

**LEAD-BASED PAINT
RISK ASSESSMENT REPORT**

FOR

**PEDRICKTOWN ARMY RESERVE BASE
BUILDING NOS. 120, 177, 179, 276, 277, 278
QUARTERS NOS. 120N, 120S, 132C, 132D, 132E, 132G,
132H, 132I, 132J, 132L, 132M
PEDRICKTOWN, NJ**

Prepared for:

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1.0 INTRODUCTION

On June 6 through June 14, 1994, Ogden conducted a Lead-Based Paint Risk Assessment survey for the following buildings located on the Pedricktown Army Reserve Base, Pedricktown, NJ: Building numbers - 120, 179, 177N, 177S, 276N, 276S, 277N, 277S, 278N, 278S. This assessment included garages associated with each building. This risk assessment survey was conducted for the Department of the Army, U.S. Garrison Fort Dix, Fort Dix, NJ. The work was performed under contract number DAC61-93-D-0008, Work Order No. 1.

1.1 SCOPE

The scope of services provided and the technical procedures employed in this Lead-Based Paint Risk Assessment were conducted in accordance with the general requirements set forth in the Base Realignment and Closure (BRAC) Lead Based Paint (LBP) Policy and the Department of Housing and Urban Development (HUD) Lead Based Paint Risk Assessment Protocol dated September, 1992. The work was also performed in accordance with the OSHA Standard CFR 1910.1025. Any subsequent revisions to these guidelines may require additional work.

The scope of the Lead-Based Paint Risk Assessment included an assessment of painted and varnished surfaces, performance of field inspections and environmental sample collection, laboratory analysis and preparation of a report detailing where and at what concentrations lead in household dust and lead in soil were found.

1.2 PURPOSE

The purpose of the Lead-Based Paint Risk Assessment was to evaluate current Army policies employed at the Pedricktown Army Reserve Base regarding the ability to contain and minimize potential lead based paint exposure hazards in residential buildings; to inspect and assess existing conditions by the collection of dust wipe and soil samples in accordance with the protocols identified above; and to make recommendations for the remediation and management of identified hazards.

1.3 GENERAL

No previous surveys were noted during the preparation of this report. The findings of this report have been prepared in accordance with generally accepted practice of the Lead-Based Paint Testing and Abatement industry.

The observations and test results presented in this report are time dependent and conditions may change. The conclusions and recommendations contained in this report are based upon the observations and test results obtained in the field and information provided by Base personnel and residents during the field survey. If any deviations from the conditions noted are encountered during abatement operations they could change the recommendations contained within this report and should be brought to the attention of Ogden.

This report has been prepared for the use of the Department of the Army for the specific application to the Residential Quarters of the Pedricktown Army Reserve Base, Pedricktown, NJ.

2.0 GENERAL PROJECT INFORMATION

2.1 BUILDING INFORMATION

This risk assessment included the assessment of the following buildings: 120, 177, 179, 276, 277, and 278. Building 120 was constructed in 1918 and consists of a concrete foundation with a wood frame and wood siding. Buildings 177, 179, 276, 277, and 278 were constructed in 1939-1940. These buildings all consist of a concrete and brick foundation with brick exterior walls. All of the buildings contain windows made of vinyl casement or wood, wooden entry doors, and wood trim. The roofs are pitched with a wood frame and shingle cover. The buildings all consist of two single family Quarters except for Building No. 179 which is one single family Quarter. The following table identifies the buildings and associated Quarters which were surveyed.

Building Number	Quarter Number
120	Quarters 120 N, 120 S
177	Quarters 131 I, 132 J
179	Quarters 132 C
276	Quarters 132 G, 132 H
277	Quarters 132 I, 132 J
278	Quarters 132 L, 132 M

The buildings have a first floor, second floor and a basement.

2.2 AREAS TESTED

All above referenced buildings was inspected and assessed in accordance with the protocols established in the Base Realignment and Closure (BRAC) Lead-Based Paint (LBP) Policy and the Department of Housing and Urban Development (HUD) Lead-Based Paint Risk Assessment Protocol dated September 1992.

The testing included the collection of soil samples outside of the building and the collection of dust wipe samples inside of the building. The soil samples were taken from the ground surface surrounding the building. The wipe samples were taken from window wells, window sills, and floor sample locations. The samples were located in accordance with the referenced guidance documents.

3.0 METHODOLOGY

3.1 FIELD SURVEY

The assessment was conducted based on the risk assessment field inspection and sample collection protocols established in the Base Realignment and Closure (BRAC) Lead-Based Paint (LBP) Policy and the Housing and Urban Development (HUD) Lead-Based Paint Risk Assessment Protocol, dated September, 1992. The requirements of the DOD and HUD protocols are fundamentally the same. Where deviations were noted, the more stringent requirements were applied.

For each of the Quarters assessed, the following dust wipe samples were collected:

Location	Component	Number of Samples
Inside entrance	Floor	1
Kitchen	Floor	1
	Window Well/Sill	1
Living Room	Floor	1
	Window Well/Sill	1
Bedroom # 1	Floor	1
	Window Well/Sill	1
Bedroom # 2	Floor	1
	Window Well/Sill	1
	Total :	9

Wipe samples were collected inside the building using sterile latex surgical gloves to prevent contamination of the sample. The samples were collected using a commercial wipe with a non-alcohol wetting agent and placed in a 50 ml polypropylene sample container and shipped for laboratory analyses. The wipe samples were taken by wiping any dust off of the surface sampled in a 1 square foot area for floors from the entire window sill.

Two composite soil samples were collected at each building and each garage. The first sample was collected around the building foundation in an area less than three (3) feet from the structure. The second sample was collected around the building perimeter in area between approximately 15 - 20 feet from the structure.

The soil samples were also taken from the playground at the Pedricktown Army Reserve Base.

Soil samples were collected using sterile latex surgical gloves to prevent contamination of the a sample. The sample was collected in a 50 ml polypropylene sample container and shipped for laboratory analysis.

Based on the conditions encountered at each site, additional samples were collected as necessary.

3.2 LABORATORY TESTING PROGRAM

All dust wipe and soil samples were shipped to Housing Environmental Services, Inc.'s Laboratory in Cambridge Massachusetts for analysis for lead concentration by Flame Atomic Absorption Spectrometry according to the modified NIOSH 7082 method. In addition to the wipe and soil samples which were collected, a representative number of blank wipe samples were also collected and sent to the laboratory. The blank was obtained by removing a commercial wipe from the package while wearing sterile gloves and immediately placing it in a sample container. The blank sample was provided to confirm the sampling procedures were not contributing to the level of the contaminant concentration in the sample result

The samples were analyzed to determine if they had results which were above the permissible threshold limits established in the guidance documents.

4.0 ASSESSMENT RESULTS

4.1 GENERAL ASSESSMENT OF CONDITIONS

One objective of the assessment is to evaluate the conditions of the area surveyed. This survey includes a visual observation of the paint conditions. The survey also includes an assessment of previous projects which may have abated lead based paint. Also, management, maintenance and training is assessed during the risk assessment.

During the inspection of the family housing units located on the Pedricktown Army Reserve Base, an assessment of suspect LBP surfaces was made. This assessment found surfaces to vary greatly from unit to unit and from interior surfaces to exterior surfaces of each unit. Interiors of occupied units were generally in fair to good condition. Interiors of vacant units ranged from good to poor. Notable areas of interior damage were found in Quarters 132L, where approximately fifty percent of the ceiling in the north living room had collapsed due to lightning damage. The interiors of the two units in Building Number 120 were severely deteriorated. Most painted surfaces were severely peeling and floors in many rooms were collapsed in Building 120.

Unit exteriors with the exception of Building Number 120 were uniform. All wooden trim and porch structures were in very poor condition. The paint on these components was found to contain very high concentrations of lead through XRF analysis. It was apparent that the deteriorating paint was substantially contributing to the high levels of lead in the soil at the unit foundations. All brick surfaces were unpainted and in very good condition. A complete listing of building components and their assessed conditions can be found in Appendix A of the comprehensive testing reports for each unit.

4.2 PREVIOUS LBP ABATEMENT, MODERNIZATION OR EXTRAORDINARY MAINTENANCE

Information regarding any systematic LBP abatement projects was not provided. Upon inspection it was apparent replacement of windows and unit entry doors had been conducted. The window replacement project did not include the kitchen or basement windows in most units. These remaining surfaces were found to contain high levels of lead in paint and dust.

Upon inspection of the units no substantial maintenance work was apparent except for window and door replacement. The removal and replacement of the windows and doors most likely created a substantial amount of lead dust based on the high concentration of lead in the remaining components. Specifics as to when the work was conducted and what types of work and clean-up procedures were implemented, was not provided prior to this report.

Information detailing lead abatement projects was not provided. Based on the inspection of the units it is apparent that no organized LBP abatement projects have been conducted at this site. Results of the comprehensive LBP survey and of the risk assessment samples indicate high levels of lead paint and lead dust remain in each of the units inspected.

4.3 MANAGEMENT AND MAINTENANCE STAFFING

Based on the information provided by the Housing Engineer, maintenance work is contracted out and generally performed during vacancy unless an emergency presents itself. Management of the maintenance contracts is conducted through the Chief of Contract Management at the Pedricktown base. Upon vacancy, an inspection of the unit is conducted by personnel from the maintenance department. During this inspection items in need of repair are noted and the work is repaired prior to occupancy. This inspection process does not take potential lead paint hazards into account nor does it initiate lead paint repair and clean-up procedures prior to reoccupancy. This system does appear to be effective for general interior maintenance items, but exteriors do not appear to be addressed.

A complete preventive maintenance policy manual describing painting procedures and surface preparation that could potentially disturb lead-painted surfaces was not available for review prior to this report.

Work orders are addressed on an as needed basis preferably during unit turnover or if an emergency presents itself. Discussions with residents indicated that it often takes several requests before maintenance personnel conduct repairs.

4.4 PAINTING POLICY AND PREVENTIVE MAINTENANCE

The repainting policy for units at the Pedricktown base is to repaint upon vacancy or every three years, but generally not during occupation. Painting is performed by an outside contractor. This policy appears to apply to the interior surfaces only.

The interior surfaces were noted to be in good condition in all occupied units except for Building 120. The exterior wooden porches and building trim were noted to be in very poor condition for all units inspected. Conditions indicate that it has been much longer than three years since these areas have been maintained. Deteriorating exterior surfaces appear to be a substantial source of lead contamination in the living environments and should be addressed immediately.

4.5 WORKER TRAINING AND PROTECTION

According to the housing engineer, maintenance is performed by outside contract and apparently all required training is the responsibility of the contractor. Ogden was not informed of any training programs for base maintenance personnel relative to lead-based paint clean-up, abatement, or clearance procedures.

5.0 CONCLUSIONS & RECOMMENDATIONS

5.1 CONCLUSIONS

This risk assessment report included the assessment of the Residential Quarters at Pedricktown Army Reserve Base Pedricktown, NJ. The risk assessment survey included the collection of 141 samples for laboratory analysis. These samples were submitted for laboratory analysis to determine if they had results measuring above the permissible threshold limits established by the Base Realignment and Closure Lead-Based Paint Policy and the Department of Housing and Urban Development Lead-Based Paint Risk Assessment Protocol dated September 1992 guidance documents. These permissible threshold limits are listed as follows:

Window wells:	800 ug/ft ²
Window sills:	500 ug/ft ²
Floors:	200 ug/ft ²
Soils:	500 ppm

Appendix A contains the results of the sampling performed for this assessment.

The comprehensive LBP testing program conducted for these units and their associated garages established exterior wooden trim components to contain lead above the action level of 1.0 mg/cm². The assessment of these surfaces determined all to be in poor to very poor condition. It is clear that the deterioration of these components is a substantial cause of contamination of soil around the unit foundations and is likely to be contributing to the contamination of interior floors.

A complete listing of all painted or varnished surfaces is included in the comprehensive LBP testing report in Appendix A.

5.2 RECOMMENDATIONS

5.2.1 RECOMMENDATIONS FOR BUILDING NO. 120

Based on the deteriorated condition and the extreme levels of lead contamination in these units it is recommended that they be secured utilizing a chain link fence not less than six (6) feet high. The fencing should extend in an area around the perimeter of the building not less than 15 feet from the structure. This measure of security should be maintained until complete abatement can be completed.

5.2.2 RECOMMENDATIONS FOR BUILDING NOS. 177, 179, 276, 277, 278

Ogden recommends that either in-house capabilities be developed or a maintenance contractor who is trained, equipped, and certified to conduct LBP abatement and clean-up work be employed to address any maintenance/repair work that may disturb LBP surfaces. This work would include any repairs and cleaning conducted during routine maintenance or renovations, or as part of an on-going in-place management program.

Ogden recommends the comprehensive testing data should be consulted prior to conducting any maintenance/renovation projects to ensure that the work does not disturb known or suspect LBP surfaces without taking appropriate precautions. All outside contractors should be notified of known or suspect LBP surfaces in order to ensure that their work plans will be conducted in accordance with the requirements established by the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) for lead related projects.

Ogden recommends personnel conducting facility maintenance inspections should be trained to identify and assess potential LBP hazards. Inspection personnel should incorporate LBP testing and risk assessment information in their inspection process. Work orders to remedy potential hazards should be submitted immediately and treated on a priority basis.

Ogden recommends the appropriate maintenance and contract management staff and any subordinates responsible for the oversight or execution of maintenance work renovation contracts, receive training in accordance with the requirements established in the DOD LBP policy. Should other military personnel conduct work disturbing known or suspect LBP surfaces, it is recommended they receive appropriate worker or supervisory training covering topics outlined in the DOD LBP policy.

Ogden recommends all building occupants be notified of existing LBP conditions detailing locations of known or suspected surfaces above the action levels. Residents should be instructed not to disturb any known or suspect painted surfaces unless proper precautions are initiated. Residents should be encouraged to report any defective paint film to the designated maintenance authority in order for it to be cleaned and repaired properly. Educational programs should be developed to instruct residents in proper procedures to minimize exposure to lead in their living environments. The program should include an explanation of health effects, pathways of exposure, methods to minimize exposure, age groups at high risk, dietary considerations, and availability of blood screening or medical monitoring programs for small children. The resident education program should emphasize housekeeping and home maintenance practices to minimize lead-based paint disturbance.

Ogden recommends that all inconclusive surfaces be confirmed through chip sample analysis prior to any renovation work and/or interior/exterior paint stabilization work, that may disturb surfaces that have not been conclusively identified as to their lead content. All non-intact

surfaces should be evaluated and repaired in order to prevent recontamination of the building after in-place management.

Ogden recommends the following in-place management procedures to remediate the conditions assessed at the Residential Quarters at Pedricktown Army Reserve Base in this report. The recommendations include environmental clean-up, paint stabilization, and soil remediation and should be performed at the earliest date possible. All in-place management work should be conducted by trained and qualified personnel in accordance with the lead hazard abatement procedures established in the DOD LBP policy. Due to the extremely poor condition of some painted surfaces a careful analysis of the economic benefit of in-place management of the material versus the complete abatement should be considered.

Window wells/Window sills:

Dust wipe sample results indicate that approximately 35% - 45% of all samples collected from window wells or window sills were above the permissible threshold limit. It is recommended that all window wells and window sills be cleaned according to the following procedures: (Windows which have been replaced with vinyl casements should be thoroughly cleaned utilizing HEPA vacuums and Tri-Sodium Phosphate detergents. Associated painted or wooden components should be handled as specified below.)

- a) Residents should not be permitted inside the area during this work.
- b) All furniture should be removed from the work area, or covered with plastic and all edges of the plastic sealed with tape to prevent dust from penetrating the plastic barrier. The floor should be covered with 6-mil plastic sheeting for a distance of eight (8) feet from the work area.
- c) Respiratory protection and protective clothing measures are to be employed for this clean-up, unless it can be documented through a pilot program that some or all protective measures are not necessary.
- d) Use a HEPA vacuum to clean all window sills, window wells and surrounding window trim. After vacuuming, using a paint scraping tool, gently remove all loose non-intact paint from the window sills, window trim, window stops, window wells and sashes. To control dust and paint chips from circulating, the area being scraped should be misted continually during scraping. After scraping, vacuum all dust and paint chips from the entire window area once again.
- e) Upon completion of the second stage of HEPA vacuuming, apply one (1) coat of latex enamel primer and one (1) coat of latex enamel finish paint to previously painted surfaces.

- f) Upon completion of the painting stage, using a phosphate detergent, wash the lower portion of the windows thoroughly (include the sashes, track, sill, stop, and well). After the phosphate wash, HEPA vacuum the window areas again to capture any residual dust.
- g) When finished, carefully fold plastic inward and vacuum all debris (i.e. paint chips, dust, etc.) from the center of the plastic. It is critical to remove visible debris from the plastic in order for the plastic to be disposed of as common, rather than hazardous waste.
- h) Use a HEPA vacuum to clean all floor areas. With a phosphate detergent, wash the floors thoroughly (include the door thresholds and exterior entry landings). HEPA vacuum the floors again to capture any residual dust.
- i) Wipe samples should be collected from one (1) window sill/well in each room (with a maximum of two (2) bedrooms per unit) to verify the effectiveness of cleanup measures. The windows sampled should be different from those sampled during the risk assessment process, if possible.
- j) The initial clean-up should be re-evaluated in six (6) months (from the time of the initial cleaning) by collecting wipe samples. The window sills/wells sampled should be different from those sampled after the initial clean-up process, if possible. At least one window sill/well in each room with a maximum of two (2) bedrooms per unit should be sampled.

Floors:

For all areas listed above where floor samples were found above the threshold limit of 200 ug/ft², the following cleaning procedures should be implemented in each of the rooms listed:

- a) Residents should not be permitted inside the area during this work.
- b) All furniture and equipment should be removed from the work area or covered with poly.
- c) Respiratory protection and protective clothing measures should be employed for this clean-up unless it can be documented through a pilot program that some or all protective measures are not necessary.
- d) Use a HEPA vacuum to clean all floor areas. With a phosphate detergent, wash the floors thoroughly(include the door thresholds and stair treads). HEPA vacuum the floors again to capture any residual dust.

- e) Collect wipe samples from each of the rooms (with a maximum of two (2) bedrooms per unit) and one (1) stair tread. The floor areas sampled should be different from those sampled during the risk assessment process, if possible. These clearance procedures shall be applied to all reoccupancy practices for all units until fully abated.
- f) The initial clean-up should be evaluated in six (6) months (from the time the areas are first cleaned), by collecting wipe samples. Floor samples should be collected at different areas than those sampled for clearance after the initial clean-up, if possible. Wipe samples should be collected from each of the rooms in the unit (with a maximum of two (2) bedrooms per unit) and one (1) stair tread.

Soils:

Soil samples collected along the northeast corner of the building near the foundation were found to be above the threshold level of 500 PPM. It is recommended that, at a minimum, all visible paint chips be removed utilizing HEPA vacuums or soil removal methods. The area should then be covered with clean top soil in an area not less than three (3) feet from the structure. Sod or other secure ground covering should be established in areas.

All exterior components contributing to soil contamination should be evaluated and repaired to ensure recontamination does not occur. These surfaces should be addressed on a priority basis to ensure areas are not rapidly recontaminated. Due to the poor condition of some painted surfaces, a careful analysis of the economic benefit of in-place management of the material versus the complete abatement should be considered. All in-place management work should be conducted by trained and qualified personnel in accordance with the lead hazard abatement procedures established in the DOD LBP policy.

Interior Surfaces in Poor Condition:

For any interior areas where samples were found above the threshold limits and the paint was in poor condition the following cleaning procedures should be implemented:

- a) All interior windows should be closed during the remediation work.
- b) Residents should not be permitted within the work area while any remediation work is taking place.
- c) Respiratory protection and protective clothing measures shall be employed for this clean up unless the Department of the Army can document through a pilot program that some or all protective measures are not necessary.
- d) Any movable objects near the work site should be removed before work begins. Any objects that cannot be moved should be thoroughly covered with 6 mil plastic and remain

covered until the remediation work is complete. Plastic should also be secured to cover the entire floor within the room where the work is being performed.

- e) Moisten all painted surfaces to be treated with water using a spray bottle. Gently scrape any loose paint and remove all dust with a HEPA vacuum paint scraping attachment. Apply a paint primer coat and two coats of latex enamel to seal the areas after scraping. Respirators should be worn at all times when destructive measures are employed.
- f) When finished, carefully fold plastic inward and vacuum all debris from the center of the plastic. All debris and dust must be removed and the plastic can be disposed of as common waste and not hazardous waste.
- g) Visually inspect work area and HEPA vacuum areas on the floor where paint chips have escaped the plastic sheeting.
- h) Collect one wipe sample in each area where remediation work is performed to verify the effectiveness of the clean up measures. The limits referenced above should be applied to determine the effectiveness.
- i) The interior of the unit should then be inspected on an annual basis until they are abated to insure that the condition of the paint has not deteriorated

Exterior Surfaces in Poor Condition:

For any exterior surfaces areas where samples were found above the threshold limits and the paint is in poor condition the following cleaning procedures should be implemented:

- a) All windows should be closed during the remediation work.
- b) Residents should not be permitted within the work area while any remediation work is taking place.
- c) Respiratory protection and protective clothing measures shall be employed for this clean up unless the Department of the Army can document through a pilot program that some or all protective measures are not necessary.
- d) Any movable objects near the work site should be removed before work begins. Any objects that cannot be moved should be thoroughly covered with 6 mil plastic and remain covered until the remediation work is complete. Plastic should also be secured at least 16 feet in all directions surrounding the immediate work area.
- e) Moisten all painted surfaces to be treated with water using a spray bottle. Gently scrape any loose paint and remove all dust with a HEPA vacuum paint scraping attachment. Apply a paint primer coat and two coats of latex enamel to seal the areas after scraping.

Respirators should be worn at all times when destructive measures are employed.

- f) When finished, carefully fold plastic inward and vacuum all debris from the center of the plastic. All debris and dust must be removed and the plastic can be disposed of as common waste and not hazardous waste.
- g) Visually inspect work area and HEPA vacuum areas on the ground where paint chips have escaped the plastic sheeting.
- h) Collect one soil sample in each area where remediation work is performed to verify the effectiveness of the clean up measures. The limits referenced above should be applied to determine the effectiveness.
- i) The interior of the unit should then be inspected on an annual basis until they are abated to insure that the condition of the paint has not deteriorated.

APPENDIX A

FIELD SAMPLE COLLECTION LOG

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 120S

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 120S

DATE: June 13, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
2	W	Entry Foyer	Floor	Wood	F	12.00 x 12.00	P	at front entry	vacant unit - severely deteriorated	3,587 ug/ft2
3	W	Kitchen	Floor	Vinyl	P	9.00 x 9.00	P	sampled at rear entry to porch		465 ? 466 ug/ft2
4	W	Kitchen	Window Sill	Wood	P	3.00 x 24.00	P	sampled at window to porch		5,028 ug/ft2
5	W	Living Room	Floor	Wood	P	12.00 x 12.00	P	sampled under middle window east wall		1,142 ug/ft2
6	W	Living Room	Window Sill	Wood	P	3.50 x 24.00	P	sampled at middle sill east wall	184 855 ?	16,029 ug/ft2
7	W	Bedroom 1	Floor	Wood	P	12.00 x 12.00	P	sampled at radiator		787 ug/ft2
8	W	Bedroom 1	Window Well	Wood	P	4.00 x 13.00	P	sampled at east window, north side	590 557 ?	590,538 ug/ft2
9	W	Bedroom 3	Floor	Wood	P	12.00 x 12.00	P	sampled at the entry to bedroom 3		435 ug/ft2
10	W	Bedroom 3	Window Well	Wood	P	4.00 x 13.00	P	sampled at the north window on the west wall	753 946 ?	753,923 ug/ft2
11	S	Ext. Found.				0.00 x 0.00		sampled around the south half of the building foundation. Large quantity of paint all around foundation.		23,073 ppm
12	S	Ext. Yard				0.00 x 0.00		sampled around building perimeter (south half). Some paint chips noted 10' to 15' from house.		521 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
1	W	BLANK				0.00 x 0.00		Field blank		1 ug/ft2

Codes	Sample Types:	Room:	Surface:	Condition:	Lead Content Thresholds Window Wells = 800 ug/ft2 Soil = 500 parts per million Window Sills = 500 ug/ft2 Paint = 5,000 parts per million Floors = 200 ug/ft2
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good	
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair	
	P = Paint			P = Poor	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 120N

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 120N

DATE: June 14, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
13	W	Entry Foyer	Floor	Vinyl	F	12.00 x 12.00	P	sampled at entry to porch		12,060 ug/ft2
14	W	Kitchen	Floor	Vinyl	P	12.00 x 12.00	P	sampled at rear entry	ceiling collapsed and on floor	618 ug/ft2
15	W	Kitchen	Window Sill	Wood	F	7.50 x 27.00	P	sampled at window to porch.		516 ug/ft2
16	W	Living Room	Floor	Wood	P	12.00 x 12.00	P	sampled at dining room entry		1,873 ug/ft2
17	W	Living Room	Window Sill	Wood	P	3.00 x 24.00	P	sampled at south window on east wall.		50,500 ug/ft2
18	W	Bedroom 1	Floor	Wood	P	12.00 x 12.00	P	sampled at south side of radiator under west window		12,475 ug/ft2
19	W	Bedroom 1	Window Well	Wood	P	4.00 x 17.00	P	sampled at south window on the west wall	2708 ?	2,706 ug/ft2
20	W	Bedroom 3	Floor	Wood	P	12.00 x 12.00	P	sampled at entry		1,764 ug/ft2
21	W	Bedroom 3	Window Well	Wood	P	4.00 x 18.00	P	sampled at northwest window		136,700 ug/ft2
22	S	Ext. Found.				0.00 x 0.00		sampled at building foundation around north half of building		11,522 ppm
23	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of the north half of the building		608 ppm
24	S	Ext. Found.				0.00 x 0.00		sampled around the foundation of the garage #130		1,873 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
25	S	Ext. Yard				0.00 x 0.00		sampled around the perimeter of the garage #130		252 ppm

Codes	Sample Types:	Room:	Surface:	Condition:	Lead Content Thresholds Window Wells = 800 ug/ft2 Soil = 500 parts per million Window Sills = 500 ug/ft2 Paint = 5,000 parts per million Floors = 200 ug/ft2
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good	
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair	
	P = Paint			P = Poor	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 278N

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132L

DATE: June 13, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
28	W	Kitchen	Window Well	Wood	P	4.00 x 23.00	P	sampled at west (only) window. This window is original wooden type, all others are vinly casement.	45, 586 ?	45,587 ug/ft2
29	W	Entry Foyer	Floor	Vinyl	G	12.00 x 12.00	G	sampled at front entry		1,621 ug/ft2
31	W	Living Room	Window Sill	Wood	F	3.00 x 39.00	G	sampled at the east window. (sill peeling)		1,270 ug/ft2

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
26	W	BLANK				0.00 x 0.00		field blank	< 85 ?	19 ug/ft2
27	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		75 ug/ft2
30	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled in the north living room(sun room) under the middle window on the north wall.		27 ug/ft2
32	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at entry	< 85 ?	16 ug/ft2
33	W	Bedroom 1	Window Well	Vinyl	G	3.50 x 29.00	G	sampled at west window	46 ?	47 ug/ft2
34	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at north wall center		111 ug/ft2
35	W	Bedroom 2	Window Well	Wood	G	3.50 x 29.00	G	sampled at north window	< 85 ?	27 ug/ft2
36	S	Ext. Found.				0.00 x 0.00		sampled around building foundation. visablepaint chips		459 ppm
37	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of building - north half		228 ppm
38	S	Ext. Found.				0.00 x 0.00		sampled around foundation of garage #288. paint chips near building primarily under windows and at front entry doors on pavement.		489 ppm
39	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of garage #288		256 ppm

Codes	Sample Types: W = Wipe S = Soil P = Paint	Room: Ext. = Exterior Found. = Foundation	Surface: Playgrd. = Playground Equip. = Equipment	Condition: G = Good F = Fair P = Poor
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Lead Content Thresholds Window Wells = 800 ug/ft2 Window Sills = 500 ug/ft2 Floors = 200 ug/ft2	Soil = 500 parts per million Paint = 5,000 parts per million
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Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 278S

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132M

DATE: June 10, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
40	W	Entry Foyer	Floor	Concrete	F	12.00 x 12.00		sampled at right of front entry door		8,640 ug/ft2
42	W	Kitchen	Window Sill	Wood	F	4.00 x 23.00	P	sampled at west window. window painted shut. paint chips and dirt loaded in well	891 >	892 ug/ft2
44	W	Living Room	Window Well	Wood	F	3.50 x 12.00		sampled at north side of east window	46638	46,663 ug/ft2
49	S	Ext. Found.				0.00 x 0.00		sampled near building foundation around south half of building		1,384 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
41	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00		sampled at rear entry		33 ug/ft2
43	W	Living Room	Floor	Wood	G	12.00 x 12.00		sampled at entry to south living room	< 75	14 ug/ft2
45	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00		sampled at radiator	< 75	20 ug/ft2
46	W	Bedroom 1	Window Well	Vinyl	G	3.50 x 29.00		sampled at south window		123 ug/ft2
47	W	Bedroom 2	Floor	Wood	F	12.00 x 12.00		sampled at entry	< 75	13 ug/ft2
48	W	Bedroom 2	Window Well	Vinyl	G	3.50 x 29.00		sampled at south window		183 ug/ft2
50	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of building (south half)		188 ppm

Codes	Sample Types:	Room:	Surface:	Condition:
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair
	P = Paint			P = Poor

Lead Content Thresholds
 Window Wells = 800 ug/ft2 Soil = 500 parts per million
 Window Sills = 500 ug/ft2 Paint = 5,000 parts per million
 Floors = 200 ug/ft2

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 277S

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132J

DATE: June 10, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
53	W	Kitchen	Window Well	Wood	P	4.00 x 23.00	P	sampled at west window. Original wooden casement window. paint chips and dust noted		19,745 ug/ft2
60	S	Ext. Found.				0.00 x 0.00		sampled around unit foundation. very few chips. some paint chips were noted around porches and basement windows		526 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
51	W	Entry Foyer	Floor	Vinyl	G	12.00 x 12.00	G	sampled at front entry	285?	19 ug/ft2
52	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry	285?	3 ug/ft2
54	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled at entry to dining room	285?	9 ug/ft2
55	W	Living Room	Window Well	Vinyl	G	3.50 x 34.00	G	sampled at middle window, east wall		434 ug/ft2
56	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at entry(hall) room carpeted	285?	3 ug/ft2
57	W	Bedroom 1	Window Sill	Wood	G	3.50 x 29.00	G	sampled at south window above radiator		70 ug/ft2
58	W	Bedroom 3	Floor	Wood	G	12.00 x 12.00	G	sampled at entry, room carpeted	285?	4 ug/ft2
59	W	Bedroom 3	Window Well	Vinyl	G	3.50 x 29.00	G	sampled at west window(only) very clean	285?	28 ug/ft2
61	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of unit. ground cover was excellent		239 ppm

Codes	Sample Types:	Room:	Surface:	Condition:	Lead Content Thresholds Window Wells = 800 ug/ft2 Soil = 500 parts per million Window Sills = 500 ug/ft2 Paint = 5,000 parts per million Floors = 200 ug/ft2
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good	
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair	
	P = Paint			P = Poor	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 277N

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132I

DATE: June 9, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
62	W	Entry Foyer	Floor	Vinyl	F	12.00 x 12.00	G	sampled at front entry		222 ug/ft2
64	W	Kitchen	Window Well	Wood	P	4.00 x 23.00	P	sampled at west window. original wood window. paint chips and dust/dirt noted	87,261	87,261 ug/ft2
71	S	Ext. Found.				0.00 x 0.00		sampled around perimeter of unit foundation		685 ppm
73	S	Ext. Found.				0.00 x 0.00		sampled around garage #287 foundation		686 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
63	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		57 ug/ft2
65	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled at entry to dining room		33 ug/ft2
66	W	Living Room	Window Well	Vinyl	G	3.50 x 35.00		sampled at east window. dirt, but no paint chips noted		516 ug/ft2
67	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at entry	85	15 ug/ft2
68	W	Bedroom 1	Window Sill	Wood	G	3.00 x 33.50	G	sampled at window (only)	86	32 ug/ft2
69	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at entry		32 ug/ft2
70	W	Bedroom 2	Window Well	Vinyl	G	3.50 x 28.00		sampled at west window	413	413 ug/ft2
72	S	Ext. Yard				0.00 x 0.00		sampled around building perimeter		399 ppm
74	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of garage #287		356 ppm
75	W	BLANK				0.00 x 0.00		QA/QC spike sample number 159		331 ug/ft2

Codes	Sample Types: W = Wipe S = Soil P = Paint	Room: Ext. = Exterior Found. = Foundation	Surface: Playgrd. = Playground Equip. = Equipment	Condition: G = Good F = Fair P = Poor	Lead Content Thresholds Window Wells = 800 ug/ft2 Window Sills = 500 ug/ft2 Floors = 200 ug/ft2	Soil = 500 parts per million Paint = 5,000 parts per million
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Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 276S

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132H

DATE: June 9, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
78	W	Kitchen	Window Well	Wood	P	3.50 x 23.00	P	sampled at west window. original wooden window. paint chips and dust/dirt noted		137,694 ug/ft2
83	W	Bedroom 3	Floor	Wood	G	12.00 x 12.00	G	sampled at radiator		417 ug/ft2

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
76	W	BLANK				0.00 x 0.00		field blank		5 ug/ft2
77	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		3 ug/ft2
79	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled at entry to dining room		1 ug/ft2
80	W	Living Room	Window Well	Vinyl	G	3.50 x 36.00	G	sampled at middle window east wall		195 ug/ft2
81	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at entry		3 ug/ft2
82	W	Bedroom 2	Window Sill	Wood	F	3.00 x 33.50	G	sampled from west window		1 ug/ft2
84	W	Bedroom 3	Window Well	Vinyl	G	3.50 x 30.00		sampled at east window		524 ug/ft2
85	S	Ext. Found.				0.00 x 0.00		sampled around building foundation. paint chips noted in areas around porches, drainpipes, and windows.		493 ppm
86	S	Ext. Yard				0.00 x 0.00		sampled around building parimeter		194 ppm
87	W	Entry Foyer	Floor	Concrete	F	12.00 x 12.00	G	sampled at front entry		125 ug/ft2
88	S	Ext. Found.				0.00 x 0.00		sampled around garage #286 foundation. paint chips from door and window noted in soil and on pavement		454 ppm
89	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of garage #286		133 ppm

Codes	Sample Types: W = Wipe S = Soil P = Paint	Room: Ext. = Exterior Found. = Foundation	Surface: Playgrd. = Playground Equip. = Equipment	Condition: G = Good F = Fair P = Poor
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Lead Content Thresholds	
Window Wells = 800 ug/ft2	Soil = 500 parts per million
Window Sills = 500 ug/ft2	Paint = 5,000 parts per million
Floors = 200 ug/ft2	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 276N

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132G

DATE: June 8, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
94	W	Living Room	Window Well	Vinyl	G	3.50 x 13.00		sampled at east window, south end		1,155 ug/ft2
101	W	Entry Foyer	Floor	Vinyl	G	12.00 x 12.00		sampled at front entry		485 ug/ft2

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
90	W	BLANK				0.00 x 0.00		field blank		5 ug/ft2
91	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00		sampled at rear entry		14 ug/ft2
92	W	Kitchen	Window Sill	Wood	F	3.50 x 24.00		sampled at west window. original wooden casement type. paint chips and dirt accumulated in well		29 ug/ft2
93	W	Living Room	Floor	Wood	G	12.00 x 12.00		sampled under east window, south of radiator		10 ug/ft2
95	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00		sampled at entry		1 ug/ft2
96	W	Bedroom 1	Window Well	Vinyl	G	3.50 x 29.00		sampled at west window. a few paint chips noted in well.		35 ug/ft2
97	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00		sampled at north window		18 ug/ft2
98	W	Bedroom 2	Window Well	Vinyl	G	3.50 x 29.00		sampled at north window		119 ug/ft2
99	S	Ext. Found.				0.00 x 0.00		sampled around perimeter of unit foundation. paint chips noted from porches and trim.		destroyed
100	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of building		146 ppm

Codes	Sample Types: W = Wipe S = Soil P = Paint	Room: Ext. = Exterior Found. = Foundation	Surface: Playgrd. = Playground Equip. = Equipment	Condition: G = Good F = Fair P = Poor
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Lead Content Thresholds	
Window Wells = 800 ug/ft2	Soil = 500 parts per million
Window Sills = 500 ug/ft2	Paint = 5,000 parts per million
Floors = 200 ug/ft2	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 177S

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132E

DATE: June 8, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
111.1	S	Ext. Found.				0.00 x 0.00		sampled around perimeter of unit. fair cover. paint chips around doors, windows, and front and rear porches.		709 ppm
111.2	S	Ext. Found.				0.00 x 0.00		sampled around garage #197		640 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
102	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		5 ug/ft2
103	W	Kitchen	Window Sill	Wood	G	6.00 x 28.00	G	sampled at the west window, north side		15 ug/ft2
104	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled at stairs		1 ug/ft2
105	W	Living Room	Window Well	Vinyl	G	3.50 x 36.00	G	sampled at east window		299 ug/ft2
106	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at entry		5 ug/ft2
107	W	Bedroom 1	Window Well	Vinyl	G	3.50 x 30.00	G	sampled in east window. paint chips noted in well (few)		314 ug/ft2
108	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at south window		21 ug/ft2
109	W	Bedroom 2	Window Well	Vinyl	G	3.50 x 30.00		sampled at south window		78 ug/ft2
110	W					0.00 x 0.00		not submitted to lab		
112	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of unit. good cover		115 ppm

Codes	Sample Types:	Room:	Surface:	Condition:
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair
	P = Paint			P = Poor

Lead Content Thresholds	
Window Wells = 800 ug/ft2	Soil = 500 parts per million
Window Sills = 500 ug/ft2	Paint = 5,000 parts per million
Floors = 200 ug/ft2	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 177N

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132D

DATE: June 7, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
115	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		255 ug/ft2
123	S	Ext. Found.				0.00 x 0.00		sampled around perimeter of unit foundation. cover fair to poor		897 ppm

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
113	W	BLANK				0.00 x 0.00		field blank		7 ug/ft2
114	W	Entry Foyer	Floor	Wood	G	12.00 x 12.00	G	sampled at front entry		51 ug/ft2
116	W	Kitchen	Window Well	Vinyl	G	3.50 x 24.00	G	sampled at west window north side		24 ug/ft2
117	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled at northeast window		35 ug/ft2
118	W	Living Room	Window Well	Vinyl	G	3.50 x 36.00	G	sampled at north wall east end		430 ug/ft2
119	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at entry		11 ug/ft2
120	W	Bedroom 1	Window Well	Vinyl	G	3.50 x 31.00	G	sampled at west window north side		137 ug/ft2
121	W	Bedroom 2	Window Sill	Vinyl	G	3.00 x 33.00	G	sampled at north window		99 ug/ft2
122	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at radiator on north side		46 ug/ft2
124	S	Ext. Yard				0.00 x 0.00		sampled around perimeter of unit. cover good.		172 ppm

Codes	Sample Types:	Room:	Surface:	Condition:	Lead Content Thresholds Window Wells = 800 ug/ft2 Soil = 500 parts per million Window Sills = 500 ug/ft2 Paint = 5,000 parts per million Floors = 200 ug/ft2
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good	
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair	
	P = Paint			P = Poor	

Pedricktown Army Reserve Base

RISK ASSESSMENT

BUILDING NUMBER : 179

ASSESSOR : Eric Whiston

UNIT ADDRESS: Quarters 132C

DATE: June 6, 1994

CONTROL NUMBER: 694033

SAMPLES TESTING ABOVE PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
126	W	Kitchen	Floor	Vinyl	G	12.00 x 12.00	G	sampled at rear entry		1,072 ug/ft2
129	W	Living Room	Window Well	Vinyl	G	3.50 x 27.00	G	sampled at north window		1,391 ug/ft2
134	S	Ext. Found.				0.00 x 0.00		sampled around the perimeter of the unit foundation		672 ppm
136	W	Entry Foyer	Floor	Wood	G	12.00 x 12.00	G	sampled at unit entry		381 ug/ft2

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
125	W	BLANK				0.00 x 0.00		field blank		7 ug/ft2
127	W	Kitchen	Window Well	Vinyl	G	3.50 x 32.00	G	sampled at west window north of door		400 ug/ft2
128	W	Living Room	Floor	Wood	G	12.00 x 12.00	G	sampled under south window		47 ug/ft2
130	W	Bedroom 1	Floor	Wood	G	12.00 x 12.00	G	sampled at radiator on north wall		10 ug/ft2
131	W	Bedroom 1	Window Sill	Wood	F	3.00 x 31.00	G	sampled at north window		70 ug/ft2
132	W	Bedroom 2	Floor	Wood	G	12.00 x 12.00	G	sampled at entry		13 ug/ft2
133	W	Bedroom 2	Window Well	Vinyl	G	3.50 x 27.00	G	sampled at north window		194 ug/ft2
135	S	Ext. Yard				0.00 x 0.00		sampled around the perimeter of the unit		193 ppm
137	S	Ext. Found.				0.00 x 0.00		sampled around the foundation of the garage #188		323 ppm
138	S	Ext. Yard				0.00 x 0.00		sampled around the perimeter of the garage #188		173 ppm

Codes	Sample Types:	Room:	Surface:	Condition:	Lead Content Thresholds Window Wells = 800 ug/ft2 Soil = 500 parts per million Window Sills = 500 ug/ft2 Paint = 5,000 parts per million Floors = 200 ug/ft2
	W = Wipe	Ext. = Exterior	Playgrd. = Playground	G = Good	
	S = Soil	Found. = Foundation	Equip. = Equipment	F = Fair	
	P = Paint			P = Poor	

Pedricktown Army Reserve Base

RISK ASSESSMENT

ASSESSOR : Eric Whiston

BUILDING NUMBER :

DATE: June 6, 1994

UNIT ADDRESS: Playground Area

CONTROL NUMBER: 694033

SAMPLES TESTING BELOW PERMISSIBLE THRESHOLDS

Sample No.	Type	Room	Surface	Substrate	Subst. Cond.	Wipe Dimensions	HK	Sample Comments	Unit Comments	Results
139	S	Playground				0.00 x 0.00		collected at and around play ground equipment in areas of exposed dirt		247 ppm
140	S	Playground				0.00 x 0.00		collected at and around play ground equipment in areas of exposed dirt		365 ppm

Codes	Sample Types: W = Wipe S = Soil P = Paint	Room: Ext. = Exterior Found. = Foundation	Surface: Playgrd. = Playground Equip. = Equipment	Condition: G = Good F = Fair P = Poor
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Lead Content Thresholds	
Window Wells = 800 ug/ft2	Soil = 500 parts per million
Window Sills = 500 ug/ft2	Paint = 5,000 parts per million
Floors = 200 ug/ft2	

APPENDIX B

LABORATORY TEST RESULTS



LEAD ANALYSIS REPORT

Housing Environmental Services, Inc.

Page 1

Azimuth, Inc.

REPORT

Work Order # 94-06-243

Received: 06/20/94

06/27/94 17:27:13

REPORT Housing Environmental Svc Inc
TO 130 Bishop Allen Drive
Cambridge, MA 02139

PREPARED Azimuth, Inc.
BY 9229 University Blvd.
Charleston, SC 29406

Matthelma Stephens
APPROVED BY

ATTEN Matt Mahoney

ATTEN Laboratory Services

PHONE _____

CONTACT PAIGE

CLIENT HES SAMPLES 56
COMPANY Housing Environmental Svc Inc
FACILITY _____

Director of Laboratories
Richard D. Bennett, MSPH CIH *RDB*

WORK ID HES Control # 694033
TAKEN _____
TRANS UPS
TYPE IH
P.O. # _____
INVOICE Attached

AIHA Lab No. 367 NY State ELAP Lab No. 11052
SC DHEC Lab No. 10121 Env. Lead ELLAP Lab No. 29250-001
NVLAP Lab No. 1050 CDC/OSHA Blood Lead Lab No. 04-094

SAMPLE IDENTIFICATION

- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 08 8
- 09 9
- 10 10
- 11 13
- 12 14
- 13 15
- 14 16
- 15 17
- 16 18
- 17 19
- 18 20
- 19 21
- 20 26
- 21 27
- 22 28
- 23 29
- 24 30
- 25 31
- 26 32

TEST CODES and NAMES used on this workorder

HUDPBW HUD Lead Wipe



LEAD ANALYSIS REPORT

Housing
Environmental
Services, Inc.

Page 2
Received: 06/20/94

Azimuth, Inc. REPORT
06/27/94 17:27:13

Work Order # 94-06-243

SAMPLE IDENTIFICATION

27	33
28	34
29	35
30	40
31	41
32	42
33	43
34	44
35	45
36	46
37	47
38	48
39	51
40	52
41	53
42	54
43	55
44	56
45	57
46	58
47	59
48	62
49	63
50	64
51	65
52	66
53	67
54	68
55	69
56	70

Order #: 9406243
 HES Control #: 694033

Laboratory Results

HUD Lead Wipe

Analytical Method: Flame Atomic Absorption Spectrometry
 by modified NIOSH 7082.

Sample Description	Amount (ug)	Area (ft2)	Result (ug/ft2)
6243-1	<25	1.000	<25
6243-2	3587	1.000	3587 ✓
6243-3	262	0.563	465 ✓
6243-4	2514	0.500	5028 ✓
6243-5	1142	1.000	1142 ✓
6243-6	90350	0.583	154895 ✓
6243-7	787	1.000	787 ✓
6243-8	213250	0.361	590557 ✓
6243-9	435	1.000	435 ✓
6243-10	272250	0.361	753946 ✓
6243-13	12060	1.000	12060 ✓
6243-14	618	1.000	618 ✓
6243-15	726	1.406	516 ✓
6243-16	1873	1.000	1873 ✓
6243-17	25250	0.500	50500 ✓
6243-18	12475	1.000	12475 ✓
6243-19	1278	0.472	2708 ✓
6243-20	1764	1.000	1764 ✓
6243-21	68350	0.500	136700 ✓
6243-26	<25	1.000	<25 ✓
6243-27	75	1.000	75 ✓
6243-28	29125	0.639	45586 ✓
6243-29	1621	1.000	1621 ✓
6243-30	27	1.000	27 ✓
6243-31	1032	0.813	1270 ✓
6243-32	<25	1.000	<25 ✓
6243-33	33	0.705	46 ✓
6243-34	111	1.000	111 ✓
6243-35	<25	0.705	<35 ✓
6243-40	8640	1.000	8640 ✓
6243-41	33	1.000	33 ✓
6243-42	570	0.639	891 ✓
6243-43	<25	1.000	<25 ✓
6243-44	13610	0.292	46658 ✓
6243-45	<25	1.000	<25 ✓
6243-46	87	0.705	123 ✓
6243-47	<25	1.000	<25 ✓
6243-48	129	0.705	183 ✓
6243-51	<25	1.000	<25 ✓
6243-52	<25	1.000	<25 ✓
6243-53	12615	0.639	19745 ✓
6243-54	<25	1.000	<25 ✓
6243-55	359	0.826	434 ✓
6243-56	<25	1.000	<25 ✓

27-Jun-94

AZIMUTH LABORATORIES

PAGE 2

6243-57	49	0.705	70	✓
6243-58	<25	1.000	<25	✓
6243-59	<25	0.705	<35	✓
6243-62	222	1.000	222	✓
6243-63	57	1.000	57	✓
6243-64	55750	0.639	87259	✓
6243-65	33	1.000	33	✓
6243-66	439	0.851	516	✓
6243-67	<25	1.000	<25	✓
6243-68	<25	0.698	<36	✓
6243-69	32	1.000	32	✓
6243-70	281	0.681	412	✓



LEAD ANALYSIS REPORT

Housing Environmental Services, Inc.

Page 1 Azimuth, Inc. REPORT Work Order # 94-06-244
Received: 06/20/94 06/28/94 17:07:02

REPORT Housing Environmental Svc Inc
TO 130 Bishop Allen Drive
Cambridge, MA 02139

PREPARED Azimuth, Inc.
BY 9229 University Blvd.
Charleston, SC 29406

Matthew Stephens
APPROVED BY

ATTEN Matt Mahoney

ATTEN Laboratory Services

PHONE _____

CONTACT PAIGE

CLIENT HES SAMPLES 56
COMPANY Housing Environmental Svc Inc
FACILITY _____

Director of Laboratories
Richard D. Bennett, MSPH CIH RDB

WORK ID HES Control #694033
TAKEN _____
TRANS UPS
TYPE IH
P.O. # _____
INVOICE Attached

AIHA Lab No. 367 NY State ELAP Lab No. 11052
SC DHEC Lab No. 10121 Env. Lead ELLAP Lab No. 29250-001
NVLAP Lab No. 1050 CDC/OSHA Blood Lead Lab No. 04-094

SAMPLE IDENTIFICATION

- 01 75
- 02 76
- 03 77
- 04 78
- 05 79
- 06 80
- 07 81
- 08 82
- 09 83
- 10 84
- 11 87
- 12 90
- 13 91
- 14 92
- 15 93
- 16 94
- 17 95
- 18 96
- 19 97
- 20 98
- 21 101
- 22 102
- 23 103
- 24 104
- 25 105
- 26 106

TEST CODES and NAMES used on this workorder

HUDPBW HUD Lead Wipe



LEAD ANALYSIS REPORT

Housing
Environmental
Services, Inc.

Page 2
Received: 06/20/94

Azimuth, Inc. REPORT
06/28/94 17:07:02

Work Order # 94-06-244

SAMPLE IDENTIFICATION

27	107
28	108
29	109
30	113
31	114
32	115
33	116
34	117
35	118
36	119
37	120
38	121
39	122
40	125
41	126
42	127
43	128
44	129
45	130
46	131
47	132
48	133
49	136
50	141
51	142
52	143
53	144
54	145
55	146
56	147

ORDER #: 9406244

HES CONTROL #: 694033

Laboratory Results

HUD Lead Wipe

Analytical Method: Flame Atomic Absorption Spectrometry
by modified NIOSH 7082.

Sample Description	Amount (ug)	Area (ft2)	Result (ug/ft2)
6244-75	331	1	331
6244-76	<25	1	<25
6244-77	<25	1	<25
6244-78	76975	0.559	137701
6244-79	<25	1	<25
6244-80	171	0.875	195
6244-81	<25	1	<25
6244-82	<25	0.698	<36
6244-83	417	1	417
6244-84	382	0.729	524
6244-87	125	1	125
6244-90	<25	1	<25
6244-91	<25	1	<25
6244-92	<25	0.583	<43
6244-93	<25	1	<25
6244-94	365	0.316	1153
6244-95	<25	1	<25
6244-96	25	0.705	35
6244-97	<25	1	<25
6244-98	84	0.705	118
6244-101	485	1	485
6244-102	<25	1	<25
6244-103	<25	1.17	<21
6244-104	<25	1	<25
6244-105	262	0.875	299
6244-106	<25	1	<25
6244-107	229	0.729	314
6244-108	<25	1	<25
6244-109	57	0.729	78
6244-113	<25	1	<25
6244-114	51	1	51
6244-115	255	1	255
6244-116	<25	0.583	<43
6244-117	35	1	35
6244-118	376	0.875	429
6244-119	<25	1	<25
6244-120	103	0.753	136
6244-121	68	0.688	99
6244-122	46	1	46
6244-125	<25	1	<25
6244-126	1072	1	1072
6244-127	311	0.778	399
6244-128	47	1	47

27-Jun-94

AZIMUTH LABORATORIES

PAGE 2

ORDER #: 9406244

HES CONTROL #: 694033

Laboratory Results

HUD Lead Wipe

Analytical Method: Flame Atomic Absorption Spectrometry
by modified NIOSH 7082.

Sample Description	Amount (ug)	Area (ft2)	Result (ug/ft2)
6244-129	913	0.656	1391
6244-130	<25	1	<25
6244-131	45	0.646	69
6244-132	<25	1	<25
6244-133	127	0.656	193
6244-136	381	1	381
6244-141	<25	1	<25
6244-142	<25	1.09	<23
6244-143	108	1	108
6244-144	<25	0.938	<27
6244-145	1338	0.938	1426
6244-146	147	1	147
6244-147	<25	1	<25



LEAD ANALYSIS REPORT

Housing Environmental Services, Inc.

Page 1
Received: 06/20/94

Azimuth, Inc. REPORT
06/28/94 09:58:55

Work Order # 94-06-242

REPORT Housing Environmental Svc Inc
TO 130 Bishop Allen Drive
Cambridge, MA 02139

PREPARED Azimuth, Inc.
BY 9229 University Blvd.
Charleston, SC 29406

Mathew Stephens
APPROVED BY

ATTEN Matt Mahoney

ATTEN Laboratory Services

PHONE _____

CONTACT PAIGE

CLIENT HES SAMPLES 41
COMPANY Housing Environmental Svc Inc
FACILITY _____

Director of Laboratories *KCB*
Richard D. Bennett, MSPH CIH

WORK ID HES Control #694033

AIHA Lab No. 367 NY State ELAP Lab No. 11052

TAKEN _____

SC DHEC Lab No. 10121 Env. Lead ELLAP Lab No. 29250-001

TRANS UPS

NVLAP Lab No. 1050 CDC/OSHA Blood Lead Lab No. 04-094

TYPE IH

P.O. # _____

INVOICE Attached

SAMPLE IDENTIFICATION

- 01 148
- 02 149
- 03 150
- 04 151
- 05 11
- 06 12
- 07 22
- 08 23
- 09 24
- 10 25
- 11 36
- 12 37
- 13 38
- 14 39
- 15 49
- 16 50
- 17 60
- 18 61
- 19 71
- 20 72
- 21 73
- 22 74
- 23 85
- 24 86
- 25 88
- 26 89

TEST CODES and NAMES used on this workorder

- HUDPBS HUD Lead In Soil
- HUDPBW HUD Lead Wipe



LEAD ANALYSIS REPORT

Housing
Environmental
Services, Inc.

Page 2
Received: 06/20/94

Azimuth, Inc. REPORT
06/28/94 09:58:55

Work Order # 94-06-242

SAMPLE IDENTIFICATION

27	100
28	111
29	111B
30	112
31	123
32	124
33	134
34	135
35	137
36	138
37	139
38	140
39	152
40	153
41	154

Order #: 9406242
HES Control #: 694033

TEST RESULTS BY TEST

HUD Lead in Soil

Analytical Method: Flame Atomic Absorption Spectrometry
by modified NIOSH 7082.

Sample Description	Result	Units
6242-11	2.3073	% By Weight
6242-12	0.0521	% By Weight
6242-22	1.1522	% By Weight
6242-23	0.0608	% By Weight
6242-24	0.1873	% By Weight
6242-25	0.0252	% By Weight
6242-36	0.0459	% By Weight
6242-37	0.0228	% By Weight
6242-38	0.0489	% By Weight
6242-39	0.0256	% By Weight
6242-49	0.1384	% By Weight
6242-50	0.0188	% By Weight
6242-60	0.0526	% By Weight
6242-61	0.0239	% By Weight
6242-71	0.0685	% By Weight
6242-72	0.0399	% By Weight
6242-73	0.0686	% By Weight
6242-74	0.0356	% By Weight
6242-85	0.0493	% By Weight
6242-86	0.0194	% By Weight
6242-88	0.0454	% By Weight
6242-89	0.0133	% By Weight
6242-100	0.0146	% By Weight
6242-111	0.0709	% By Weight
6242-111B	0.0640	% By Weight
6242-112	0.0115	% By Weight
6242-123	0.0897	% By Weight
6242-124	0.0172	% By Weight
6242-134	0.0672	% By Weight
6242-135	0.0193	% By Weight
6242-137	0.0323	% By Weight
6242-138	0.0173	% By Weight
6242-139	0.0247	% By Weight
6242-140	0.0365	% By Weight
6242-152	0.2640	% By Weight
6242-153	0.0491	% By Weight
6242-154	0.0354	% By Weight

SAMPLES FD-15 AND 132 G-10 WERE NOT RECEIVED.

TWO SAMPLES WERE RECEIVED LABELED 132E-10. THEY WERE RELABELED AS 111 AND 111B.

ORDER #: 9406242
HES CONTROL #: 694033

Laboratory Results

HUD Lead Wipe

Analytical Method: Flame Atomic Absorption Spectrometry
by modified NIOSH 7082.

Sample Description	Amount (ug)	Area (ft2)	Result (ug/ft2)
6242-148	72	1.00	72
6242-149	9178	1.00	9178
6242-150	2795	0.94	2973
6242-151	221	1.00	221