		Condition Noted		
SOIL		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Delivery Method		
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SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Print Name:		
SOIL		OTHER		Date/Time Released		
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GRAB		OTHER		Condition Noted		
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WATER		OTHER		Company/Agency Affiliation		
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SOIL		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
GRAB		OTHER		To Archive/Disposal		
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WATER		OTHER		Condition Noted		
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AIR		OTHER		Date/Time Released		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
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WATER		OTHER		Delivery Method		
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SOIL		OTHER		Condition Noted		
WATER		OTHER		Print Name:		
GRAB		OTHER		Date/Time Released		
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WATER		OTHER		Condition Noted		
SLUDGE		OTHER		Signature: <i>[Signature]</i>		
AIR		OTHER		Date/Time Released		
SOIL		OTHER		Delivery Method		
WATER		OTHER		To Archive/Disposal		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
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SLUDGE		OTHER		Date/Time Released		
AIR		OTHER		Company/Agency Affiliation		
SOIL		OTHER		Condition Noted		
WATER		OTHER		Signature: <i>[Signature]</i>		
GRAB		OTHER		Date/Time Released		
COMP		OTHER		Delivery Method		
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SOIL		OTHER		Date/Time Released		
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GRAB		OTHER		Condition Noted		
COMP		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Delivery Method		
AIR		OTHER		To Archive/Disposal		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Print Name:		
COMP		OTHER		Date/Time Released		
WATER		OTHER		Company/Agency Affiliation		
SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Signature: <i>[Signature]</i>		
SOIL		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
GRAB		OTHER		To Archive/Disposal		
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WATER		OTHER		Condition Noted		
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SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Signature: <i>[Signature]</i>		
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WATER		OTHER		Delivery Method		
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SOIL		OTHER		Condition Noted		
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GRAB		OTHER		Date/Time Released		
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SOIL		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
WATER		OTHER		Signature: <i>[Signature]</i>		
SLUDGE		OTHER		Date/Time Released		
AIR		OTHER		Delivery Method		
SOIL		OTHER		To Archive/Disposal		
WATER		OTHER		Company/Agency Affiliation		
GRAB		OTHER		Condition Noted		
COMP		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Company/Agency Affiliation		
AIR		OTHER		Condition Noted		
SOIL		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Delivery Method		
COMP		OTHER		To Archive/Disposal		
WATER		OTHER		Company/Agency Affiliation		
SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Print Name:		
SOIL		OTHER		Date/Time Released		
WATER		OTHER		Company/Agency Affiliation		
GRAB		OTHER		Condition Noted		
COMP		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Delivery Method		
AIR		OTHER		To Archive/Disposal		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Print Name:		
COMP		OTHER		Date/Time Released		
WATER		OTHER		Company/Agency Affiliation		
SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Signature: <i>[Signature]</i>		
SOIL		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
GRAB		OTHER		To Archive/Disposal		
COMP		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
SLUDGE		OTHER		Print Name:		
AIR		OTHER		Date/Time Released		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Signature: <i>[Signature]</i>		
COMP		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
SLUDGE		OTHER		To Archive/Disposal		
AIR		OTHER		Company/Agency Affiliation		
SOIL		OTHER		Condition Noted		
WATER		OTHER		Print Name:		
GRAB		OTHER		Date/Time Released		
COMP		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
SLUDGE		OTHER		Signature: <i>[Signature]</i>		
AIR		OTHER		Date/Time Released		
SOIL		OTHER		Delivery Method		
WATER		OTHER		To Archive/Disposal		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
WATER		OTHER		Print Name:		
SLUDGE		OTHER		Date/Time Released		
AIR		OTHER		Company/Agency Affiliation		
SOIL		OTHER		Condition Noted		
WATER		OTHER		Signature: <i>[Signature]</i>		
GRAB		OTHER		Date/Time Released		
COMP		OTHER		Delivery Method		
WATER		OTHER		To Archive/Disposal		
SLUDGE		OTHER		Company/Agency Affiliation		
AIR		OTHER		Condition Noted		
SOIL		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
WATER		OTHER		Signature: <i>[Signature]</i>		
SLUDGE		OTHER		Date/Time Released		
AIR		OTHER		Delivery Method		
SOIL		OTHER		To Archive/Disposal		
WATER		OTHER		Company/Agency Affiliation		
GRAB		OTHER		Condition Noted		
COMP		OTHER		Print Name:		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Company/Agency Affiliation		
AIR		OTHER		Condition Noted		
SOIL		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
GRAB		OTHER		Delivery Method		
COMP		OTHER		To Archive/Disposal		
WATER		OTHER		Company/Agency Affiliation		
SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Print Name:		
SOIL		OTHER		Date/Time Released		
WATER		OTHER		Company/Agency Affiliation		
GRAB		OTHER		Condition Noted		
COMP		OTHER		Signature: <i>[Signature]</i>		
WATER		OTHER		Date/Time Released		
SLUDGE		OTHER		Delivery Method		
AIR		OTHER		To Archive/Disposal		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Print Name:		
COMP		OTHER		Date/Time Released		
WATER		OTHER		Company/Agency Affiliation		
SLUDGE		OTHER		Condition Noted		
AIR		OTHER		Signature: <i>[Signature]</i>		
SOIL		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
GRAB		OTHER		To Archive/Disposal		
COMP		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
SLUDGE		OTHER		Print Name:		
AIR		OTHER		Date/Time Released		
SOIL		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
GRAB		OTHER		Signature: <i>[Signature]</i>		
COMP		OTHER		Date/Time Released		
WATER		OTHER		Delivery Method		
SLUDGE		OTHER		To Archive/Disposal		
AIR		OTHER		Company/Agency Affiliation		
SOIL		OTHER		Condition Noted		
WATER		OTHER		Print Name:		
GRAB		OTHER		Date/Time Released		
COMP		OTHER		Company/Agency Affiliation		
WATER		OTHER		Condition Noted		
SLUDGE		OTHER		Signature: <i>[Signature]</i>		
AIR		OTHER		Date/Time Released		
SOIL		OTHER		Delivery Method		
WATER		OTHER		To Archive/Disposal		
GRAB		OTHER		Company/Agency Affiliation		
COMP		OTHER		Condition Noted		
WATER		OTHER		Print Name:		



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/20/2011
Report No.: 243657
Project: Naval Station Great Lakes
Project No.: 1602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4335050	Description / Location: Black Insulation		
Client No.: P-88-HA-215-02	12" TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	2	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			98

Lab No.: 4335051	Description / Location: Yellow Insulation		
Client No.: P-90-HA-216-03	12" TSI Steam Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	15	Cellulose
		30	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			55

Lab No.: 4335055	Description / Location: Yellow Insulation		
Client No.: P-90-HA-218-01	8" TSI Steam Pipe		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	20	Cellulose
		10	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			70

Lab No.: 4335056	Description / Location: Lt. Grey Insulation		
Client No.: P-91-HA-218-02	TSI 8"		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	2	Mineral Wool
			<u>% Non-Fibrous Material</u>
			98

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: V. Smith



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CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/20/2011
Report No.: 243657
Project: Naval Station Great Lakes
Project No.: 1602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4335057	Description / Location: Lt. Tan Insulation		
Client No.: P-91-HA-218-03	TSI 8"		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	98	Mineral Wool
			<u>% Non-Fibrous Material</u>
			2

Lab No.: 4335058	Description / Location: Black Insulation		
Client No.: P-88-HA-219-01	12" Line		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	Trace	Mineral Wool
			<u>% Non-Fibrous Material</u>
			100

Lab No.: 4335059	Description / Location: Tan Insulation		
Client No.: P-111-HA-220-01	8" Steam Line		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	98	Mineral Wool
			<u>% Non-Fibrous Material</u>
			2

Lab No.: 4335060	Description / Location: Tan Insulation		
Client No.: P-111-HA-221-01	12" Steam Line		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	98	Mineral Wool
			<u>% Non-Fibrous Material</u>
			2

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: V. Smith



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CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/20/2011
Report No.: 243657
Project: Naval Station Great Lakes
Project No.: 1602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4335106	Description / Location: Yellow Insulation		
Client No.: P-199A-HA-232-03	8" TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	98	Mineral Wool
			<u>% Non-Fibrous Material</u>
			2

Lab No.: 4335107	Description / Location: Black Tar		
Client No.: P-5-HA-235-01	8" TSI, Pit 5" Maryland St.		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
20	Chrysotile	Trace	Cellulose
			<u>% Non-Fibrous Material</u>
			80

Lab No.: 4335108	Description / Location: Black Tar		
Client No.: P-9-HA-236-01	8" TSI, Pit 9" Maryland St.		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
15	Chrysotile	Trace	Cellulose
			<u>% Non-Fibrous Material</u>
			85

Lab No.: 4335109	Description / Location: Grey Insulation		
Client No.: P-241-HA-234-01	12" TSI		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	98	Mineral Wool
			<u>% Non-Fibrous Material</u>
			2

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: V. Smith



Environmental Design International inc.

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

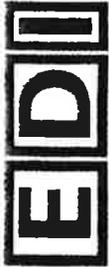
Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested		Laboratory Number				
Sampled by (Signature)		5. Date of Sample Shipment										TIME (Minutes)	# of Containers					
Sample Number	Sample Location/Description	COMP	GRAB	WATER	SOL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	NONE	OTHER	Date	Sampling Time	VOLUME (L)	
P-104-HA-224-02	12" tsi	X						X				X			6/10		1	4335066
P-104-HA-107-11	4" tsi																	4335067
P-119-HA-226-01	12" tsi														6/3			4335068
P-124-HA-226-02																		4335069
P-133A-HA-227-01	tsi 12"																	4335070
P-135-HA-227-02																		4335071
P-135-HA-228-01	tsi 8"																	4335072
P-119-HA-233-01																		4335073
P-124-HA-233-02																		4335074
P-158A-HA-34-104	Fitting Urag 18"																	4335075

6/16/11
New Station Great Lakes
6/21/11

Signature: _____
Print Name: _____

Total Hours: _____
Date/Time Released: _____
Released by (Signature): _____
Delivery Method: _____
To Archive/Disposal: _____



Environmental Design International inc.

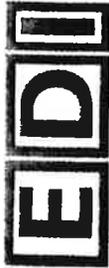
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Phone: 312-345-1400
Fax: 312-345-0529

Offices also in:
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Gary, Indiana
Milwaukee, Wisconsin

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested		Laboratory Number			
Sampled by (Signature)		New Station Great Lakes										TIME (Minutes)	# of Containers				
4. # of Samples in Shipment		5. Date of Sample Shipment				6. Date Results Needed											
74		6/16/11				6/24/11											
Sample Number	Sample Location/Description	Matrix							Method Preserved			Date	Sampling Time	VOLUME (L)			
		WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	NONE						OTHER
P-058A-HA-34-105	Fitting wrap 12"	X			X							X					4335076
P-058A-HA-35-106	Fitting wrap 2"																4335077
P-055-HA-36-107	Fitting wrap 12" valves																4335078
P-146-HA-36-108																	4335079
P-137-HA-36-109																	4335080
P-155-HA-37-110	Fitting insulation 12" valves																4335081
P-146-HA-37-111																	4335082
P-146-P-137-HA-37-112																	4335083
P-150-HA-39-114	Fitting 4"																4335084
P-150-HA-39-115																	4335085
Time In:		Total Hours:				Signature:				Print Name:							
Time Out:		Delivery Method				Released by (Signature)				Date/Time Released				Company/Agency Affiliation		Condition Noted	
Released by (Signature)		To Archive/Disposal															



Environmental Design International inc.

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Chicago, Illinois 60603
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CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.										Indicate Analysis Requested				
Prepared by (Signature)		5. Date of Sample Shipment				6. Date Results Needed						TIME (Minutes)	# of Containers	Laboratory Number		
Sample Location/Description		Matrix		Method Preserved				Sampling		VOLUME (L)						
Sample Number		WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO ₃	H ₂ SO ₄		ICE	NONE	OTHER	Date	Time	
A-02016- HA-40-120	<i>fittings patch</i>	X				X					X		6/5		2	4335116
A-02016- HA-41-121	<i>fittings wrap</i>														1	4335117
A-02016- HA-41-122															1	4335118
A-02016- HA-41-123															1	4335119
Time In:		Time Out:		Total Hours:		Signature:		Print Name:		Date/Time Released		Company/Agency Affiliation		Condition Noted		
<i>[Signature]</i>		<i>[Signature]</i>				<i>[Signature]</i>				<i>[Signature]</i>						



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/17/2011
Report No.: 243193
Project: Naval Station Great Lakes
Project No.: 11602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4330493	Description / Location: Tan Pipe Insulation			
Client No.: A-11G-HA-214-03	South Of HA-214-01			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	98	Fibrous Glass	2

Lab No.: 4330494	Description / Location: Tan/Black/Silver Pipe Wrap			Layer No.: 2
Client No.: A-11G-HA-214-03	South Of HA-214-01			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	10	Cellulose	80
		10	Fibrous Glass	

Lab No.: 4330494	Description / Location: White Insulation			
Client No.: P-83-HA-215-01	18" Stern			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Fibrous Glass	95

Lab No.: 4330495	Description / Location: White Insulation			
Client No.: P-83-HA-216-01	18" Stern			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Synthetic	95
		Trace	Fibrous Glass	

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: B. Hargrove



**International Asbestos
Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Environ. Design International
33 W Monroe, Suite 1825
Chicago IL 60603

Report Date: 6/17/2011
Report No.: 243193
Project: Naval Station Great Lakes
Project No.: 11602.029

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4330496	Description / Location: White Insulation		
Client No.: P-83-HA-216-02	18" Stern		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	Trace	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			100

Lab No.: 4330497	Description / Location: White/Tan Sheetrock		
Client No.: B-811-HA-1-01			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	40	Cellulose
			<u>% Non-Fibrous Material</u>
			60

Lab No.: 4330498	Description / Location: White/Tan Sheetrock		
Client No.: B-811-HA-1-02			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	30	Cellulose
		1	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			69

Lab No.: 4330499	Description / Location: White/Tan Sheetrock		
Client No.: B-811-HA-1-03			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	35	Cellulose
		Trace	Fibrous Glass
			<u>% Non-Fibrous Material</u>
			65

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: B. Hargrove



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CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firmly.

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Sampled by (Signature)		4. # of Samples in Shipment		5. Date of Sample Shipment		6. Date Results Needed						TIME (Minutes)	# of Containers				
Sample Location/Description		Matrix		Method Preserved		Sampling		VOLUME (L)	LABORATORY NUMBER								
Sample Number		COMP	GRAB	WATER	SOIL	AIR	SLUDGE			OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	NONE	OTHER	Date
B-116-HA-4-11	Penetrating Seal	X						X					X		6/9		4330489
B-116-HA-4-12	Penetrating Seal																4330490
A-116-HA-214-01	Pipe isolation next to bleed #11E																4330491
A-116-HA-214-02	Pipe isolation next to bleed #11B																4330492
A-116-HA-214-03	Pipe isolation South of HA-214-01																4330493
P-83-HA-215-01	18" Steam																4330494
P-83-HA-216-01	18" Steam																4330495
P-83-HA-216-02	18" Steam																4330496
B-811-HA-1-01	Drywell																4330497
B-811-HA-1-02	Drywell																4330498

6/13/11 139 3-Day SAT

Time In: _____ Time Out: _____ Total Hours: _____

Signature: _____

Print Name: _____

Company/Agency Affiliation: _____

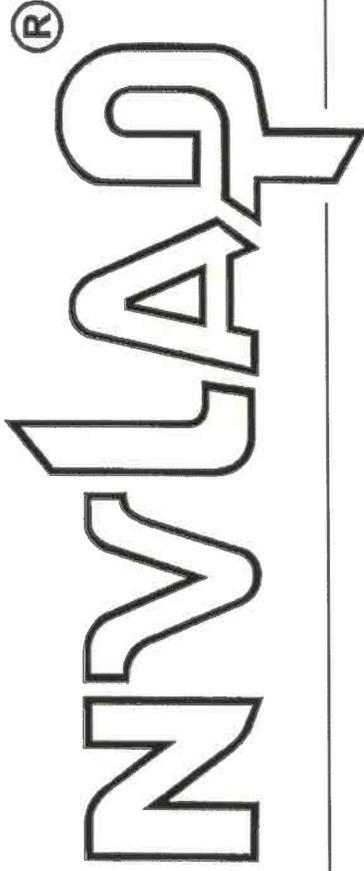
Date/Time Released: _____

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United States Department of Commerce
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Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101165-0

International Asbestos Testing Laboratories

Mt. Laurel, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

AIRBORNE ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2010-07-01 through 2011-06-30

Effective dates



Sally S. Bruce

For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

International Asbestos Testing Laboratories

9000 Commerce Parkway

Suite B

Mt. Laurel, NJ 08054

Mr. Frank E. Ehrenfeld, III

Phone: 856-231-9449 Fax: 856-231-9818

E-Mail: frankehrenfeld@iatl.com

URL: <http://www.iatl.com>

AIRBORNE ASBESTOS FIBER ANALYSIS (TEM)

NVLAP LAB CODE 101165-0

NVLAP Code Designation / Description

18/A02 U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

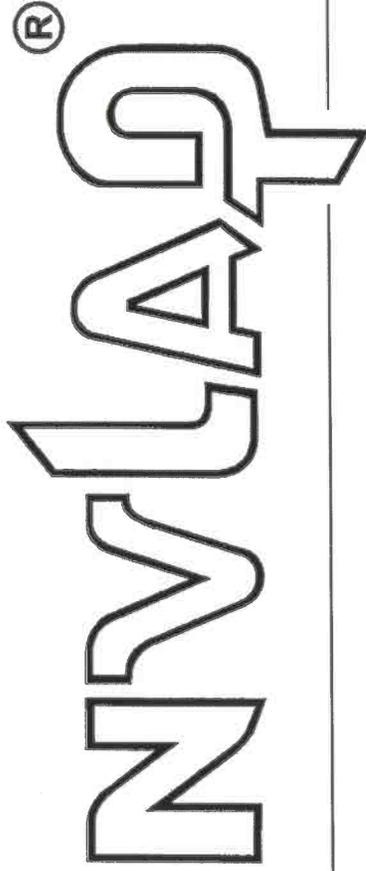
2010-07-01 through 2011-06-30

Effective dates

Sally S. Bruce

For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101165-0

International Asbestos Testing Laboratories

Mt. Laurel, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2010-07-01 through 2011-06-30

Effective dates



Sally A. Bruce

For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

International Asbestos Testing Laboratories

9000 Commerce Parkway

Suite B

Mt. Laurel, NJ 08054

Mr. Frank E. Ehrenfeld, III

Phone: 856-231-9449 Fax: 856-231-9818

E-Mail: frankehrenfeld@iatl.com

URL: <http://www.iatl.com>

BULK ASBESTOS FIBER ANALYSIS (PLM)

NVLAP LAB CODE 101165-0

NVLAP Code Designation / Description

18/A01 EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2010-07-01 through 2011-06-30

Effective dates

For the National Institute of Standards and Technology



UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

June 14, 2010

Mr. Frank E. Ehrenfeld, III
International Asbestos Testing Labs
9000 Commerce Parkway
Suite B
Mt. Laurel, NJ 08054

NVLAP Lab Code: 101165-0

Dear Mr. Ehrenfeld:

I am pleased to inform you that continuing accreditation for specific test methods in Airborne Asbestos Fiber Analysis (TEM) is granted to your organization under the National Voluntary Laboratory Accreditation Program (NVLAP). This accreditation is effective until June 30, 2011, provided that your organization continues to comply with accreditation requirements contained in the NVLAP Procedures.

Your Certificate of Accreditation is enclosed along with a statement of your Scope of Accreditation. You may reproduce these documents in their entirety and announce your organization's accreditation status using the NVLAP symbol and/or term in business publications, the trade press, and other business-oriented literature. Accreditation does not relieve your organization from observing and complying with any applicable existing laws and/or regulations.

We are pleased to have you participate in NVLAP and look forward to your continued association with this program. If you have any questions concerning your NVLAP accreditation, please direct them to Hazel M. Richmond, Program Manager, Laboratory Accreditation Program, National Institute of Standards and Technology, 100 Bureau Dr. Stop 2140, Gaithersburg, MD 20899-2140; (301) 975-4016.

Sincerely,

Sally S. Bruce, Chief
Laboratory Accreditation Program

Enclosure(s)





UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

June 14, 2010

Mr. Frank E. Ehrenfeld, III
International Asbestos Testing Labs
9000 Commerce Parkway
Suite B
Mt. Laurel, NJ 08054

NVLAP Lab Code: 101165-0

Dear Mr. Ehrenfeld:

I am pleased to inform you that continuing accreditation for specific test methods in Bulk Asbestos Fiber Analysis (PLM) is granted to your organization under the National Voluntary Laboratory Accreditation Program (NVLAP). This accreditation is effective until June 30, 2011, provided that your organization continues to comply with accreditation requirements contained in the NVLAP Procedures.

Your Certificate of Accreditation is enclosed along with a statement of your Scope of Accreditation. You may reproduce these documents in their entirety and announce your organization's accreditation status using the NVLAP symbol and/or term in business publications, the trade press, and other business-oriented literature. Accreditation does not relieve your organization from observing and complying with any applicable existing laws and/or regulations.

We are pleased to have you participate in NVLAP and look forward to your continued association with this program. If you have any questions concerning your NVLAP accreditation, please direct them to Hazel M. Richmond, Program Manager, Laboratory Accreditation Program, National Institute of Standards and Technology, 100 Bureau Dr. Stop 2140, Gaithersburg, MD 20899-2140; (301) 975-4016.

Sincerely,

Sally S. Bruce, Chief
Laboratory Accreditation Program

Enclosure(s)



February 2, 2012

ENVIRONMENTAL DESIGN INTERNATIONAL INC.
33 West Monroe Street
Suite 1825
Chicago, IL 60603-5326

Reference: Environmental Design International Inc., Naval Station Great Lakes Reports, 1602.029

The employment of the USEPA 600 R93-116 analytical method is equivalent to the 40CFR763 required 1982 Interim Method listed on our accreditation.

Furthermore, all of the analytical work performed by iATL for this project in 2011 that listed this analytical method -was performed by the analytical technique of Polarized Light Microscopy (PLM).

If you have further questions or need to contact us please either call at (856) 231-9449 or email me directly at frankehrenfeld@iatl.com.

Regards,



Frank E. Ehrenfeld III
Laboratory Director – Vice President

Cc: Patricia Feeley - EDI
Gary Flentge – EDI
Harvey Pokorny – NAVFAC - MW

Appendix D: Paint Chip Summary Tables and Photographs

ENVIRONMENTAL DESIGN INTERNATIONAL INC.
 Naval Station Great Lakes
 Basewide Steam Lines Targeted for Demolition
 Great Lakes, Illinois
 EDI Project No. 1602.029

PAINT SAMPLE LOG 1						
HA & Sample #	Lab #	Material Description	Pit Location	Condition	Results/ Type	
PC-423-HA-3-7	4326141	Grey paint on 12" & 18" pipes	Pit 423	Fair	0.017	
PC-419-HA-01-01	4326142	Grey paint on valve	Pit 419	Poor	0.043	
PC-419-HA-2-04	4326143	Green paint on valve fitting	Pit 419	Poor	<0.0075	
PC-422-HA-4-10	4326144	Pastel green paint	Pit 422	Fair	<0.0076	

Note: All samples analyzed at IATL by AAS. Results are shown as concentration of lead by weight (%) as shown on lab report (Appendix F).



PC-419- HA-01-01 and PC-419 HA-2-04: Grey paint on valve and green paint on valve fitting

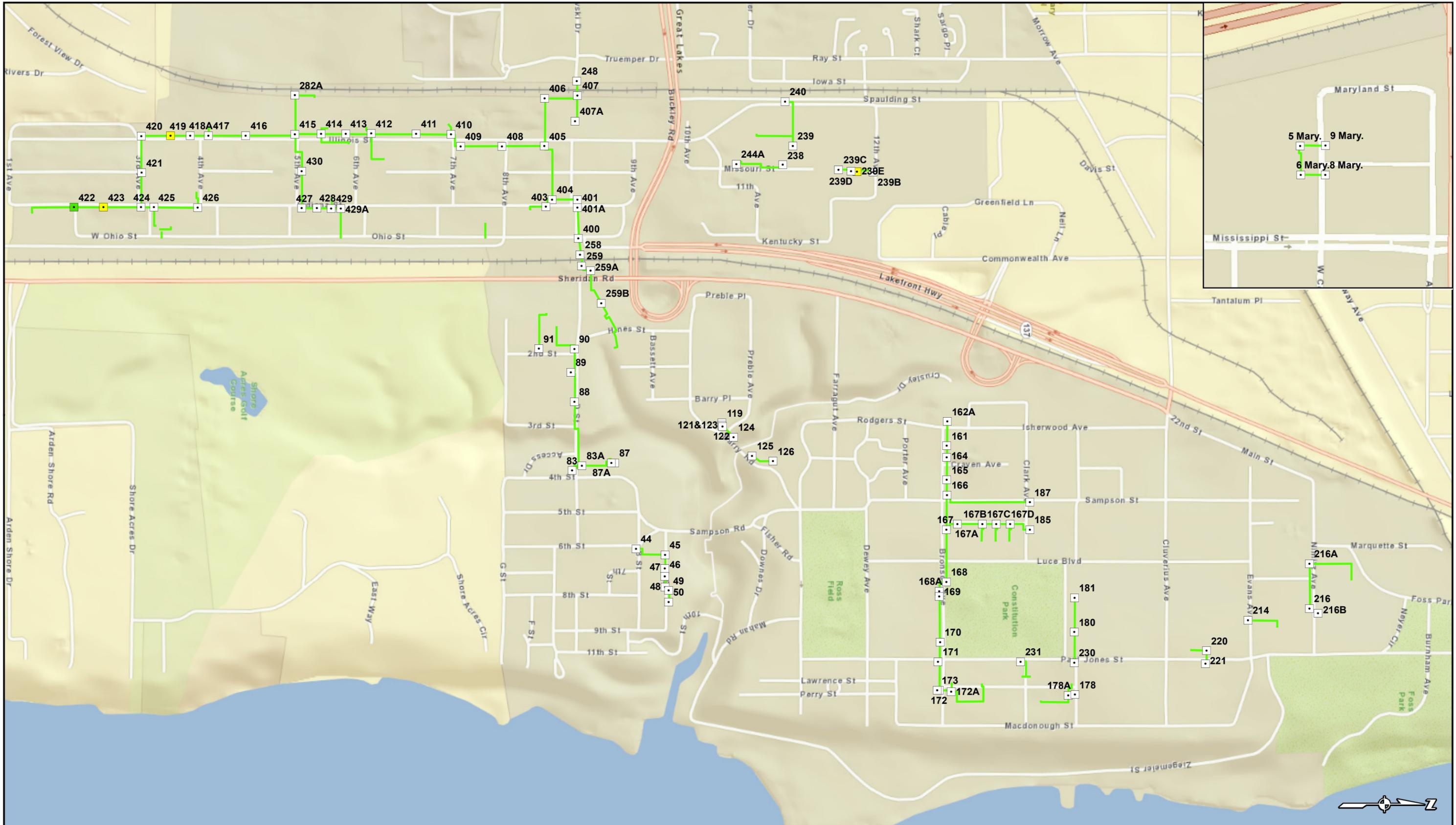


PC-423-HA-3-7: Grey paint on 12" and 18" pipes



PC-422-HA-4-10: Pastel green paint
PAINT SAMPLE RESULTS LOG

Appendix E: Paint Chip Sample Location Drawings



EDI Environmental Design International inc.
 Civil, Survey, Environmental and Construction Inspection Services
 33 W. MONROE STREET, SUITE 1825, CHICAGO, IL 60603
 Ph. (312) 345-1400 Fax (312) 345-0529
 www.envdesigni.com
 Excellence, Dedication, Innovation

Legend
 — Steam Lines Installed Post 1991
 Steam Pits Connected to Post 1991 Lines(s)
 □ No Paint Sample Taken
 ■ Paint Sample Taken, Lead Containing Paint Found
 ■ Paint Sample Taken, No Lead Content Found

Lead Based Paint
 Post 1991 Steam Pit Sampling Locations
 Appendix E

PROJ. No: 1602.029
 DATE: 09/28/2011
 DRAWN BY: JRJ
 APPROVED BY: PF

Appendix F: Paint Chip Laboratory Results and Certifications

CERTIFICATE OF ANALYSIS

Client:	Environ. Design International 33 W Monroe, Suite 1825 Chicago IL 60603	Report Date:	6/15/2011
		Report Number:	243028
		Project:	NavalStationGreatLakes;6/7/11
		Project No.:	1602.029

LEAD PAINT SAMPLE ANALYSIS SUMMARY

<u>Lab No.</u>	<u>Client No.</u>	<u>Location / Description</u>	<u>Concentration Lead By Weight (%)</u>
4328463	PC-P239E-HA-4-11	Pastel Green Paint	0.019

Accreditations: **NATIONAL LEAD LABORATORY ACCREDITATION PROGRAM (NLLAP)**
AIHA-LAP, LLC No. 100188 NYSDOH-ELAP No. 11021

Analytical Methods: ASTM D3335-85A "Standard Method To Test For Low Concentrations Of Lead In Paint By Atomic Absorption Spectrophotometry"
 EPA SW846-(3050B:7000B) "Standard Method To Test For Low Concentrations Of Lead In Soils, Sludges and Sediments By AAS"

Comments: Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. IATL assumes that appropriate sampling methods have been used and the data upon which these results are based have been accurately supplied by the client. Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B. Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies. LSD=0.2 ppm MDL=0.0024% by weight. RL= 0.010% by weight (based upon 100 mg sampled). * Insufficient sample provided to perform QC reanalysis (<200 mg) ** Not enough sample provided to analyze (<50 mg) *** Matrix / substrate interference possible. Sample results are not corrected for contamination by field or analytical blanks. This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any government agency. This report shall not be reproduced except in full, without written approval of the laboratory.

Date Received: 6/13/2011
Date Analyzed: 6/15/2011
Analyst: C. Shaffer

Approved By: _____
 Frank E. Ehrenfeld, III
 Laboratory Director

Offices also in:
Columbus, Ohio
Gary, Indiana
Milwaukee, Wisconsin

CHAIN OF CUSTODY
33 W. Monroe Street, Suite 1825
Chicago, Illinois 60603
Phone: 312-345-1400
Fax: 312-345-0529



Custody and Sample Information - Complete ALL information. Put N/A in blanks not applicable. Press firm

1. Sender's Name/Project No.		2. Sampling Site Address/Contact Telephone No.		3. Date of Sample Shipment		4. # of Samples in Shipment		5. Date of Sample Shipment		6. Date Results Needed		Indicate Analysis Requested		Laboratory Number
Sender's Name/Project No. <i>Environ / 167-1602-029</i>		Sampling Site Address/Contact Telephone No. <i>Naval Station Great Lakes</i>		Date of Sample Shipment		# of Samples in Shipment		Date of Sample Shipment		Date Results Needed		Indicate Analysis Requested		
Sample Number	Sample Location/Description	Matrix			Method Preserved			Date	Sampling Time	VOLUME (L)	TIME (Minutes)	# of Containers		
		GRAB	WATER	SOIL	AIR	SLUDGE	OTHER							HCl
1	PC-239E - HA-4-11	X											X	4328463
2	P-410 - 18" Pipe								6/7				X	
3	HA-1-02 P-410 - 12" Pipe												X	
4	HA-2-05 P-401A - Expansion Joint												X	
5	HA-3-08 P-401 - Expansion Joint												X	
6	HA-3-09 HA-4-11 18" Pipe Elbow												X	
7	P-410 - HA-5-14 12" Pipe Elbow												X	
8	P-410 - HA-16-41 Paper between Metal Joints												X	
9	P-411 - HA-16-46 Paper between Metal Joints												X	
10	P-408 - HA-16-48 Paper between Metal Joints												X	
Time in:		Date/Time Released		Delivery Method		Total Hours:		Signature:		Date/Time Released		Company/Agency of Origin/Noted		
Released by (Signature)		6/10/2011 <i>ccro</i>						<i>[Signature]</i>		6/15/11		IATL RECEIVED		
To Archive/Disposal										JUN 13 2011		IATL-BY		
Report Number:												000611411		

White - Client/Customer Copy
Yellow - Billing Copy
Pink - In-House File Copy

CERTIFICATE OF ANALYSIS

Client:	Environ. Design International 33 W Monroe, Suite 1825 Chicago IL 60603	Report Date:	6/13/2011
		Report Number:	242499
		Project:	NavalStationGreatLakes;6/6/11
		Project No.:	1602.029.01

LEAD PAINT SAMPLE ANALYSIS SUMMARY

<u>Lab No.</u>	<u>Client No.</u>	<u>Location / Description</u>	<u>Concentration Lead By Weight (%)</u>
4326141	PC-423-HA-3-7	Grey Paint On 12"&18" Pipes Pit #423	0.017
4326142	PC-419-HA-01-01	Grey Paint On Valve Pit #419	0.043
4326143	PC-419-HA-2-04	Green Paint ON Valve Fitting Pit #419	<0.0075
4326144	PC-422-HA-4-10	Pastel Green Paint Pit #422	<0.0076

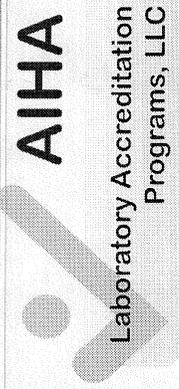
Accreditations: **NATIONAL LEAD LABORATORY ACCREDITATION PROGRAM (NLLAP)**
 AIHA-LAP, LLC No. 100188 NYSDOH-ELAP No. 11021

Analytical Methods: ASTM D3335-85A "Standard Method To Test For Low Concentrations Of Lead In Paint By Atomic Absorption Spectrophotometry"
 EPA SW846-(3050B;7000B) "Standard Method To Test For Low Concentrations Of Lead In Soils, Sludges and Sediments By AAS"

Comments: Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. IATL assumes that appropriate sampling methods have been used and the data upon which these results are based have been accurately supplied by the client. Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B. Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies. LSD=0.2 ppm MDL=0.0024% by weight. RL= 0.010% by weight (based upon 100 mg sampled). * Insufficient sample provided to perform QC reanalysis (<200 mg) ** Not enough sample provided to analyze (<50 mg) *** Matrix / substrate interference possible. Sample results are not corrected for contamination by field or analytical blanks. This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any government agency. This report shall not be reproduced except in full, without written approval of the laboratory.

Date Received: 6/9/2011
Date Analyzed: 6/13/2011
Analyst: C. Shaffer

Approved By: _____
 Frank E. Ehrenfeld, III
 Laboratory Director



AIHA

Laboratory Accreditation
Programs, LLC

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

International Asbestos Testing Laboratories (IATL)

9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054

Laboratory ID: 100188

has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC thereby, conforming to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories*. The above named laboratory, along with all premises from which key activities are performed, as listed above, have been accredited by AIHA-LAP, LLC in the following:

ACCREDITATION PROGRAMS

- ✓ **INDUSTRIAL HYGIENE** Accreditation Expires: 05/01/2011
- ✓ **ENVIRONMENTAL LEAD** Accreditation Expires: 05/01/2011
- ENVIRONMENTAL MICROBIOLOGY** Accreditation Expires:
- FOOD** Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with LQAP requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA website for the most current status of the scope of accreditation.



Pamela A. Kostle, CIH
Chairperson, Analytical Accreditation Board

Date Issued: 05/01/2009



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

International Asbestos Testing Laboratories (IATL)
 9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054

Laboratory ID: **100188**
 Issue Date: 05/01/2009

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 03/01/1991

IHLAP Category	Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Core Program Testing	AA	NIOSH 7082	
	Polarized Light Microscopy (PLM)	EPA 600/R-93/116	
	Phase Contrast Microscopy (PCM)	NIOSH 7400	
	Transmission Electron Microscopy (TEM)	NIOSH 7402	

The laboratory participates in the following AIHA-LAP, LLC* or AIHA-LAP, LLC-approved proficiency testing programs:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Metals*
<input type="checkbox"/> Silica*
<input checked="" type="checkbox"/> Asbestos*
<input type="checkbox"/> Bulk Asbestos*
<input type="checkbox"/> Beryllium*
<input type="checkbox"/> WASP ¹ (Thermal Desorption Tubes)
<input type="checkbox"/> Pharmaceutical Round Robin
<input type="checkbox"/> Compressed/Breathing Air Round Robin
<input type="checkbox"/> NVLAP (determined at the time of site assessment) | <input type="checkbox"/> Organic Solvents*
<input type="checkbox"/> Diffusive Sampler (3M)*
<input type="checkbox"/> Diffusive Sampler (SKC)*
<input type="checkbox"/> Diffusive Sampler (AT)*
<input type="checkbox"/> WASP ¹ (Formaldehyde) |
|---|--|

¹ Workplace Analytical Scheme for Proficiency



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

International Asbestos Testing Laboratories (IATL)
9000 Commerce Parkway, Suite B, Mt. Laurel, NJ 08054

Laboratory ID: **100188**
Issue Date: 05/01/2009

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 1/20/1997

Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Airborne Dust	NIOSH 7082	
Paint	ASTM D3335-85a	
Settled Dust By Wipe	EPA SW-846 7420	
Soil	EPA SW-846 7420	

The laboratory participates in the following AIHA-LAP, LLC testing programs:

- ✓ Paint
- ✓ Soil
- ✓ Settled Dust by Wipe
- ✓ Airborne Dust

Appendix G: Employee License and Certifications

**ASBESTOS
PROFESSIONAL
LICENSE**

Illinois Department of
**PUBLIC
HEALTH**

ID NUMBER 100 - 10088
ISSUED 3/16/2011 EXPIRES 05/15/2012



JOSE G AGUILERA
2852 S. CENTRAL PARK AVEN
CHICAGO, IL 60623

Environmental Health

American Heart
Association

Learn and Live

Heartsaver® First Aid
Jose Aguilera

This card certifies that the above individual has successfully completed the

Training
Center

TC Address
Contact Info

Course
Location

**CHICAGOLAND CPR &
SAFETY TRAINING**
THOMAS DUKUPS
708-259-6018

ENDORSEMENTS

TC EXPIRES

INSPECTOR

1/19/2012

PROJECT MANAGER

7/30/2011

AIR SAMPLING PROFESSIONAL

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois
Department of Public Health
This license is valid only when accompanied by a valid
training course certificate.



Learn and Live

Heartsaver® First Aid

Jose Aguilera

This card certifies that the above individual has successfully completed the
objectives and skills evaluations in accordance with the curriculum of the AHA

for Heartsaver First Aid Program.

Modules Completed: (A) (B) (C) (D) (E)

AUG 21 2011

Issue Date

AUG 21 2012

Recommended Renewal Date

Training Center

TC Address **CHICAGOLAND CPR &**

Contact Info **SAFETY TRAINING**

Course **THOMAS DUKLIPS**

Location **708-259-6018**

Instructor

Holder's Signature *Jose Aguilera*

American Heart Association Temporary Use Card will alter its appearance. 8C-12C



Occupational Training & Supply, Inc.

7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

Jose Aguilera

has successfully completed the 4 hour Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health and the Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency Response Act (AHERA) and TSCA Title II.

Asbestos Building Inspector Refresher

Course Date: 1/19/2011
Expiration Date: 1/19/2012

Exam Date: 1/19/2011
Certificate: BIR1101190180


Kathy DeSalvo, Director

2011



Occupational Training & Supply, Inc.

7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

Jose G. Aguilera

has successfully completed the 16 hour Lead Risk Assessor course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health in accordance with the Illinois Lead Poisoning Prevention Code.

Lead Risk Assessor

Course Date: 4/2-3/2009
Expiration Date: 4/3/2012

Exam Date: 4/3/2009
Certificate: LRA0904021069

Kathy DeSalvo
Kathy DeSalvo, Director

2009



Occupational Training & Supply, Inc.

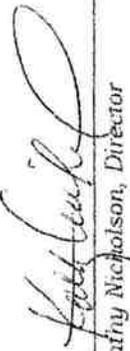
7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

Jose G. Aguilera

has successfully completed the 8 hour Confined Space Entry course in accordance with OSHA 29 CFR 1910.146, Permit-Required Confined Spaces.

Confined Space Entry

Class Date: June 27, 2007
Certificate: CSE0706271799


Kathryn Nicholson, Director

2007

Certificate of Completion

This certifies that

Jose Aguilera

Has Successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does not necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And all State OSHA and EPA Regulations As Well

Julius P. Griggs

Julius P. Griggs
Instructor #892

100625514879

Certificate Number

6/25/2010

Issue Date



UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

690A East Los Angeles Ave Suite 180 Simi Valley, CA 93065
888-309-7233 • 805-306-8027 • 866-869-7097 (F)
www.safetyunlimited.com

Proof of initial certification and subsequent refresher training is NOT required to take refresher training
Want to be sure this certificate is valid? Visit safetyunlimited.com/verification



**ASBESTOS
PROFESSIONAL
LICENSE**

ID NUMBER
100 - 00249

ISSUED
2/8/2011

EXPIRES
05/15/2012

JOHN C FEELY
9513 SOUTH LAWTON AVENUE
OAK LAWN, IL 60453



Environmental Health



**LEAD RISK
ASSESSOR LICENSE**

LEAD ID ISSUED
007573 1/6/2011

EXPIRES
1/31/2012

John C Feely
9513 S. Lawton
Oak Lawn, IL 60453



ILLINOIS LEAD PROGRAM
Environmental Health



Occupational Training & Supply, Inc.

7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

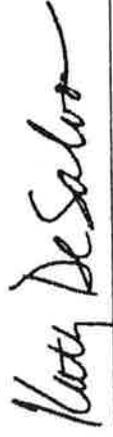
John Feely

has successfully completed the 4 hour Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health and the Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency Response Act (AHERA) and TSCA Title II.

Asbestos Building Inspector Refresher

Course Date: 1/7/2011
Expiration Date: 1/7/2012

Exam Date: 1/7/2011
Certificate: BIR1101070045


Kathy DeSalvo, Director

2011



Occupational Training & Supply, Inc.

7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

John Feely

has successfully completed the 8 hour Asbestos Contractor/ Supervisor Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health and the Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR763, Asbestos Hazard Emergency Response Act (AHERA) and TSCA Title II.

Asbestos Abatement Contractor/ Supervisor Refresher/ Project Supervisor Refresher

Course Date: 1/6/2011
Expiration Date: 1/6/2012

Exam Date: 1/6/2011
Certificate: ASR1101060023


Kathy DeSalvo, Director

2011



Environmental Design International inc.

Environmental Design International inc. Training

John Feely

Has successfully completed the Confined Space Entry course and has passed the exam with a score of at least 80%. This course is in accordance with OSHA standards and practices as specified in 29 CFR 1910.146. Training provided by Environmental Design International inc. Chicago, IL.

Confined Space Entry

Course Date	Exam Date	Unique Certificate #
June 3, 2011	June 3, 2011	EDI-CSE-06032011-001



Environmental Design International inc.

Environmental Design International inc.
33 West Monroe, Suite 1825
Chicago, Illinois 60603
(312) 345-1400


Jason Janssen
Trainer

Certificate of Completion

This certifies that

John Feely

Has Successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does not necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And all State OSHA and EPA Regulations As Well

Julius P. Griggs

Julius P. Griggs
Instructor #892

100722535887

Certificate Number

7/22/2010

Issue Date



UNLIMITED, Inc.

OSHA Compliant Safety Training Since 1983

690A East Los Angeles Ave Suite 180 San Jose Valley, CA 93065
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Proof of initial certification and subsequent refresher training is NOT required to take refresher training
Want to be sure this certificate is valid? Visit safetyunlimited.com/verification



This Certifies That

JASON JANSSEN

Has Completed the

8-Hour HAZWOPER Refresher Training Course

In accordance with 29 CFR 1910.120(e)(8) completed on 03/18/2011 in Paducah, KY

A handwritten signature in black ink, appearing to read "Owen B. Douglass, Jr.", is written over the printed name and title.

TRAINING MANAGER
Owen B. Douglass, Jr., PhD, CIH

A handwritten signature in black ink, appearing to read "Theo Deecke", is written over the printed name and title.

INSTRUCTOR
Theodore Deecke

1_16915_03182011 *Weston Solutions, Inc. • 1400 Weston Way • West Chester, PA • 19380*



**Hazardous Waste Operations
and Emergency Response
8-Hour Management/Supervisor Training**

This is to certify that

Jason R. Janssen

has received the required
Health and Safety Training designated by
OSHA 29 CFR 1910.120 (e) (4)

given

February 23, 2006

at

1431 OPUS Place, Downer's Grove, Illinois
2006-290-S

Beverly Quakron

Eric Wenger CTH
Course Instructor



This Certifies That

JASON JANSSEN

Has Completed the

Confined Space Entry-Entrant, Attendant, Non-entry Rescue Training Course

completed on 03/27/2009 in Paducah, KY

Conrad W. Lehr, CTT

**TRAINING MANAGER
Conrad W. Lehr, CET, CTT**

Conrad W. Lehr, CTT

**INSTRUCTOR
Conrad W. Lehr**

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Compliance Solutions



"Today's Training... Tomorrow's Solution"

3380 Quebec St, 2nd Floor Denver, CO 80207-1633 800-711-2708

Student Affiliations:
Environmental Design International Inc.
200702463

Certificate of Completion

This is to certify that
Alpana Chaudhary
has been tested and successfully meets the training requirements for
40-Hour HAZWOPER
29 CFR 1910.120(e)

Presented
Friday, January 14, 2011

Compliance Solutions Occupational Trainers, Inc.

Certificate Number: 754819880

Neval Gupta
Vice President

Bobby Finkerton, CECM
Instructor



Environmental Design International inc.

Environmental Design International inc. Training

Alpana Chaudhary

Has successfully completed the Confined Space Entry course and has passed the exam with a score of at least 80%. This course is in accordance with OSHA standards and practices as specified in 29 CFR 1910.146. Training provided by Environmental Design International inc. Chicago, IL.

Confined Space Entry

Course Date	June 3, 2011	Exam Date	June 3, 2011	Unique Certificate #	EDI-CSE-06032011-002
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Environmental Design International inc.

Environmental Design International inc.
33 West Monroe, Suite 1825
Chicago, Illinois 60603
(312) 345-1400

Jason Janssen
Trainer



This Certifies That

JOHN WELLMAN

Has Completed the

Confined Space Entry-Entrant, Attendant, Non-entry Rescue Training Course

completed on 03/06/2009 in Paducah, KY

Conrad W. Lehr, CET

TRAINING MANAGER
Conrad W. Lehr, CET, CIT

Theodore L. Blackburn, CSP, CET

INSTRUCTOR
Theodore L. Blackburn CSP, CET

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166_16201_03062009

Certificate of Completion

This certifies that

John Wellman

Has Successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does not necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance W/Federal OSHA Regulation 29 CFR 1910.120(e), (p) & (q)

And all State OSHA and EPA Regulations As Well

Julius P. Griggs

Julius P. Griggs
Instructor #892

110408544948

Certificate Number

4/8/2011

Issue Date



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**ASBESTOS
PROFESSIONAL
LICENSE**

ID NUMBER
100 - 18299

ISSUED
4/11/2011

EXPIRES
05/15/2012

CRAIG A CHAMBERS
1438 W EDGEWATER AVE
CHICAGO, IL 60660

Environmental Health



ENDORSEMENTS

TC EXPIRES

PROJECT DESIGNER

4/1/2012

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois
Department of Public Health
This license is valid only when accompanied by a valid
training course certificate.