

ENVIRONMENTAL REVIEW REPORT

**Community Development Block Grant – Disaster Recovery
Owner Occupied Rehabilitation and Rebuilding Program**

Applicant # 1486

**21 Danbury Avenue
Westport, Connecticut**

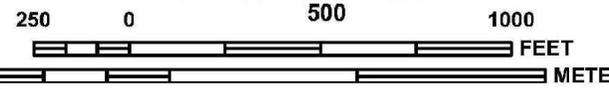
March 26, 2015

Prepared by:

**Diversified Technology Consultants
2321 Whitney Avenue
Hamden, Connecticut 06518**



MAP SCALE 1" = 500'



SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
 The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
 The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.

- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
 - OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
 - 0.2% Annual Chance Floodplain Boundary
 - Floodway boundary
 - Zone D boundary
 - CBRS and OPA boundary

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



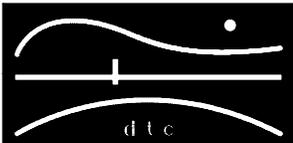
PROPERTY LOCATION

GRAPHIC SCALE E2US2P



(IN FEET)

MAP SOURCE: U.S. FISH AND WILDLIFE SERVICE



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2321 Whitney Avenue - Hamden Center II - Hamden CT 06518
Ph: 203 239 4200 Fax: 203 234 7376

DEPARTMENT OF HOUSING
COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY

21 DANBURY AVENUE
WESTPORT, CT

ATTACHMENT 2
WETLANDS MAP

SCALE: 1"=100'	DRAWN BY: EPZ
DATE: 03/28/2015	CHECKED BY: JAB

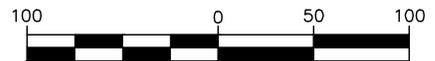
PROJECT NUMBER: 13-449-013	APPLICANT NO: 1486
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

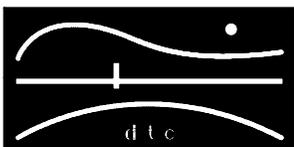
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- GRM_Line
 - Deleted_Wetland
 - Amended_Wetland
 - dot_line
 - Tidal_Wetland
 - Waterbody_Watercourse
 - wet_text_line
 - Wetland
 - 100 Year Flood Zone
 - 500 Year Flood Zone
 - Floodway in Zone AE
 - Basins
 - Spot Elevation
 - Water Spot Elevation
 - buildhook_polylines
 - landhook_polylines
 - original_parcel_polylines
 - Index
 - Index Depression
 - Index Obscured
 - Index Depression Obscured
 - Intermediate
 - Intermediate Depression
 - Intermediate Obscured
 - Intermediate Depression (Obs)
 - Tree
 - Pipe
 - Outfall
 - Catchbasin
 - Manhole
 - Electrical Box
 - Hydrant
 - Light Pole
 - Utility Pole
 - Sign
 - Unknown
 - Billboard
 - Pipeline Above Ground
 - Tower
 - boundary_polyline
 - Unknown Lines
 - Culvert
 - Dam
 - Ditch
 - Rip Rap
 - Elevation Wall
 - Fence
 - Quonset
 - Hedge
 - Retaining Wall
 - Stone Wall
 - Trestle
 - Abandoned Railroad Tracks
 - Railroad Tracks
 - Paved Road Centerline
 - Unpaved Road Centerline
 - Stream
 - Coast Line
 - Easement
 - Utility Right of Way
 - Private Right of Way
 - Proposed Right of Way
 - Public Right of Way
 - Parcel
 - Fuel Tank
 - Water Tank
 - Quarry or Pit
 - Building
 - Building Construction
 - Cement Pad
 - Deck
 - Foundation
 - Greenhouse
 - Mobile Home
 - Ruins
 - Slo
 - Sankstack
 - Substation
 - Single
 - Paved Road
 - Runway
 - Unpaved Road
 - Golf Path
 - Paved Parking
 - Unpaved Parking
 - Paved Driveway
 - Unpaved Driveway
 - Public Sidewalk
 - TreeLine
 - WetArea
 - Sound, Lake, Pond, or River
 - Pool
 - Golf Green
 - Golf Bunker
 - Tennis Court
 - Golf Tee
 - Wharf, Dock, or Pier
 - Park
 - Athletic Field
 - Golf Course
 - index_polygon
 - HYDRIC SOILS
 - NON-HYDRIC SOILS
 - WATER
 - A
 - AA
 - AAA
 - B
 - BCD
 - BPD
 - CPD
 - DDD4
 - GBD
 - GBD/S
 - HDB
 - HDS
 - MHP
 - OSRD
 - PRD
 - RBD
 - RCRD
 - RPOD

GRAPHIC SCALE



(IN FEET)

MAP SOURCE: CT DEEP



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21 DANBURY AVENUE
WESTPORT, CT

ATTACHMENT 3 TOWN WETLANDS MAP

SCALE: 1"=100'

DRAWN BY: EPZ

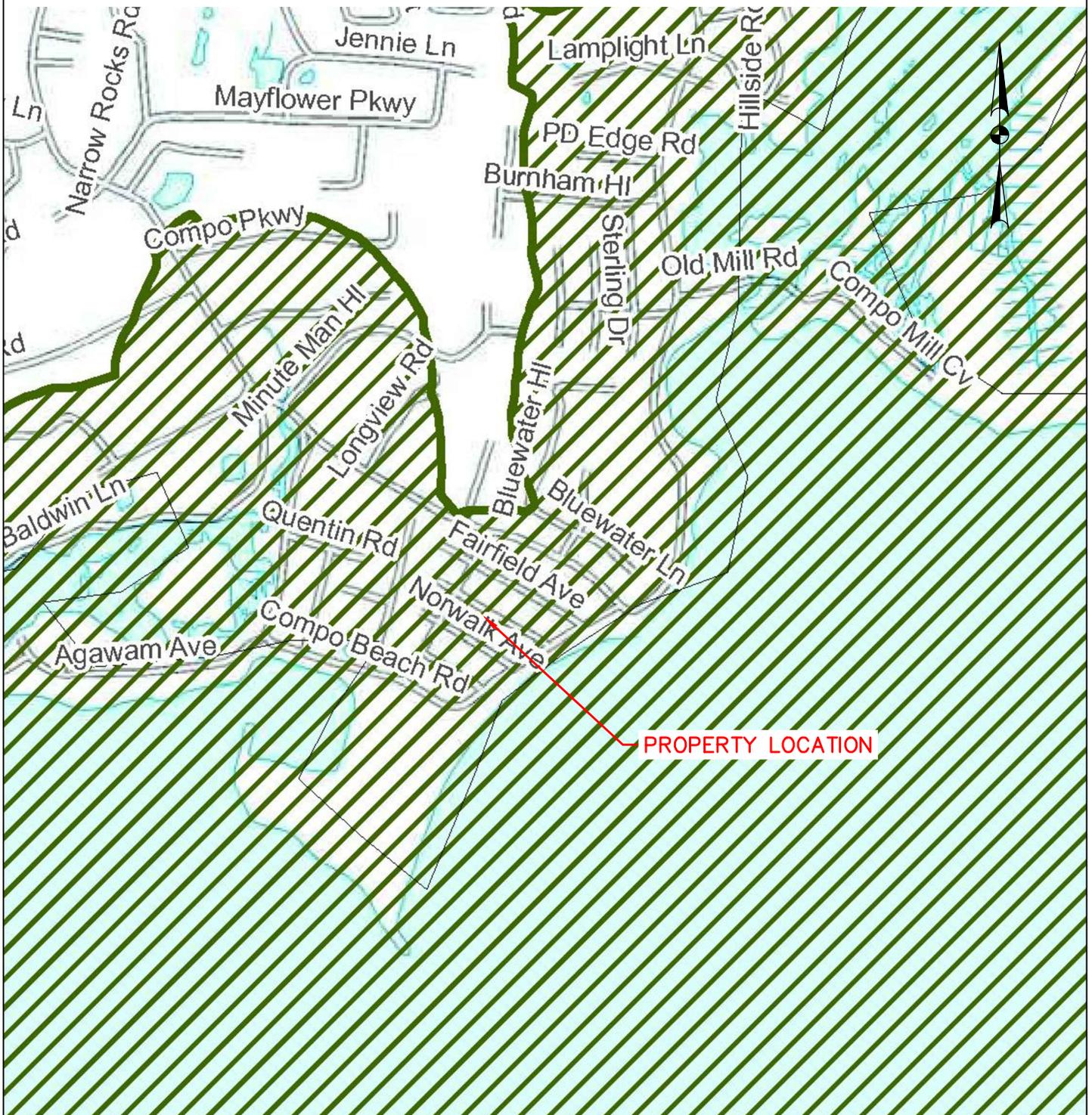
PROJECT NUMBER: 13-449-013

APPLICANT NO:

1486

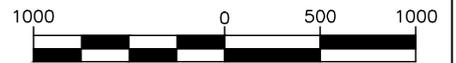
DATE: 03/28/2015

CHECKED BY: JAB

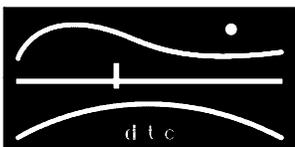


Coastal Boundary

GRAPHIC SCALE



(IN FEET)



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COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY

21 DANBURY AVENUE
WESTPORT, CT

ATTACHMENT 4
CAM AREA MAP

SCALE: 1"=1000'

DRAWN BY: EPZ

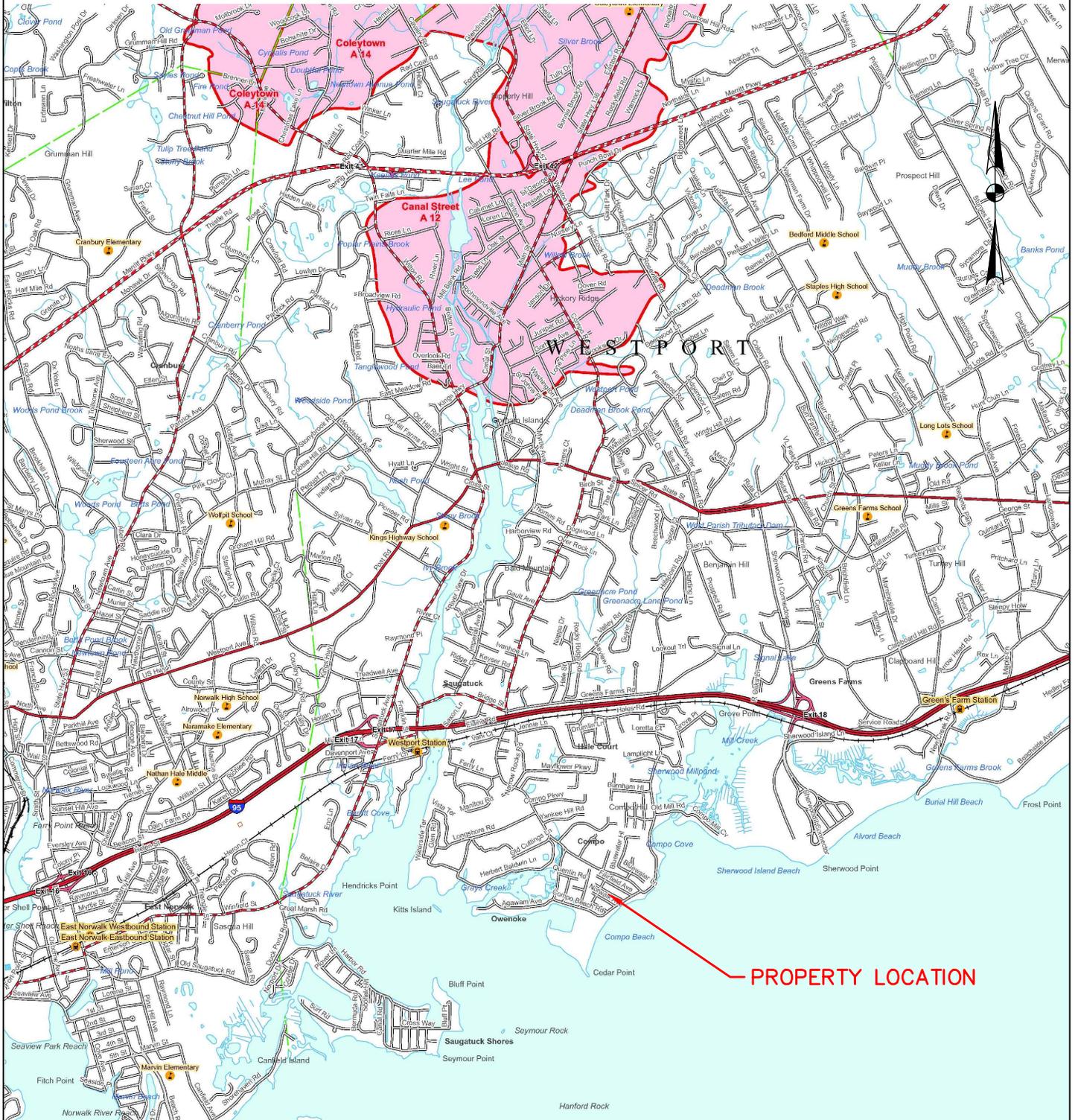
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APPLICANT NO:

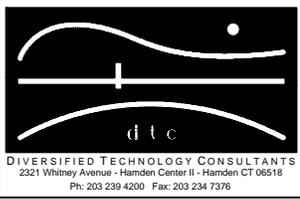
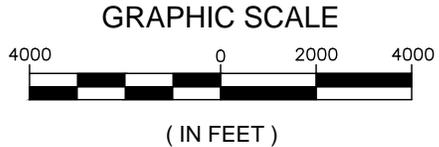
1486

DATE: 03/28/2015

CHECKED BY: JAB



- Level A Aquifer Protection Area (Final Adopted)
- Level A Aquifer Protection Area (Final)
- Level B Aquifer Protection Area (Preliminary)



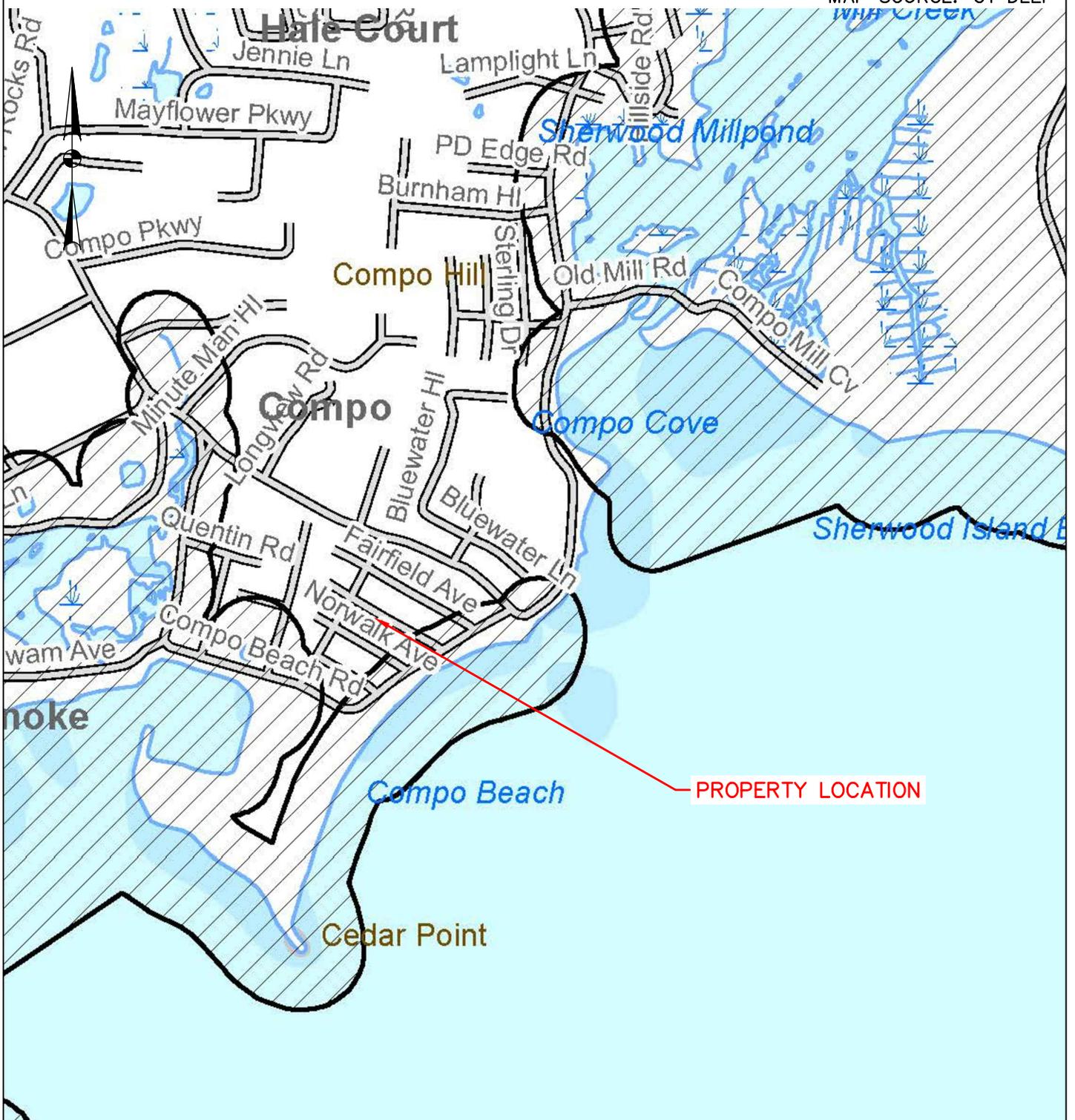
**DEPARTMENT OF HOUSING
COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY**

21 DANBURY AVENUE
WESTPORT, CT

PROJECT NUMBER: 13-449-013	APPLICANT NO: 1486	
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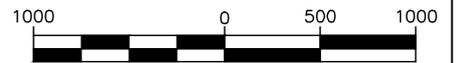
**ATTACHMENT 5
AQUIFER PROTECTION
AREAS**

SCALE: 1"=4000'	DRAWN BY: EPZ
DATE: 03/28/2015	CHECKED BY: JAB

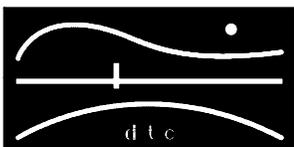


 State and Federal Listed Species and Significant Natural Communities*

GRAPHIC SCALE



(IN FEET)



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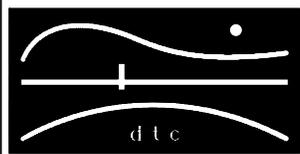
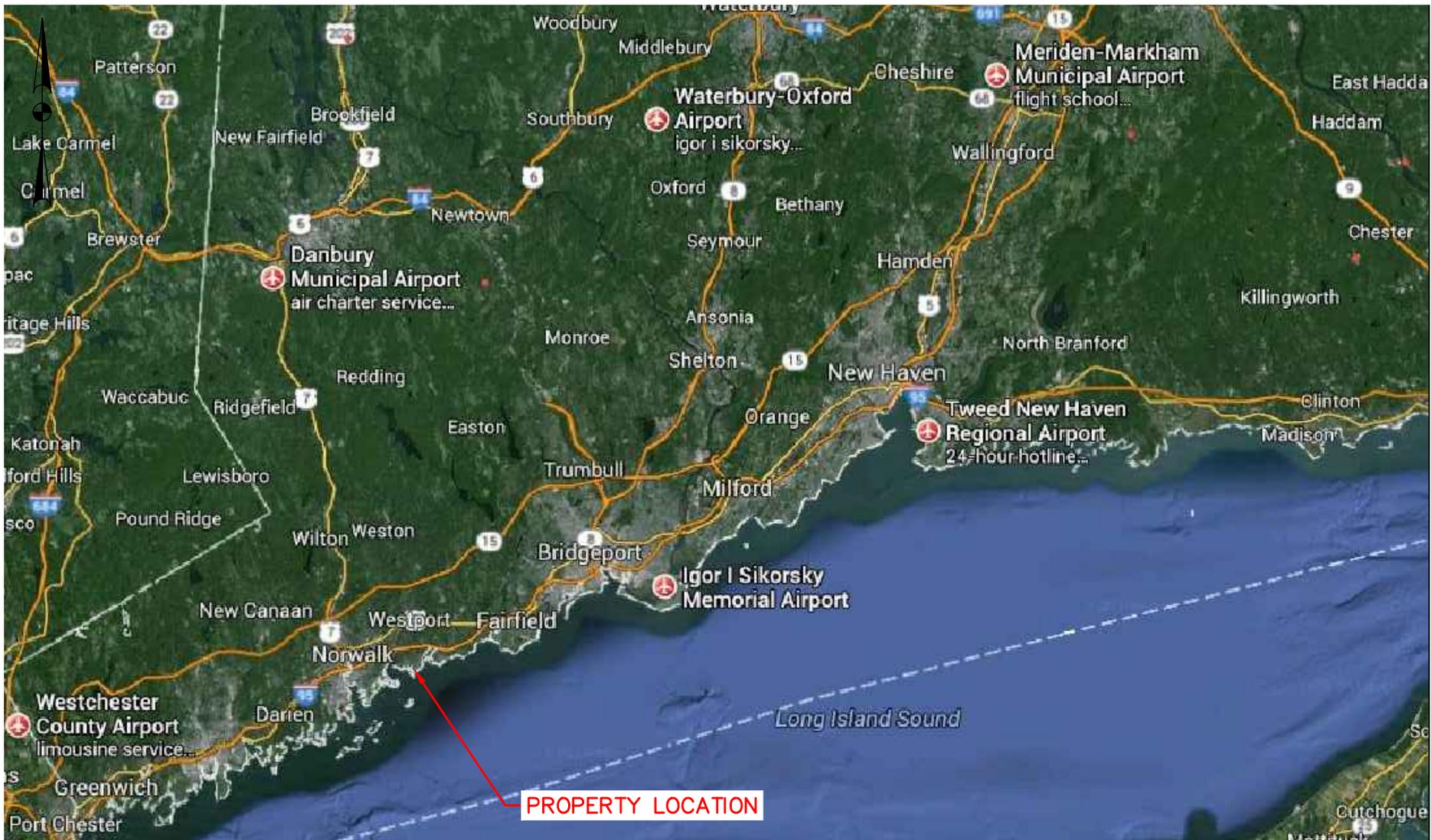
DEPARTMENT OF HOUSING
COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY

21 DANBURY AVENUE
WESTPORT, CT

ATTACHMENT 6
NDDB AREAS

SCALE: 1"=1000'	DRAWN BY: EPZ
DATE: 03/28/2015	CHECKED BY: JAB

PROJECT NUMBER: 13-449-013	APPLICANT NO: 1486
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 COMMUNITY DEVELOPMENT BLOCK GRANT
 DISASTER RECOVERY

21 DANBURY AVENUE
 WESTPORT, CT

ATTACHMENT 7
 AIRPORT VICINITY MAP

PROJECT NUMBER: 13-449-013

APPLICANT NO: 1486

SCALE: NTS

DRAWN BY: EPZ

DATE: 03/28/15

CHECKED BY: JAB



MAP SOURCE: U.S. FISH AND WILDLIFE SERVICE



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DEPARTMENT OF HOUSING
 COMMUNITY DEVELOPMENT BLOCK GRANT
 DISASTER RECOVERY

21 DANBURY AVENUE
 WESTPORT, CT

ATTACHMENT 8
 COASTAL BARRIER MAP

SCALE: NTS

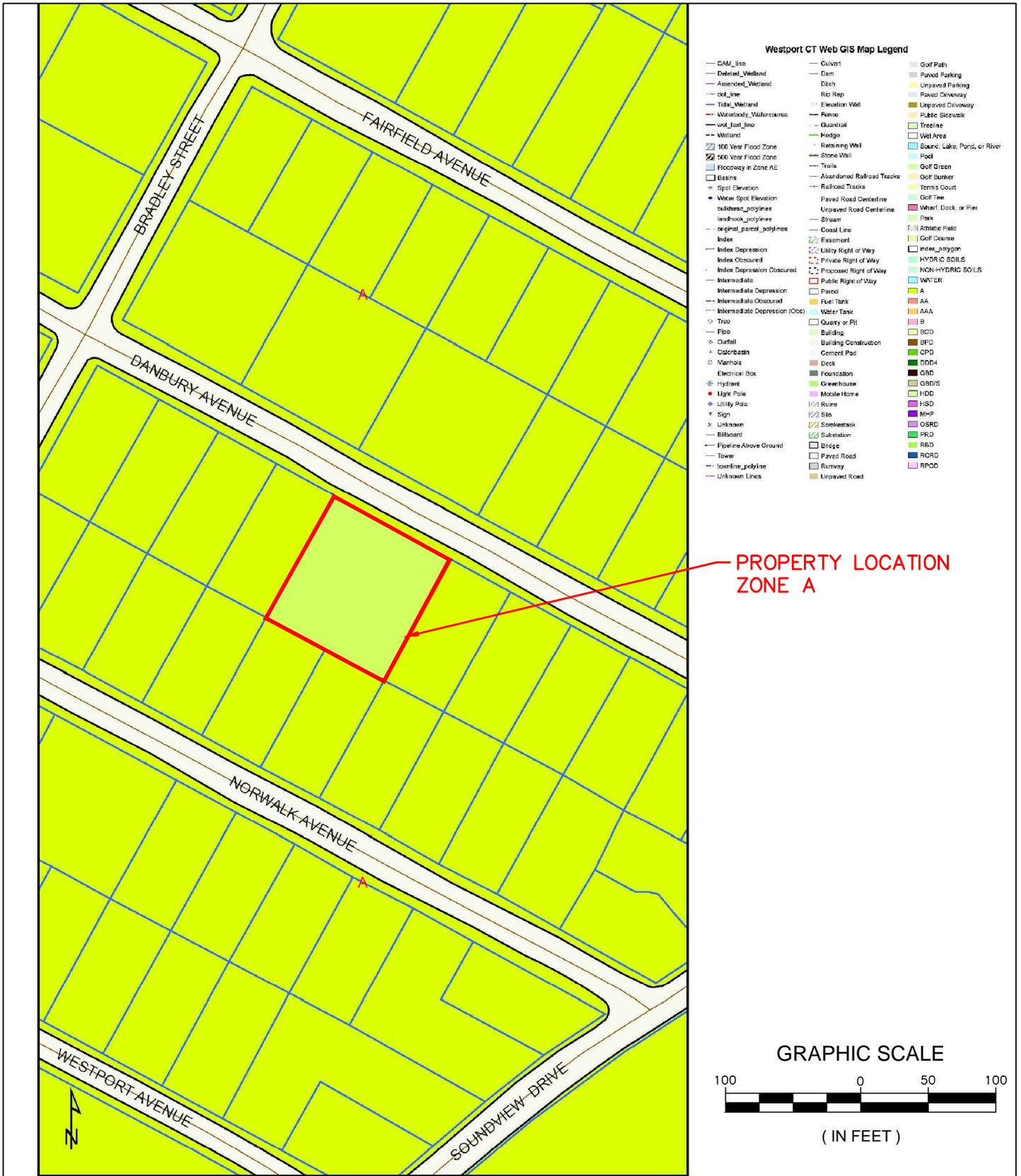
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DATE: 03/28/15

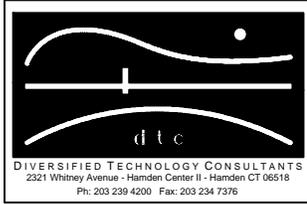
CHECKED BY: JAB

PROJECT NUMBER: 13-449-013

APPLICANT NO: 1486



MAP SOURCE: TOWN OF WESTPORT GIS



DEPARTMENT OF HOUSING
 COMMUNITY DEVELOPMENT BLOCK GRANT
 DISASTER RECOVERY
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NUMBER: 13-449-013 APPLICANT NO: 1486

ATTACHMENT 9
 ZONING MAP

SCALE: 1"=100' DRAWN BY: EPZ
 DATE: 03/28/2015 CHECKED BY: JAB



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 3301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2015-SLI-0355

March 26, 2015

Event Code: 05E1NE00-2015-E-00563

Project Name: Westport 1486

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Westport 1486

Official Species List

Provided by:

New England Ecological Services Field Office

70 COMMERCIAL STREET, SUITE 300

CONCORD, NH 3301

(603) 223-2541

<http://www.fws.gov/newengland>

Consultation Code: 05E1NE00-2015-SLI-0355

Event Code: 05E1NE00-2015-E-00563

Project Type: ** Other **

Project Name: Westport 1486

Project Description: Repair of flood damage to the interior of the home.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Westport 1486

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-73.3510673 41.1078802, -73.3509036 41.1081308, -73.3505684 41.1079934, -73.3507454 41.1077448, -73.3510673 41.1078802)))

Project Counties: Fairfield, CT



United States Department of Interior
Fish and Wildlife Service

Project name: Westport 1486

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Red Knot (<i>Calidris canutus rufa</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Westport 1486

Critical habitats that lie within your project area

There are no critical habitats within your project area.

ChemScope INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610 • www.chem-scope.com

Scott Feulner
Diversified Technology Consultants (DTC)
2321 Whitney Avenue, Suite 301
Hamden, CT 06518

12/30/2014

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
LEAD BASED PAINT PRE-RENOVATION XRF SCREENING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486, CS#187-240, 11/21/2014, Page 1 of 13**

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Recommendations	12-14

Attachments:

Appendix A: XRF Lead-Based Paint Testing Results with quality evaluation sheet, 5 pages
Appendix B: Dust Wipe and Soil Sample Analytical Data and Chain of Custody Document, 7 pages
Appendix C: Sample Location Drawings, 3 pages
Appendix D: Lead Hazardous Waste Evaluation Worksheet, 1 page(s)
Appendix E: Copy of Risk Assessor's License/Certification, 2 pages
Appendix F: Copy of Firm's Lead Activity License/Certification, 3 pages
Appendix G: Copy of XRF Training Certificate and LPA-1 Performance Characteristics Sheet, 5 pages
Appendix H: "LEAD SPEAK" – A Brief Glossary, 2 pages
Appendix I: Additional Lead and Lead Safety Resource Data, 1 page

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Curtis Graham, DTC graham.curtis@teamdtc.com
Michael Casey, DTC michael.casey@teamdtc.com

File Location:

NAS AAUM-Reports\LeadInsp\DS-RiskAssess_June2014.doc

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
LEAD BASED PAINT PRE-RENOVATION XRF SCREENING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486, CS#187-240, 11/21/2014, Page 2 of 14**

INTRODUCTION

EXECUTIVE SUMMARY: As a result of the Lead Hazard Risk Assessment and the limited Lead-Based Paint Testing (Assessment) conducted on 11/21/2014, it was found that lead-based surface coatings (paint) and lead hazards were present on the subject property as of the date of the Assessment. Lead (as defined by OSHA regulations 29 CFR 1926.62) and Lead Based Paint (as defined by EPA/HUD and CT-DPH) was detected on surfaces and/or components within the scope of the inspection. This will require workers disturbing Lead to be properly protected and trained including personal air sampling on the workers. The concentrations determined by the personal samples will determine the level of protection required by OSHA. (Contact us for assistance with the personal samples and further interpretation. General information is contained in the recommendations to follow.) Because lead based paint was detected, a Hazardous Waste Evaluation was done per CT DEEP regulations to determine if the waste products from the renovation are potentially a hazardous waste. The hazardous waste evaluation was done using a modified “knowledge of process” technique. This modified method resulted in the waste containing 500 mg/kg of lead, which is considered **likely to be a lead hazardous waste** since it is > 100 mg/kg (the threshold for this modified method). No lead soil hazards were identified. A lead dust hazard was identified on the Bedroom 1 (CS-15) floor only. See report details for additional information

BUILDING DESCRIPTION: The subject building is a two-story, single family, residential structure totaling approximately 1700 sq ft, which was built in 1930 of wood-frame construction. In addition to the two floors of living space there is a basement with a crawlspace. The house is heated from a boiler located in the west corner of the first floor. The crawlspace is unfinished with a gravel floor and a ceiling insulated with a combination of fiberglass and mineral wool. At the time of our screening, there were no children under the age of six residing at this subject house and the house was not being used as a daycare facility. At the time of our inspection the heat, electricity and water were all in service and the house was occupied.

BACKGROUND: We understand the subject house suffered damage as a result of hurricane Sandy on October 29-30, 2012. We understand the house suffered mainly from water damage in mechanical areas in relation to the storm. We understand the scope of the renovations still to be completed as follows: mitigation to electrical service, water heater, replacement of boiler room walls and insulation, and work in the foyer from the lower entry, and electrical wiring repairs below the first floor.

SCOPE OF OUR WORK: Our work would include the following:

- A Lead Hazard Risk Assessment
- XRF Screening of Lead Based Paint of representative painted surfaces on the 1st floor as directed by our client.
- A hazardous waste evaluation.
- A report of the findings with site drawings.

Lead paint chip and TCLP sampling are not in our scope of work.

This investigation and information provided in this report depends partly on background information provided by the client. This report is intended for the use of the client. The scope of services performed may not be appropriate for other users and any use of this report by third parties is at their sole risk. This report is intended to be used in its entirety. No excerpts may be taken to be representative of this report.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
LEAD BASED PAINT PRE-RENOVATION XRF SCREENING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486, CS#187-240, 11/21/2014, Page 3 of 14**

INTRODUCTION (cont)

QUALIFICATIONS: The Inspection was conducted by Daniel P. Sullivan, CT DPH Certified DPH Lead Inspector/Risk Assessor #002131, Radiation Safety Training, RMD 12/2/94. Dan was assisted by Ziyang Wang and Leigh Honorof. Chem Scope's DPH lead license # is CC000164.

METHOD OF TESTING: Spectrum Analyzer XRF (x-ray fluorescence). Instrument used: RMD LPA-1, Serial # 1647 in Quick Mode. The unit source (Cobalt 57) for unit 1647 was replaced November 2nd, 2012. The XRF detects paint in all layers down to the painted substrate. In other words if lead paint is painted over with new paint, the lead paint is still detected by this procedure. When paint is covered with metal or plastic trim such as siding or by carpet, the lead paint is usually not detectable. This instrument is registered with the State of Connecticut Dept of Energy and Environmental Protection and is Generally Licensed under the NRC. This is one of the two methods, which are approved under the CT Dept of Public Health (DPH) regulations. This is a non-destructive test.

The dust/soil samples were sent for analysis to Eastern Analytical Services (EAS), a laboratory accredited by AIHA Laboratory Accreditation Program, LLC and a CT DPH approved Environmental Laboratory in regards to this test, using Atomic Absorption analysis.

TEST PARAMETERS FOR XRF TESTING USING THIS INSTRUMENT: OSHA 1926.62
Definition: Lead means metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds. XRF readings of 1.0 mg/cm² or higher are lead based paint as defined by USC Title 15 – Chapter 53- Toxic Substance Control and XRF reading with any detectable amount of lead detected are defined as Lead by OSHA standard 1926.62.

XRF CALIBRATION CHECK: Standard Reference Material (SRM) paint film nearest to 1.0 mg/cm² within the National Institute of Standards and Technology (NIST) SRM is used to calibrate the XRF. Calibration Readings are taken at the beginning and end of a job and every four (4) hours during the job with three (3) readings per set. The expiration date of the standard used is 7/1/20.

QUALITY CONTROL PROCEDURES: The XRF is used in accordance with Manufacturer's Performance Characteristics Sheet and instructions. See test data attached for details. Ten (or if <10, then the total number of tests conducted) testing combinations for re-testing from each unit are selected and checked in either 15 second or 60 second readings.

STATEMENT ON ACCURACY: The XRF Calibration checks were acceptable with each of the three (3) readings before, during (if applicable) and after the testing between 0.7 mg/cm² and 1.3 mg/cm². See attached XRF data sheets for documentation of proper calibration check sequence.

REPORT CONVENTIONS: Rooms are sometimes given arbitrary numbers to avoid ambiguity. Please refer to the enclosed schematic drawings of the site. Samples are referenced by the side of the building they are facing, as indicated on the drawings. Side A is the street side (front), Side B is the left side, Side C is the rear and Side D is the right side.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
LEAD BASED PAINT PRE-RENOVATION XRF SCREENING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486, CS#187-240, 11/21/2014, Page 4 of 14**

INTRODUCTION (cont)

ONGOING MONITORING: Ongoing monitoring is necessary in all dwellings in which LBP is known or presumed to be present. At these dwellings, the very real potential exists for LBP hazards to develop. Hazards can develop by means such as, but not limited to: the failure of lead hazard control measures; previously intact LBP becoming deteriorated; dangerous levels of lead-in-dust (dust lead) re-accumulating through friction, impact, and deterioration of paint; or, through the introduction of contaminated exterior dust and soil into the interior of the structure. Ongoing monitoring typically includes two different activities: re-evaluation and annual visual assessments. A re-evaluation is a risk assessment that includes limited soil and dust sampling and a visual evaluation of paint films and any existing lead hazard controls. Re-evaluations are supplemented with visual assessments by the Client, which should be conducted at least once a year, when the Client or its management agent (if the housing is rented in the future) receives complaints from residents about deteriorated paint or other potential lead hazards, when the residence (or if, in the future, the house will have more than one dwelling unit, any unit that turns over or becomes vacant), or when significant damage occurs that could affect the integrity of hazard control treatments (e.g., flooding, vandalism, fire). The visual assessment should cover the dwelling unit (if, in the future, the housing will have more than one dwelling unit, each unit and each common area used by residents), exterior painted surfaces, and ground cover (if control of soil-lead hazards is required or recommended). Visual assessments should confirm that all Paint with known or suspected LBP is not deteriorating, that lead hazard control methods have not failed, and that structural problems do not threaten the integrity of any remaining known, presumed or suspected LBP.

The visual assessments do not replace the need for professional re-evaluations by a certified risk assessor. The re-evaluation should include:

1. A review of prior reports to determine where lead-based paint and lead-based paint hazards have been found, what controls were done, and when these findings and controls happened;
2. A visual assessment to identify deteriorated paint, failures of previous hazard controls, visible dust and debris, and bare soil;
3. Environmental testing for lead in dust, newly deteriorated paint, and newly bare soil; and
4. A report describing the findings of the reevaluation, including the location of any lead-based paint hazards, the location of any failures of previous hazard controls, and, as needed, acceptable options for the control of hazards, the repair of previous controls, and modification of monitoring and maintenance practices.

The first reevaluation should be conducted no later than two years after completion of hazard controls, or, if specific controls or treatments are not conducted, two years from the beginning of ongoing lead-based paint monitoring and maintenance activities. Subsequent reevaluations should be conducted at intervals of two years, plus or minus 60 days. If two consecutive reevaluations are conducted two years apart without finding a lead-based paint hazard, reevaluation may be discontinued.

Please refer to your community development agency, housing authority, or other applicable agency for additional local/regional regulations and guidelines governing re-evaluation activities.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
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INTRODUCTION (cont)

DISCLOSURE REGULATIONS: A copy of this complete report must be made available to new lessees (tenants) and/or must be provided to purchasers of this property under Federal law before they become obligated under any future lease or sales contract transactions (Section 1018 of Title X – found in 24 CFR Part 35 and 40 CFR Part 745), until the demolition of this property. Landlords (Lessors) and/or sellers are also required to distribute an educational pamphlet developed by the EPA entitled “*Protect Your Family From Lead in Your Home*” and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from LBP hazards.

FUTURE REMODELING PRECAUTIONS: It should be noted that during this Assessment, a limited number of areas were tested for the presence of LBP. All LBP, dust, and soil hazards that were identified are addressed in this report. However, LBP, dust lead hazards, and/ or soil lead hazards may be present at other locations of the property. Additional paint testing should precede any future remodeling activities that occur at any untested areas. Additional dust and/or soil sample collection and analysis should follow any hazard control activity, repair, remodeling, or renovation effort, and any other work efforts that may in any way disturb LBP and/or any lead containing materials. These Assessment activities will help the Client and owner to ensure the health and safety of the occupants and the neighborhood. Details concerning lead-safe work techniques and approved hazard control methods can be found in the HUD publication entitled: “*Guidelines for the Evaluation and Control of LBP Hazards in Housing*” (www.hud.gov/offices/lead). Remodeling, repair, renovation and painting at the residence beyond the scale of minor repair and maintenance activities must be conducted in accordance with the EPA’s Lead Repair, Renovation, and Painting Rule (within 40 CFR part 745); see the EPA’s website on the RRP Rule at <http://www.epa.gov/lead/pubs/renovation.htm> for the scope and requirements of that Rule. Lead-based paint abatement or lead-based paint hazard abatement at the residence must be conducted in accordance with the EPA’s Lead Abatement Rule (also within 40 CFR 745); see the EPA’s website for Lead Abatement Professionals at <http://www.epa.gov/lead/pubs/traincert.htm>.

CONDITIONS & LIMITATIONS: Staff of ChemScope Inc. has performed the tasks listed above requested by the our client in a thorough and professional manner consistent with commonly accepted standard industry practices, using state of the art practices and best available known technology, as of the date of the assessment. ChemScope cannot guarantee and does not warrant that this Assessment/Limited LBP Testing has identified all adverse environmental factors and/or conditions affecting the subject property on the date of the Assessment. ChemScope cannot and will not warrant that the Assessment/Limited Testing that was requested by the client will satisfy the dictates of, or provide a legal defense in connection with, any environmental laws or regulations. It is the responsibility of the client to know and abide by all applicable laws, regulations, and standards, including EPA’s Renovation, Repair and Painting regulation.

The results reported and conclusions reached by ChemScope are solely for the benefit of the client. The results and opinions in this report, based solely upon the conditions found on the property as of the date of the Assessment, will be valid only as of the date of the Assessment. ChemScope assumes no obligation to advise the client of any changes in any real or potential lead hazards at this residence that may or may not be later brought to our attention. Further conditions and limitations to this contracted report are included in the general terms and conditions supplied to the client with the contract for services.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
LEAD BASED PAINT PRE-RENOVATION XRF SCREENING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486, CS#187-240, 11/21/2014, Page 6 of 14**

INSPECTION REPORT SYNOPSIS

LOCATION NAME AND ADDRESS: Site #013 (Cady) Application #1486
21 Danbury Avenue, Westport, CT

INSPECTION DATE(S): 11/21/2014.

XRF Testing Results: Limited LBP Testing, conforming with HUD regulation 24 CFR 35.930(c), (d) was accomplished at this residence on surfaces found to have deteriorated paint and/or where it was indicated to the Assessor that planned renovation would occur. No paint chip samples were taken. On 11/21/2014, a total of 77 tests (assays) were taken at a limited number of specified surfaces on the inside and outside of the residence using a x-ray fluorescence analyzer. Deteriorated paint and areas that were specified to be disturbed during the planned renovation project were tested. Lead concentrations that meet or exceed the HUD published levels identified as being potentially dangerous (e. g., greater than or equal to 1.0 milligrams per centimeter square [$> 1.0 \text{ mg/cm}^2$]) were encountered on a few interior surfaces (see list of lead based paint items listed below).

The following surface(s) and/or component(s) contained Lead as defined by OSHA regulations 29 CFR 1926.62, in addition the **items in bold are Lead Based Paint as defined by EPA/HUD and CT-DPH:**

Component/Description	Location	Defective	Friction/ Impact Surface	Potential Remediation Methods
Gray painted wood siding shingles	Basement Stairs/ Basement	Yes	No	REM, REP, LENCAP or RENCAP
White painted wooden pet door frame	CS-6 Laundry	Yes	Yes	REM, REP
White painted wooden window sills and wells	CS-8b, CS-14, CS-14 CI, CS-15, CS-16, CS-12	Yes	Yes	REM or REP
White painted wooden window casings	CS-8b, CS-14, CS-14 CI, CS-15, CS-16, CS-12	Yes	No	REM, REP, or LENCAP
White painted wooden baseboards	Throughout 2nd Floor and CS- 8b	Yes	No	REM, REP, or LENCAP
White painted wooden stair stringers	CS-8b Living Rm	Yes	No	REM, REP, or LENCAP
White painted wooden stair risers	CS-8b Living Rm	Yes	Yes	REM, REP
White painted wooden doors and door frames/stops	Throughout 2nd Floor	Yes	Yes	REM, REP
White painted wooden door casings	Throughout 2nd Floor	Yes	No	REM, REP, or LENCAP
White painted wooden window sashes, frames, wells	Exterior	Yes	Yes	REM, REP
White metal door frame	Boiler Room	Yes	Yes	N/A

LIMITATIONS OF SCREENING: Not all painted surfaces were tested. Consequently, if a surface was not tested assume it contains Lead until proven otherwise. See attached data sheets for a list of surfaces tested.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
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INSPECTION REPORT SYNOPSIS (cont)

RESIDENT QUESTIONNAIRE: A resident questionnaire was completed as part of the Assessment, to help identify particular use patterns, which may be associated with potential LBP hazards, such as opening and closing windows painted with LBP. The answers to the questionnaire were obtained during a phone interview with the owner/occupant, Ms. Cady on 11/21/2014. Following is a summary of the information obtained during the interview:

Children in the Household:	None, and none visit regularly
Children's bedroom locations:	N/A
Children's eating locations:	N/A
Primary interior play area(s):	N/A
Primary exterior play area(s):	N/A
Toy Storage:	N/A
Pets:	N/A
Children's blood lead testing history:	N/A
Observed chewed surfaces:	None
Women of child bearing age:	No
Previous lead testing:	None
Most frequently used entrances:	Side A Front Door
Most frequently opened windows:	Office, Kitchen and Master Bedroom opened seasonally
Structure cooling method:	One window air conditioning unit in small bedroom, three in-wall AC units
Gardening – type and location(s):	No Vegetable gardens, Flower gardens throughout
Plans for landscaping:	None planned
Cleaning regiment:	Daily
Cleaning methods:	Mopping, sweeping, dusting, vacuuming
Recently completed renovations:	None
Demolition debris on site:	N/A
Resident(s) with work lead exposure:	None
Planned renovations:	The scope of the renovations is as follows: mitigation to electrical service, water heater, replacement of mechanical room walls and insulation, and work in the from the lower entry, and electrical wiring repairs below the first floor.

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
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INSPECTION REPORT SYNOPSIS (cont)

Building Conditions Survey

Date of Construction:	1930
Apparent Building Use:	Residential
Setting:	Residential
Front Entry Faces:	Side A. Faces Northeast
Design:	2-Story. Conventional
Construction Type:	Wood framed, wood shingle siding
Lot Type:	Flat
Roof:	Good, no apparent roof leaks
Foundation:	Concrete foundation walls with crawlspace (gravel floor)
Front Lawn Condition:	Approx. < 10% bare soil
Back Lawn Condition:	Approx. < 10% bare soil
Drip Line Condition:	Good – no paint chips seen
Site Evaluation:	Very Good
Exterior Structural Condition:	Exterior structural is good for the house
Interior Structural Condition:	Very Good
Overall Building/Site Condition:	Very Good

PAINT CONDITION SURVEY

Please Note: EPA and HUD have provided a specific definition for the term “deteriorated paint.” Deteriorated paint is defined as “any interior or exterior paint or other coating that is peeling, chipping, chalking or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate.” This definition is most typically associated with surface conditions only. Usage of this term in describing conditions other than those associated with surface coatings are not known to be defined by EPA or HUD.

Continued

**PRE-REHABILITATION LEAD HAZARD RISK ASSESSMENT &
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INSPECTION REPORT SYNOPSIS (cont)

PAINT CONDITION SURVEY

Please Note: EPA and HUD have provided a specific definition for the term "deteriorated paint." Deteriorated paint is defined as "any interior or exterior paint or other coating that is peeling, chipping, chalking or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate." This definition is most typically associated with surface conditions only. Usage of this term in describing conditions other than those associated with surface coatings are not known to be defined by EPA or HUD.

Identified Deteriorated Paint, Paint Conditions, Lead Content, & Most Apparent Cause of Deterioration:

Component/Description	Location	Cause of Deterioration
Gray painted wood siding shingles	Basement Stairs/ Basement	Age/ Weather
White painted wooden pet door frame	CS-6 Laundry	Animal Contact
White painted wooden window sills and wells	Throughout	Age/Contact
White painted wooden window casings	Throughout	Age/Contact
White painted wooden baseboards	Throughout	Age
White painted wooden stair stringers	CS-8b Living Rm	Age
White painted wooden stair risers	CS-8b Living Rm	Age/Contact
White painted wooden doors and door frames/stops	Throughout 2nd Floor	Age/Contact
White painted wooden door casings	Throughout 2nd Floor	Age/Contact
White painted wooden window sashes, frames, wells	Exterior	Age/Contact

The remaining paint exhibited no apparent signs of deterioration, as of the date of the Assessment.

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INSPECTION REPORT SYNOPSIS (cont)

INTERIOR DUST SAMPLING:

A total of 12 single surface dust wipe samples were collected in an effort to help to determine the levels of lead-containing dust on the interior window sills and floors. These samples were collected from areas most likely to be lead-contaminated if lead-in-dust is present. These samples were collected in accordance with the requirements of ASTM Standard E-1728, Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques. EPA, HUD and State of Connecticut regulations define the following as hazardous levels for lead dust in residences: floors – ≥ 40 mg/ft² (micrograms per square foot); interior window sills – ≥ 250 mg/ft². There is no EPA dust-lead hazard standard for window troughs. Please refer to *Appendix B – Dust Wipe Analytical Results* for the laboratory reports and to *Appendix I – Lead and Lead Safety Information and Resources* for a list of publications and resources addressing lead hazards and their health effects; both are located at the end of this report.

Eleven of the twelve dust samples collected were within acceptable levels. A summary list is given below, see attached analysis reports and drawings for details. **Samples noted in bold below exceeded HUD and CT-DPH standards and represent dust-lead hazards. These samples constitute dust-lead hazards in those rooms.**

Sample #	Date	Location	Surface	Dust Wipe Result (ug/sq ft)	CT-DPH Standard (ug/sq ft)
187-240-1D	11/21/2014	Living Room by Back door	Floor	BDL <12.3	40
187-240-2D	11/21/2014	Living Room by Front door	Floor	BDL <12.3	40
187-240-3D	11/21/2014	Living Room Window Side B	Window Sill	BDL <29.5	250
187-240-4D	11/21/2014	Kitchen	Floor	BDL <12.3	40
187-240-5D	11/21/2014	Kitchen Window Side C	Window Sill	BDL <12.3	250
187-240-6D	11/21/2014	Upstairs bath floor by door	Floor	BDL <12.3	40
187-240-7D	11/21/2014	Sitting Room Side B Window	Window Sill	BDL <27.1	250
187-240-8D	11/21/2014	Sitting Room under Side B Window	Floor	BDL <12.3	40
187-240-9D	11/21/2014	Bedroom 1 – Side B Window	Window Sill	BDL <27.1	250
187-240-10D	11/21/2014	Bedroom 1 – floor under Side B Window	Floor	115.1	40
187-240-11D	11/21/2014	Bedroom 2 – Side D Window	Window Sill	BDL <27.1	250
187-240-12D	11/21/2014	Bedroom 2 – floor under side D Window	Floor	BDL <12.3	40
187-240-13D	11/21/2014	-	Blank	BDL <12.3	-
187-240-14D	11/21/2014	-	Blank	BDL <12.3	-

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INSPECTION REPORT SYNOPSIS (cont)

SOIL SAMPLING AND LABORATORY INFORMATION

Two (2) composite soil samples were collected at this residence in accordance with the requirements of ASTM Standard E-1727, Standard Practice for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques. None of the samples identified lead concentrations above the levels that EPA, HUD or CT-DPH identifies as hazardous. See the following table for a summary of the soil sampling results. Please refer to *Appendix C – Soil Sample Analytical Data* for the detailed analytical reports.

Sample #	Date	Location	Surface	Soil Concentration (mg/kg)	CT-DPH Standard (mg/kg)
187-240-1S	11/21/2014	Bare soil spot composite Side B	Soil 1/2" deep	77.3	400
187-240-2S	11/21/2014	Drip line composite Side C	Soil 1/2" deep	127.5	400

HAZARDOUS WASTE EVALUATION: Because toxic levels of lead were detected, a Hazardous Waste Evaluation was done to determine if the waste products from the renovation are potentially a hazardous waste.

An initial hazardous evaluation was done using a modified (for XRF data as opposed to paint chip data) "knowledge of process" technique intended to approximate the method described by the CT Department of Energy and Environmental Protection (DEEP). That method is one of six methods outlined in the CT DEEP "Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation and Demolition Industries" (11/4/94) for hazardous waste evaluation. For our modified method, data gathered during the XRF inspection is used to calculate for hazardous waste vs. other methods that require TCLP (Toxicity Characteristic Leaching Procedure) testing.

This modified method resulted in the waste being approximately **1350 mg/kg of lead**, which is considered likely to be a lead hazardous waste since it is > 100 mg/kg (the threshold for this modified method). If the components with lead-based paint (hot spots) throughout the interior and exterior of the building were removed then remaining waste would not be considered hazardous for lead.

This method is the least expensive method of hazardous waste evaluation but has limited applicability. The other methods include the following:

- Demolish and Test (TCLP test and needs to be done during the renovation or demolition)
- Composite-Sample and Demolish (TCLP test done before the renovation and destructive testing required and challenging to do for renovations if we don't know what the waist stream is actually going to be in the dumpster)

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RECOMMENDATIONS

Lead Hazard Control Options Lead-safe work practices and worker/occupant protection practices complying with current EPA, HUD and OSHA standards will be necessary to safely complete all work involving the disturbance of LBP coated surfaces and components. In addition, any work considered lead hazard control will enlist the use of interim control (temporary) methods and/or abatement (permanent) methods. It should be noted that all lead hazard control activities have the potential of creating additional hazards or hazards that were not present before.

Details for the listed lead hazard control options and issues surrounding occupant/worker protection practices can be found in the publication entitled: *Guidelines for the Evaluation and Control of LBP Hazards in Housing* published by HUD, the Environmental Protection Agency (EPA) lead-based paint regulations, and the Occupational Safety and Health Administration (OSHA) regulations found in its Lead in Construction Industry Standard. The associated cost estimates, unless otherwise noted, include the labor and materials to accomplish the stated activity and most additional funds typically found to be necessary to complete worker protection, site containment, and cleanup procedures. These are approximate estimates only and due to a variety of potential factors, may not accurately reflect all local cost factors. A precise estimate must be obtained from a certified LBP abatement contractor or a contractor trained in lead-safe work practices. Properly trained and/ or licensed persons, as well as properly licensed firms (as mandated) should accomplish all abatement/interim control activities conducted at this residence.

Interim controls, as defined by HUD, means a set of measures designed to temporarily reduce human exposure to LBP hazards and/or lead containing materials. These activities include, but are not limited to: component and/or substrate repairs; paint and varnish repairs; the removal of dust-lead hazards; renovation; remodeling; maintenance; temporary containment; placement of seed, sod or other forms of vegetation over bare soil areas; the placement of at least 6 inches of an appropriate mulch material over an impervious material, laid on top of bare soil areas; the tilling of bare soil areas; extensive and specialized cleaning; and, ongoing LBP maintenance activities.

Abatement, as defined by HUD, means any set of measures designed to permanently eliminate LBP and/ or LBP hazards. The product manufacturer and/or contractor must warrant abatement methods to last a minimum of twenty (20) years, or these methods must have a design life of at least twenty (20) years. These activities include, but are not necessarily limited to: the removal of LBP from substrates and components; the replacement of components or fixtures with lead containing materials and/or lead containing paint; the permanent enclosure of LBP with construction materials; the encapsulation of LBP with approved products; the removal or permanent covering (concrete or asphalt) of soil-lead hazards; and, extensive and specialized cleaning activities. (EPA's definition is substantively the same.)

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RECOMMENDATIONS (cont)

CT DEEP Hazardous Waste evaluation: Contractor generated waste from lead paint chips or component removal must be evaluated to determine if it is hazardous using one of the many techniques as described in the CT Department of Energy and Environmental Protection (DEEP) Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation and Demolition Industries" (11/4/94). This guidance document allows for homeowners to take up to 10 cubic yards to be disposed of as part of normal house hold waste (even if it contains lead). Under the household waste exclusion, in order for the waste to be exempt, the homeowner must have the means to dispose of it in a manner typical for routine household wastes: that is, either via curbside pickup, or by taking it themselves to their local transfer station.

EPA's RRP rule sets up requirements for firms and individuals performing renovations in pre-1978 housing and child-occupied facilities, such as schools and day cares. The RRP Rule requires that renovators be trained in the use of lead safe work practices, that renovators and firms be certified, that providers of renovation training be accredited, and that renovators follow specific work practice standards.

Because this is a pre-1978 house, contractors (including renovation, repair and painting workers, plumbers, electricians, HVAC professionals, etc.) working on this project must be EPA certified and trained in lead-safe work practices when conducting renovation, repair and painting activities that will disturb more than six (6) square feet of painted surfaces on the interior of a building or more than twenty (20) square feet on the exterior and all window replacements jobs. Additional information on this rule can be found at <http://www.epa.gov/lead/pubs/renovation.htm>.

OSHA 1926.62 (worker protection): Work that disturbs surfaces that contain Lead Based Paint (or any detectable amount of Lead) such as is the case for this work must be done according to OSHA regulation 1926.62 OSHA requires employers to conduct air sampling on workers disturbing lead to establish exposure levels to lead for those workers. The recorded levels are then compared to two different airborne concentrations in the OSHA standard: the action limit (AL) and the permissible exposure limit (PEL). Currently, the AL is set at 30 micrograms of lead per cubic meter of air ($\mu\text{g}/\text{m}^3$) and the PEL is 50 $\mu\text{g}/\text{m}^3$. At a minimum the following is required even for air sample results below the action level (this is known as Category 1):

10. Train employees
11. Conduct Exposure Monitoring (air sampling, as mentioned above)
12. Maintain Records

See details below if your sampling exceeds the standards. Chem Scope, Inc could help with compliance assistance as needed.

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RECOMMENDATIONS (cont)

OSHA 1926.62 – Additional Details:

Category 2: OSHA regulations require; Same as category I, plus: Provide respirator at employee request, Conduct exposure monitoring every 3 months, and Conduct blood lead monitoring when the exposure monitoring results are 30–50 ug/m³ (above the action level, but below the PEL).

Category 3: OSHA Regulations require; Same as category II, plus, enforce respirator use, enforce use of protective clothing, develop monitoring every 6 months, enforce housekeeping, provide hygiene facilities and enforce washing when the exposure monitoring results are 50 ug/m³ and over (above the PEL).

See separate Asbestos Pre-renovation Inspection report and Mold Assessment report for additional details.

If you have any questions or need more information please call me. Thank you for calling on us.

Sincerely,



Dan Sullivan
Vice President, Operations

Appendix A XRF Lead-Based Paint Testing Results

Site Name: Site #013 (Cady) - Application #1486 Date of Inspection: 11/21/14

Site Address: 21 Danbury Avenue, Westport, CT CS# 187-240

Customer Name: - Diversified Technology Consultants (DTC) - Scott Feulner

Customer Address: 2321 Whitney Avenue Suite 301, Hamden CT 06518

Work Area: Throughst Page 1 of 4

Site Description: 2nd Floor Convential Style Residential Year of Construction: 1930

Name of Individual Doing Testing: Dan Sullivan CT DPH Lic# 002131

CO-57 Date Source Installed: 9/29/14 Software version # _____ Serial # 1647

Test #	Clock Time	NIST Calibration Standard	Results QM (mg/CM2)
1	10:11 am	NIST SRM 2573 Red	1.0
2	10:12 am	NIST SRM 2573 Red	1.0
3	10:13 am	NIST SRM 2573 Red	1.0
86	11:23 am	NIST SRM 2573 Red	1.0
87	11:24 am	NIST SRM 2573 Red	1.0
88	11:25 am	NIST SRM 2573 Red	1.0
		NIST SRM 2573 Red	
		NIST SRM 2573 Red	
		NIST SRM 2573 Red	
4	10:14 am	NIST SRM 2570 White (Blank)	0.0
89	11:26 am	NIST SRM 2570 White (Blank)	-0.2

Note: each entry represents a single test on the surface indicated.

- Acceptance limits for calibration are 0.7-1.3.
- 1.0 mg/cm² or higher = lead based paint (LBP)
- All values run under Quick Mode (QM), unless noted otherwise under comments above.
- Calibration std SRM 2573 has 1.0 mg/cm² of lead, expiration of std is 7/1/20.
- DEF under comments means the surface has defective lead based paint

INSPECTOR SIGNATURE/Date/REVIEWED BY/Date: Dan Sullivan 11/21/14 Pa 12/31/14

Site Name: Site #013 (Cady) - Application #1486

Date of Inspection: 11/21/14

Site Address: 21 Danbury Avenue, Westport, CT

CS# 187-240

Work Area: Interior Basement & 1st Floor

Page 2 of 4

Test #/ Side	Int/Ext	Room #	Component	Defective (Y/N)	Color	Substrate	Results QM (mg/CM2)	LBP (Y/N)
5	B	Int basement	wall old wood siding	Y	gray	wood	1.6	Y
6	"	"	"	"	"	"	1.5	Y
7	A	" storage	window sash	"	white	"	-0.0	N
8	"	"	"	"	"	"	-0.1	N
9	B	" boiler	door frame	"	"	metal	0.3	N
10	"	"	"	"	"	"	0.1	N
11	B	" laundry	Pet door frame	"	"	wood	0.5	N
12	"	"	"	"	"	"	1.3	Y
13	C	" dining ^{CS-8A}	door 1	"	"	"	-0.3	N
14	"	"	"	"	"	"	-0.2	N
15	"	"	door frame	"	"	"	-0.1	N
16	"	"	"	"	"	"	-0.1	N
17	"	"	door casing	"	"	"	-0.1	N
18	"	"	"	"	"	"	-0.1	N
19	"	"	floor	"	wood stain	wood	-0.1	N
20	"	"	"	"	"	"	-0.2	N
21	A	" living ^{CS-8B}	door 4	"	white	"	-0.2	N
22	"	"	"	"	"	"	-0.2	N
23	"	"	door frame	"	"	"	-0.2	N
24	"	"	"	"	"	"	-0.1	N
25	"	"	door casing	"	"	"	-0.1	N
26	B	"	window sill	"	"	"	0.5	N
27	"	"	" sash	"	"	"	-0.1	N
28	"	"	" well	"	"	"	1.6	Y
29	A	"	baseboard	"	"	"	1.3	Y
30	C	"	stair tread	"	wood stain	wood	-0.2	N
31	"	"	" stringer	"	white	"	0.4	N
32	"	"	" riser	"	"	"	1.3	Y
33	"	"	" stringer beam	"	"	"	0.1	N

Signature: W. J. Keller

Date: 11/21/14

Site Name: Site #013 (Cady) - Application #1486

Date of Inspection: 11/21/14

Site Address: 21 Danbury Avenue, Westport, CT

CS# 187-240

Work Area: Interior 1st floor / 2nd floor

Page 3 of 4

Test # / Side	Int/Ext	Room #	Component	Defective (Y/N)	Color	Substrate	Results QM (mg/CM2)	LBP (Y/N)
34	C	Living ^{CS-28B}	stair stringer	Y	white	wood	1.0	Y
35	"	"	" balustrades	"	"	"	0.0	N
36	"	"	stair handrail	"	"	"	0.1	N
37	"	"	" newel post	"	"	"	0.1	N
38	D ₁	2nd floor hall	Window sill	"	"	"	0.1	N
39	"	CS-13	" casing	"	"	"	0.5	N
40	"	"	" well	"	"	"	>9.9	Y
41	C	"	door frame 2	"	"	"	2.4	Y
42	"	"	door 2	"	"	"	0.3	N
43	"	"	door 1	"	"	"	1.6	Y
44	"	"	door frame 1	"	"	"	1.6	Y
45	"	"	door casing 1	"	"	"	2.0	Y
46	"	"	base board	"	"	"	1.8	Y
47	B	"	door 1	"	"	"	1.9	Y
48	"	"	door 2	"	"	"	2.6	Y
49	"	"	door frame 2	"	"	"	2.6	Y
50	D ₂	"	door	"	"	"	1.6	Y
51	"	"	door step	"	"	"	1.7	Y
52	A	CS-14	door 1	"	"	"	1.9	Y
53	"	"	door frame 1	"	"	"	2.2	Y
54	C	"	Window sill	"	"	"	1.0	Y
55	"	"	" well	"	"	"	2.4 ^{>9.9}	Y
56	B	"	" sill	"	"	"	1.0	Y
57	"	"	" well	"	"	"	2.9	Y
58	"	CS-15	" well	"	"	"	0.4	N
59	"	"	" sill	"	"	"	2.0	Y
60	"	"	" casing	"	"	"	0.6	N
61	"	"	" frame	"	"	"	1.0	Y
62	D	"	door 2	"	"	"	2.1	Y

Signature: Wan Jilin

Date: 11/21/14

Site Name: Site #013 (Cady) - Application #1486

Date of Inspection: 11/21/14

Site Address: 21 Danbury Avenue, Westport, CT

CS# 187-240

Work Area: Int 2nd Floor / Exterior

Page 4 of 4

Test #/ Side	Int/Ext	Room #	Component	Defective (Y/N)	Color	Substrate	Results QM (mg/CM2)	LBP (Y/N)
63	D	Int CS-15	door frame 2	Y	white	wood	6.7	Y
64	A2	Ext	door casing 1	"	"	"	4.4	Y
65	"	"	door casing 2	"	"	"	3.0	Y
66	"	"	porch floor	"	brown	"	-0.2	N
67	"	"	" stair tread	"	"	"	-0.2	N
68	"	"	" stair riser	"	"	"	-0.1	N
69	"	"	Siding	"	"	"	-0.0	N
70	"	"	foundation column	"	white	conc	0.1	N
71	A3	"	door	"	purple	wood	-0.1	N
72	"	"	window sash	"	white	"	-0.2	N
73	"	"	corner trim	"	"	"	-0.1	N
74	D2	"	deck trim	"	"	"	-0.1	N
75	"	"	foundation column	"	"	conc	-0.1	N
76	D1	" to laundry	window sash	"	"	wood	-0.2	N
77	"	"	" sill	"	"	"	0.0	N
78	C3	" to kitchen	siding	"	brown	"	-0.0	N
79	B2	"	lattice frame	"	white	"	-0.4	N
80	D	" to basement ^{storage}	window 1 sash	"	"	"	0.4	N
81	"	"	window 1 frame	"	"	"	3.9	Y
82	"	"	" sill	"	"	"	4.0	Y
83	"	" to boiler	window 2 sash	"	"	"	1.9	Y
84	"	"	" 2 sill	"	"	"	0.6	N
85	"	"	siding	"	brown	wood	-0.2	N

Signature: David Hill

Date: 11/21/14

EVALUATING THE QUALITY OF XRF:

Site Name: Site #13 (Cady) - Application #1486
 Site Address: 21 Danbury Avenue, Westport, CT

CS# 187-240
 Date: 11/21/2014

Location	Original Reading	Retest Reading	Square of Original Reading	Square of Retest Reading
1. Interior - Basement - Wall Old Wood Siding - Side B	1.6	1.5	2.56	2.25
2. Interior - Basement Storage - Window Sash - Side A	0.0	-0.1	0.00	0.01
3. Interior - Boiler Room - Door Frame - Side B	0.3	0.1	0.09	0.01
4. Interior - CS-6 Laundry - Pet Door Frame - Side B	0.5	1.3	0.25	1.69
5. Interior - CS-8A Dining - Door 1 - Side C	-0.3	-0.2	0.09	0.04
6. Interior - CS-8A Dining - Door Frame - Side C	-0.1	-0.1	0.01	0.01
7. Interior - CS-8A Dining - Door Casing - Side C	-0.1	-0.1	0.01	0.01
8. Interior - CS-8A Dining - Floor - Side C	-0.1	-0.2	0.01	0.04
9. Interior - CS-8B Living - Door 4 - Side A	-0.2	-0.2	0.04	0.04
10. Interior - CS-8B Living - Door Frame - Side A	-0.2	-0.1	0.04	0.01
Sum of ten squared averages ("C"):			3.10	4.11
		"C" times 0.0072 ("D"):	0.02232	0.02959
		"D" plus 0.032 ("E"):	0.05432	0.061592
		Square root of "E" ("F"):	0.23307	0.248177356
		"F" times 1.645 (Retest Tolerance Limit):	0.3834	0.4083
Average of the ten XRF Readings:			0.14	0.19
		Absolute difference of the two averages:	0.0500	

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest.

Appendix B Lead in Dust and Soil Sample Analysis Reports

ChemScope INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610

Diversified Technology Consultants
2321 Whitney Avenue, Suite 301
Hamden CT 06518

Application #1486
12/1/2014
CS# 187-240

LEAD ANALYSIS BY ATOMIC ABSORPTION

Lead dust wipe and soil samples from Site #013 (Cady), 21 Danbury Avenue, Westport CT, collected by ChemScope, Inc., on 11/21/2014:

See attached chain of custody and EAS Analytical Services, Inc., reports for sample descriptions and analytical data; and applicable standards on reverse side of this page.

*NOTE: The EAS Analytical Services, Inc. report provides the lead soil concentration in mg/kg which is equivalent to ppm (parts per million).

Suzanne Cristante or
Laboratory Director
SC

Izabela Kremens or
Quality Manager
IK


Ronald D. Arena
President
RDA

LEAD STANDARDS AND GUIDELINES

(Revised 4/2013)

The following are some existing known standards and guidelines as they relate to lab analysis for lead by AAS. ChemScope assumes no liability for the use of these data. All values are expressed as pure lead, Pb.

1. Lead in Dust Standards: Connecticut DPH, EPA & HUD:

Dust-Wipe Re-Occupancy Testing:

Floors: 40 micrograms/sq ft

Sills: 250 micrograms/sq ft

Window Wells: 400 micrograms/sq ft

Toxic Level of lead in dry paint: 0.5%

*NOTE: City of Stamford has a stricter standard of .06%

2. For Air Samples: OSHA PEL (Permissible Exposure Limit) is 50 micrograms/cubic meter and the AL (Action Level) is 30 micrograms/cubic meter.

3. For Soil: 400 PPM is considered contaminated.

State regulations (CT DEEP RCSA 22a-133K) require lead-contaminated soil to be cleaned up to a concentration of 500 ppm in residential areas and 1,000 ppm in industrial and commercial areas. But in practice the Department of [Energy and] Environmental Protection (DEEP) and state and local health departments apply a 400 ppm standard in residential areas. DEEP has begun the process of adopting the 400 ppm standard in regulation.

OLR Research Report, October 11, 2006, 2006-R-0596

4. For any material to be disposed of: the DEP and EPA Standard for TCLP lead is 5 milligrams/liter. In addition, other substances besides lead may need to be tested which are not in the scope of this test report.

5. Consumer Product Safety Commission: Lead in paint for sale 0.06%.

6. For Drinking Water Samples (First Draw and Fully Flushed samples):

State of Connecticut Action Level: 0.015 mg/l

EPA Action Level: 15 ppb

NOTE: .015 mg/l = 15 ppb



Eastern Analytical Services, Inc.

Wipe Sample Report

RE: CPN 187-240 - Diversified Technology Consultants (DTC) - Scott Feulner - Site 013
(Cady) Application #1486 - 21 Danbury Avenue - Westport, CT

Date Collected: 11/21/2014
Collected By: Leigh Hanarof
Date Received: 11/24/2014
Date Analyzed: 11/24/2014
Analyzed By: Everton Byron Barrett
Signature: 
Analyte: Pb Dust
Analytical Method: EPA 3050B/7000B
NYS Lab Number: 10851

Client: Chem Scope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Sample ID# / Lab ID#	Sample Location	Sample Notes	Concentration
187-240-1LD 2328406	Living Room Back Door - Floor	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-2LD 2328407	Living Room Front Door - Floor	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-3LD 2328408	Living Room - B Window Sill	Dust Wipe - 2" x 30" Area	BDL < 29.5 µg/ft ²
187-240-4LD 2328409	Kitchen - Floor 5 Feet from Living Room - 2 Feet from Sink	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-5LD 2328410	Kitchen - C2 Window Sill	Dust Wipe - 24" x 6" Area	BDL < 12.3 µg/ft ²
187-240-6LD 2328411	Upstairs Bath - Floor at Door	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-7LD 2328412	Sitting Room - B Window Sill	Dust Wipe - 2.25" x 29" Area	BDL < 27.1 µg/ft ²
187-240-8LD 2328413	Sitting Room - Floor Under Window B	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-9LD 2328414	Bedroom 1 - B Window Sill	Dust Wipe - 2.25" x 29" Area	BDL < 27.1 µg/ft ²

BDL = Below Detectable Limits Reporting Limit = 0.3 ppm
Liability Limited to Cost of Analysis
Results Applicable to Those Items Tested Results are Not Blank Corrected All QC within Control Limits Unless Otherwise Indicated
AIHA Accreditation No. 100263 Rhode Island DOH No. AAL-072T3 Massachusetts DOL No. A A 000072 Connecticut DOH No. PH-0622 Maine DEP No. LA-024 Vermont DOH No. AAS-2095



Eastern Analytical Services, Inc.

Wipe Sample Report

RE: CPN 187-240 - Diversified Technology Consultants (DTC) - Scott Feulner - Site 013
(Cady) Application #1486 - 21 Danbury Avenue - Westport, CT

Date Collected: 11/21/2014
Collected By: Leigh Hanarof
Date Received: 11/24/2014
Date Analyzed: 11/24/2014
Analyzed By: Everton Byron Barrett
Signature: 
Analyte: Pb Dust
Analytical Method: EPA 3050B/7000B
NYS Lab Number: 10851

Client: Chem Scope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Sample ID# / Lab ID#	Sample Location	Sample Notes	Concentration
187-240-10LD 2328415	Bedroom 1 - Floor Under Window B	Dust Wipe - 12" x 12" Area	115.1 µg/ft ²
187-240-11LD 2328416	Bedroom 2 - D Window Sill	Dust Wipe - 2.25" x 29" Area	BDL < 27.1 µg/ft ²
187-240-12LD 2328417	Bedroom 2 - Floor by Door	Dust Wipe - 12" x 12" Area	BDL < 12.3 µg/ft ²
187-240-13LD 2328418	Not Applicable	Field Blank	BDL < 12.3 µg
187-240-14LD 2328419	Not Applicable	Field Blank	BDL < 12.3 µg

BDL = Below Detectable Limits Reporting Limit = 0.3 ppm
Liability Limited to Cost of Analysis
Results Applicable to Those Items Tested Results are Not Blank Corrected All QC within Control Limits Unless Otherwise Indicated
AIHA Accreditation No. 100263 Rhode Island DOH No. AAL-072T3 Massachusetts DOL No. A A 000072 Connecticut DOH No. PH-0622 Maine DEP No. LA-024 Vermont DOH No. AAS-2095



Eastern Analytical Services, Inc.

Bulk Sample Report

RE: CPN 187-240 - Diversified Technology Consultants (DTC) - Scott Feulner - Site 013
(Cady) Application #1486 - 21 Danbury Avenue - Westport, CT

Date Collected: 11/21/2014
Collected By: Leigh Hanarof
Date Received: 11/24/2014
Date Analyzed: 11/24/2014
Analyzed By: Everton Byron Barrett
Signature: 
Analyte: Pb Bulk
Analytical Method: EPA 3050B/7000B
NYS Lab Number: 10851

Client: Chem Scope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Sample ID# / Lab ID#	Sample Location	Sample Notes	Concentration
187-240-1LS 2328420	Bare Soil Composite	Lead in Soil - 1/2" Deep	77.3 mg/kg 0.01 %
187-240-2LS 2328421	Drip Line Composite	Lead in Soil - 1/2" Deep	127.5 mg/kg 0.01 %

BDL = Below Detectable Limits Reporting Limit = 0.3 ppm
Liability Limited to Cost of Analysis
Results Applicable to Those Items Tested Results are Not Blank Corrected All QC within Control Limits Unless Otherwise Indicated Soil Samples Reported on Dry Weight Basis - Paint Samples Reported as Received
AIHA Accreditation No. 100263 Rhode Island DOH No. AAL-072T3 Massachusetts DOL No. A A 000072 Connecticut DOH No. PH-0622 Maine DEP No. LA-024 Vermont DOH No. AAS-2095

ChemScope

INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610

Emailed _____
Faxed _____
Called _____
Logged

Chain of Custody

Site #013 (Cady) - Application #1486

Sample Source: 21 Danbury Avenue, Westport, CT

CS Job # 187-240

Sampled By: Leigh Howard HZH Date Sampled: 11/21/14 Customer Name: Diversified Technology Consultants (DTC) - Scott Feulner

CS Sample#	Client Sample#	Sample Description	Comments
187-240-1LD		Living Room Back Door Floor	1'x1'
187-240-2LD		Living Room Front Door Floor	1'x1'
187-240-3LD		Living Room B Window Sill	2"x30"
187-240-4LD		Kitchen Floor, 5' from living rm, 2' from sink	1'x1'
187-240-5LD		Kitchen C2 Window Sill	2'x6"
187-240-6LD		Upstairs Bath Floor at Door	1'x1'
187-240-7LD		Sitting Room B Window sill	2 1/4" x 29"
187-241-8LD		Sitting Room Floor under window B	1'x1'
187-240-9LD		Bedroom 1 B Window sill	2 1/4" x 29"
187-240-10LD		Bedroom 1 Floor under window B	1'x1'
187-240-11LD		Bedroom 2 D window sill	2 1/4" x 29"
187-240-12LD		Bedroom 2 floor by door	1'x1'
187-240-13LD		BLANK	
187-240-14LD		BLANK	
187-240-1LS		Bare Soil Composite (5 samples)	1/2" deep
187-240-2LS		Drip Line Composite (2 samples)	1/2" deep

} Lead in Dust

} Lead in Soil

Sample Turnaround: 1 Week

Analysis Requested (if variable, use comment column): _____

Check if you want sample returned _____ (sample will be disposed of after 30 days).

Relinquished by HZH Date 11/21/14 Time _____ Received By Fed Ex

Relinquished by _____ Date _____ Time _____ Received By _____

Other Special Instructions: _____

Result Transmittal Instructions (for Chem Scope to transmit): Tell DS for Report - email Dan Sullivan at sullivan.chemscope@snet.net

FOR CHEM SCOPE, INC. TO FILL OUT IF SAMPLES ARE GOING TO OUTSIDE LABORATORY:

Name of Laboratory: _____

Method of Transportation to Laboratory: _____

Result Transmittal Instructions (for outside Laboratory to Chem Scope, Inc): _____

The person submitting samples is responsible for obtaining true and representative samples, for complying with applicable regulations and for the use of the data obtained from the analysis. For example, many states have licensing and laboratory approval requirements. Please contract the individual states if you have any questions regarding specific sampling or approval requirements. For Connecticut, sites we have licensed inspectors available to collect client samples and to perform building inspections.

Dear Laboratory Customer or Potential Customer,

New laboratory accreditation standards require us to provide our clients information about our services to make sure that your requirements for testing are adequately defined, documented and understood. The following is for your information. Please call us if you have any questions or comments.

Type of Samples

/ / PCM cassettes are routinely run by NIOSH Method 7400.

// Bulk materials are run by EPA Method: #600/R-93/116.

Air Samples: NIOSH 7400 Method counts all fibers. This method may be used for personal air samples and for finals. Two field blanks must be submitted for each set of samples. In the unlikely event that there is to be any deviation from the standard test, you will be consulted by phone before the work begins. Those clients who have not had NIOSH 582 or AHERA asbestos training courses (either supervisor or project monitor) should consult with the lab director for more information. The test parameters are further explained in the analytical report.

Bulk materials: sampled are analyzed by the latest EPA Method: (#600/R-93/116) which uses polarized light microscopy (PLM). When asbestos is detected and the amount is estimated to be less than 10%, we automatically point count the samples. When there are interfering substances present, we may use ashing, acid washing or other procedures described in the method to handle the interference. Those clients who have not had AHERA asbestos training courses (either inspector, supervisor or project designer) should consult with the lab director for more information. The test parameters are further explained in the analytical report.

All Samples must be clearly labeled with source name and identification number or sufficient information from the client to make this sample uniquely identified. (We will then add our notebook #, page # (batch) and unique number within the batch.) Samples must be in a clean, air tight package such as a zip loc bag. Appropriate completed paperwork must accompany the sample. Bulk and air samples may not be submitted in the same package.

As soon as available bench top results will be faxed to you and reports will then be mailed. We will retain air samples for at least three months and bulk samples for 6 months unless you advise us otherwise.

You are welcome to visit the laboratory at any time to discuss the work, monitor the work or verify our testing services. We appreciate your business and encourage any feedback regarding improving our services or our quality system. Please take a minute to complete the following survey and mail/fax it to ChemScope, Inc.

Customer Service Survey

To help us improve our services give your opinions to the following:

- 1- The printed laboratory report was complete and easy to understand. YES__ NO__
If no, please explain _____.
- 2- The turn around time for results met your expectations/needs. YES__ NO__
If no, please explain _____.
- 3- How likely are you to recommend ChemScope Inc. to someone?
Excellent__ Very Good__ Good__ Fair__ Poor__
- 4- How likely are you to return to ChemScope in the future if the need arises?
Excellent__ Very Good__ Good__ Fair__ Poor__
5. On a scale of 1 to 5 where 1 represents "Satisfied" and 5 represents "Dissatisfied", how would you rate your level of overall satisfaction.
1__ 2__ 3__ 4__ 5__
- 6- Please add any additional comments or suggestions that would be helpful when you use our services:

Name _____ Company _____

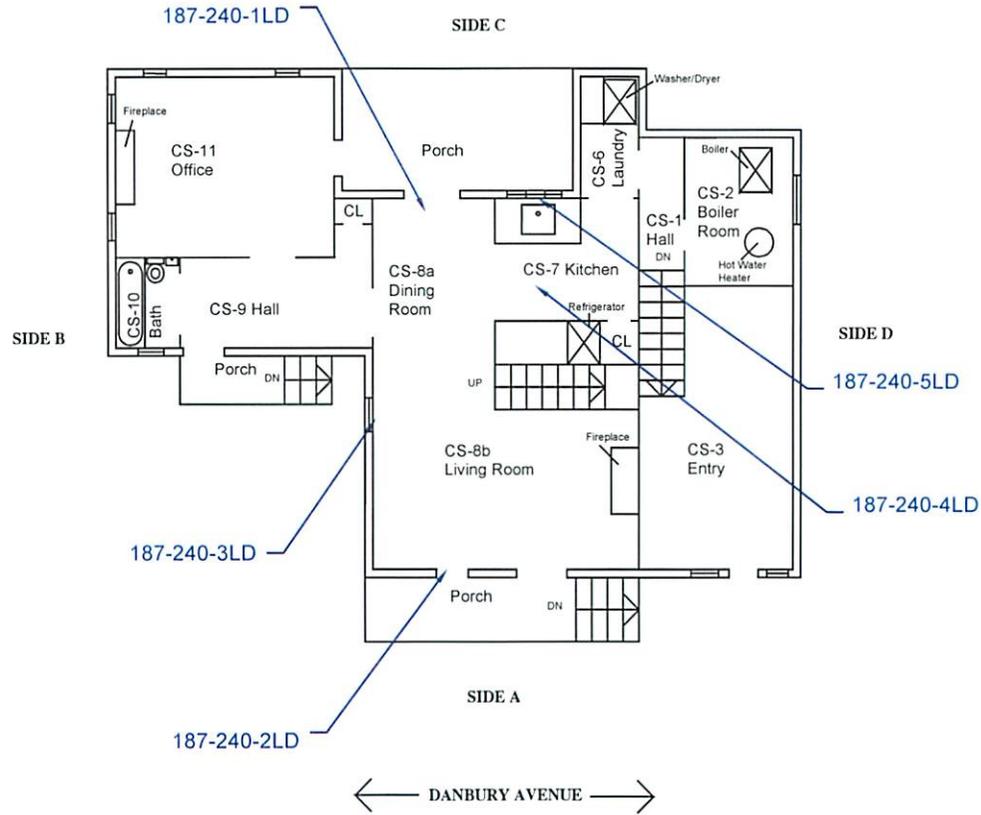
Address _____ Telephone/e-mail _____

Can we contact you regarding this survey? YES__ NO__

Appendix C Sample Location Drawings

ChemScope Inc.
 Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 First Floor

LEAD IN DUST SAMPLE LOCATION DRAWING



LEGEND OF SYMBOLS

#LD	Lead in Dust Sample

NOTATIONS

LEIGH HONOROF

ChemScope Inc.

FIRST FLOOR

LEAD/MOLD/ASBESTOS
 RADON INSPECTION
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NUMBER
187-240

SCALE
NOT TO SCALE

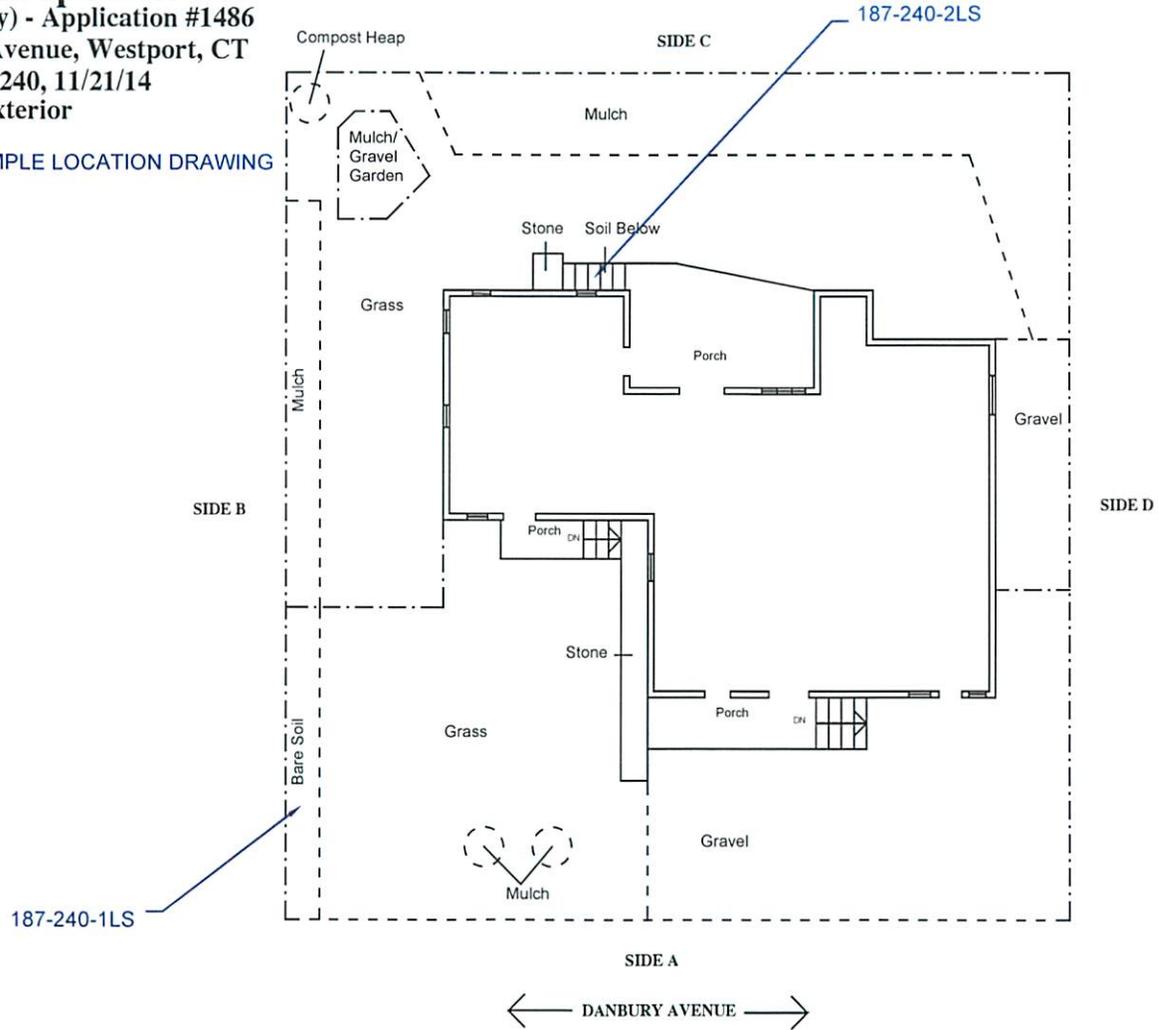
DATE
11/21/14

1

ChemScope Inc.

Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 Exterior

LEAD IN SOIL SAMPLE LOCATION DRAWING



LEGEND OF SYMBOLS

#LS Lead in Soil Sample

NOTATIONS

[Dashed Line] = Fence

[Dashed Line] = Ground Cover Change

DESIGNED BY LEIGH HONOROF

ChemScope Inc.

EXTERIOR

LEAD/MOLD/ASBESTOS
 RADON INSPECTION
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NUMBER
 187-240
 SCALE
 NOT TO SCALE
 DATE
 11/21/14

4

Appendix D Hazardous Waste Evaluation Worksheet

Site Name: Site #013 (Cady) - Application #1486
 Site Address: 21 Danbury Avenue, Westport, CT

CS# 187-240
 Date: 11/21/14

Building Component	Average XRF Readings		Material Mass g/cm ²	mg Lead/kg of Mass		Component Est % of Mass	Weighting Factor	Weighting Factor x mg/kg of lead	
	w/ hot spots	w/o hot spots		w/hot spots	w/o hot spots			w/ hot spots	w/o hot spots
Painted/Stained Wood	1.07	0.11	0.6	1783.3	183.3	75	0.75	1337.5	137.5
Concrete	0	0	60	0.0	0.0	25	0.25	0.0	0.0
						Total	Total*	1337.5	137.5

*Compared to criterion of > 100 mg/kg lead - (DEP: "Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation and Demolition Industries" (11/4/94)

A value by this method of >100 mg/kg lead indicates the material is potentially a hazardous waste.

NOTES:

Wood Trim 3/4" = .60 g/cm²

SR 5/8" = .45 g/cm²

Plaster (typical two coat) = 1 g/cm²

Brick (one course - 2 1/4") = 32 g/cm²

Brick (two course - 4 1/2") = 64 g/cm²

Concrete 4" = 60 g/cm²

Cinder Block 5" = 60 g/cm²

Ceramic Tile (typical floor) = 1.3 g/cm²

Ceramic Tile (typical wall) = 1.5 g/cm²

Linoleum = 0.2 g/cm²

Carpet = 0.2 g/cm²

Suspended ceiling tile = 0.33 g/cm²

Paint Chips with plaster skim coat = 0.28 g/cm²

Fiberboard = 0.4 g/cm²

Appendix E Copy of Risk Assessor's License/Certification

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A

LEAD INSPECTOR RISK ASSESSOR

DANIEL P. SULLIVAN

CERTIFICATION NO.
002131
CURRENT THROUGH
04/30/15
VALIDATION NO.
03-790779


SIGNATURE


COMMISSIONER

CERT# L-600 - 763

CHEMSCOPE TRAINING DIVISION
LEAD INSPECTOR/RISK ASSESSOR REFRESHER
8HOUR TRAINING CERTIFICATE

Daniel P. Sullivan
15 Moulthrop Street , North Haven CT

Has attended an 8 hour course on the subject discipline on
11/08/2013 and has passed a written and hands on skills examination.

The above individual has successfully completed the above training course approved in accordance with the Department of Public Health Standards established pursuant to Section 20-477 of the Connecticut General Statutes.

Course syllabus includes all required topics of State of Connecticut DPH and EPA.

Examination Date: 11/08/2013

Expiration Date: 11/08/2014

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (U.S.C. 1001 and 15 U.S.C. 2615), I certify that this training complies with all applicable requirements of Title IV of TSCA, 40 CFR part 745 and any other applicable Federal, State, or local requirements.



Ronald D. Arena or Brian Santos
Training Director Training Manager

Chem Scope, Inc.
15 Moulthrop Street
North Haven CT 06473
(203) 865-5605

Appendix F Copy of Firm's Lead Activity License/Certification

**STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH**

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT

THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT AS A
LEAD CONSULTANT CONTRACTOR

CHEMSCOPE INC

LICENSE NO
000164

CURRENT THROUGH
07/31/15

VALIDATION NO
03-847539


SIGNATURE


COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

**STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
NAME**

VALIDATION NO. CHEMSCOPE INC CURRENT THROUGH
03-847539 LICENSE NO 000164 07/31/15
PROFESSION

LEAD CONSULTANT CONTRACTOR


SIGNATURE


COMMISSIONER



Connecticut Department of
Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127
www.ct.gov/deep

Certificate of Use

Issued To

CHEM SCOPE, INC.

For

Radioactive Material and Industrial X-Ray Device Registration

**Daniel C. Esty
Commissioner**

Site Located at:
15 Mouthrop St,
North Haven, CT 06473
Reference: 0808-2014

Application No: 201306468
Issue Date: 12/24/2013
Expiration Date: 12/31/2014



**Connecticut Department of
Energy & Environmental Protection**
79 Elm Street
Hartford, CT 06106-5127
www.ct.gov/deep

CHEM SCOPE, INC.
15 MOULTHROP STREET
NORTH HAVEN, CT 06473

12/30/2013

Dear Registrant:

Enclosed is a Certificate of Use for the Radioactive Materials and Industrial X-Ray Device Registration submitted by your facility to the department.

This certificate will serve two purposes. First, this is a way for us to acknowledge to you that your registration has been processed. Second, it is a way for our inspection staff to know that you have the appropriate registration for your radioactive materials and equipment.

The Radioactive Materials and Industrial X-Ray Device Registration must be renewed each year. Notification will be sent to you in the month of November prior to the expiration of this registration to renew your registration.

When corresponding with our office regarding your registration please use the "Application No." indicated on the certificate. This number is unique to your facility and its location.

If you have any questions regarding the Radioactive Materials and Industrial X-Ray Device Registration please feel free to call the Radiation Division at 860-424-3029.

Enclosure

Appendix G Copy of XRF Training Certificate and XRF Performance
Characteristics Sheet

Certificate of Achievement

This is to certify that
Daniel P. Sullivan
of **Chem Scope**

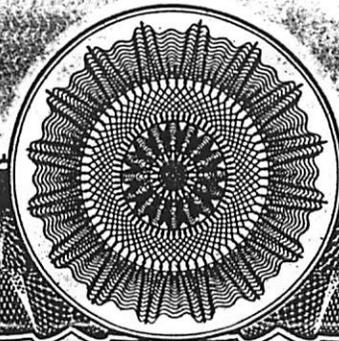
on the 2nd day of December 1994 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob Paster, Vice-President of RMD
44 Hunt St., Watertown, Massachusetts



Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2006

EDITION NO.: 5

MANUFACTURER AND MODEL:

Make: *Radiation Monitoring Devices*Model: *LPA-1*Source: *⁵⁷Co*

Note: This sheet supersedes all previous sheets for the XRF instrument of the make, model, and source shown above **for instruments sold or serviced after June 26, 1995. For other instruments, see prior editions.**

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Quick mode or 30-second equivalent standard (Time Corrected) mode readings.

XRF CALIBRATION CHECK LIMITS:

0.7 to 1.3 mg/cm ² (inclusive)

SUBSTRATE CORRECTION:

For XRF results below 4.0 mg/cm², substrate correction is recommended for:

Metal using 30-second equivalent standard (Time Corrected) mode readings.
None using quick mode readings.

Substrate correction is not needed for:

Brick, Concrete, Drywall, Plaster, and Wood using 30-second equivalent standard (Time Corrected) mode readings
Brick, Concrete, Drywall, Metal, Plaster, and Wood using quick mode readings

THRESHOLDS:

30-SECOND EQUIVALENT STANDARD MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results corrected for substrate bias on metal substrate only	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	0.9
	Plaster	1.0
	Wood	1.0

QUICK MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Readings not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted on approximately 150 test locations in July 1995. The instrument that performed testing in September had a new source installed in June 1995 with 12 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION :

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm² for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm² at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm². Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm² NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1^{\text{st}} + 2^{\text{nd}} + 3^{\text{rd}} + 4^{\text{th}} + 5^{\text{th}} + 6^{\text{th}} \text{ Reading}) / 6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use either the Quick Mode or 30-second equivalent standard (Time Corrected) Mode readings.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

BIAS AND PRECISION:

Do not use these bias and precision data to correct for substrate bias. These bias and precision data were computed without substrate correction from samples with reported laboratory results less than 4.0 mg/cm² lead. The data which were used to determine the bias and precision estimates given in the table below have the following properties. During the July 1995 testing, there were 15 test locations with a laboratory-reported result equal to or greater than 4.0 mg/cm² lead. Of these, one 30-second standard mode reading was less than 1.0 mg/cm² and none of the quick mode readings were less than 1.0 mg/cm². The instrument that tested in July is representative of instruments sold or serviced after June 26, 1995. These data are for illustrative purposes only. Actual bias must be determined on the site. Results provided above already account for bias and precision. Bias and precision ranges are provided to show the variability found between machines of the same model.

30-SECOND STANDARD MODE READING MEASURED AT	SUBSTRATE	BIAS (mg/cm ²)	PRECISION* (mg/cm ²)
0.0 mg/cm ²	Brick	0.0	0.1
	Concrete	0.0	0.1
	Drywall	0.1	0.1
	Metal	0.3	0.1
	Plaster	0.1	0.1
	Wood	0.0	0.1
0.5 mg/cm ²	Brick	0.0	0.2
	Concrete	0.0	0.2
	Drywall	0.0	0.2
	Metal	0.2	0.2
	Plaster	0.0	0.2
	Wood	0.0	0.2
1.0 mg/cm ²	Brick	0.0	0.3
	Concrete	0.0	0.3
	Drywall	0.0	0.3
	Metal	0.2	0.3
	Plaster	0.0	0.3
	Wood	0.0	0.3
2.0 mg/cm ²	Brick	-0.1	0.4
	Concrete	-0.1	0.4
	Drywall	-0.1	0.4
	Metal	0.1	0.4
	Plaster	-0.1	0.4
	Wood	-0.1	0.4

*Precision at 1 standard deviation.

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than the upper boundary of the inconclusive range, and negative if they are less than the lower boundary of the inconclusive range, or inconclusive if in between. The inconclusive range includes both its upper and lower bounds. Earlier editions of this *XRF Performance Characteristic Sheet* did not include both bounds of the inconclusive range as "inconclusive." While this edition of the Performance Characteristics Sheet uses a different system, the specific XRF readings that are considered positive, negative, or inconclusive for a given XRF model and substrate remain unchanged, so previous inspection results are not affected.

DOCUMENTATION:

An EPA document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD. A HUD document titled *A Nonparametric Method for Estimating the 5th and 95th Percentile Curves of Variable-Time XRF Readings Based on Monotone Regression* provides supplemental information on the methodology for variable-time XRF instruments. A copy of this document can be obtained from the HUD lead web site, www.hud.gov/offices/lead.

This XRF Performance Characteristic Sheet was developed by QuanTech, Inc., under a contract from the U.S. Department of Housing and Urban Development (HUD). HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

Appendix H "LEAD SPEAK" – A Brief Glossary

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. (For full EPA definition, see 40 CFR 745.223).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

Chewable surface: An interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is the same as an “accessible surface” as defined in 42 U.S.C. 4851b(2). Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

Deteriorated paint: Any paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligating, cracking, or otherwise becoming separated from the substrate.

Dripline/foundation area: The area within 3 feet out from the building wall and surrounding the perimeter of a building.

Dust-lead hazard: Surface dust in residences that contains an area or mass concentration of lead equal to or in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for dust-lead hazards, which are based on wipe samples, are published at 40 CFR 745.65(b); as of the publication of this edition of these *Guidelines*, these are 40 µg/ft² on floors and 250 µg/ft² on interior windowsills. Also called lead-contaminated dust.

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Garden area: An area where plants are cultivated for human consumption or for decorative purposes.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include, but are not limited to, specialized cleaning, repairs, maintenance, painting, temporary containment, and the establishment and operation of management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land use controls. Interim controls that disturb painted surfaces are renovation activities under EPA’s Renovation, Repair and Painting Rule.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight (5000 mg/g, 5000 ppm, or 5000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA at 40 CFR 745.65, under Title IV of the Toxic Substances Control Act). Lead-based paint hazards include, for example, **paint-lead hazards, dust-lead hazards, and soil-lead hazards.**

Paint-lead hazard: Lead-based paint on a friction surface that is subject to abrasion and where a dust-lead hazard is present on the nearest horizontal surface underneath the friction surface (e.g., the window sill, or floor); damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component; a chewable lead-based painted surface on which there is evidence of teeth marks; or any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Play area: An area of frequent soil contact by children of under age 6 as indicated by, but not limited to, such factors including the following: the presence of outdoor play equipment (e.g., sandboxes, swing sets, and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, care givers, or property owners.

Soil-lead hazard: Bare soil on residential property that contains lead in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for soil-lead hazards, published at 40 CFR 745.65(c), as of the publication of this edition of these *Guidelines*, is 400 µg/g in play areas and 1,200 µg/g in the rest of the yard. Also called lead-contaminated soil.

Appendix I Additional Lead and Lead Safety Resource

Key Units of Measurement

Gram (g or gm): A unit of mass in the metric system. A nickel weighs about 1 gram, as does a 1 cube of water 1 centimeter on each side. A gram is equal to about 35/1000 (thirty-five thousandths of an ounce). Another way to think of this is that about 28.4 grams equal 1 ounce.

µg (microgram): A microgram is 1/1000th of a milligram. To put this into perspective, a penny weighs 2 grams. To get a microgram, you would need to divide the penny into 2 million pieces. A microgram is one of those two million pieces.

µg/dL (microgram per deciliter): used to measure the level of lead in children's and worker's blood to establish whether intervention is needed. A deciliter is a little less than a half a cup.

µg/ft² (micrograms per square feet): the unit used to express levels of lead in dust samples. All reports should report levels of lead in dust in µg/ft².

mg/cm² (milligrams per square centimeter): used to report levels of lead in paint thru XRF testing.

ppm (parts per million): Typically used to express the concentrations of lead in soil. Can also be used to express the amount of lead in a surface coating on a mass concentration basis. This measurement can also be shown as: µg/g, mg/kg or mg/l.

ppb (parts per billion): Typically used to express the amount of lead found in drinking water. This measurement is also sometimes expressed as: µg/L (micrograms per liter). EPA/HUD Lead-Based Paint and Lead-Based Paint Hazard Standards

Lead-Based Paint (may be determined in either of two ways)

- Surface concentration (mass of lead per area) 1.0 µg/cm²
- Bulk concentration (mass of lead per volume) 0.5%, 5000 µg/g, or 5000 ppm

Dust-thresholds for Lead-Contamination

- Floors 40 µg/ft²
- Interior Window Sills 250 µg/ft²
- Window Troughs (clearance examination only) 400 µg/ft²

Soil-thresholds for Lead Contamination

- Play areas (used by children under age 6) 400 µg/g, or 400 ppm
- Other areas 1200 µg/g, or 1200 ppm

Resources For Additional Information On Lead-Based Paint And Lead-Based Paint Hazards:

National Lead information Center & Clearinghouse: 1-800-424 LEAD

www.epa.gov/lead/pubs/nlic.htm

Centers for Disease Control and Prevention Lead Program: www.cdc.gov/lead Toll-free

CDC Contact Center: 800-CDC-INFO; TTY 888-232-6348

Consumer Product Safety Commission www.cpsc.gov Toll-free consumer hotline: 1-800-638-2772; TTY 301-595-7054

Environmental Protection Agency Lead Program: www.epa.gov/lead 202-566-0500

HUD Office of Healthy Homes and Lead Hazard Control: www.hud.gov/offices/lead 202-402-7698

Connecticut Department of Public Health, Lead Poisoning Prevention Program

<http://www.ct.gov/dph/>

Hearing- or speech-challenged individuals may access the federal agency numbers above through TTY by calling the toll-free Federal Relay Service at 800-877-8339; see also

<http://www.federalrelay.us/tty>.

ChemScope INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610 • www.chem-scope.com

Scott Feulner
Diversified Technology Consultants (DTC)
2321 Whitney Avenue, Suite 301
Hamden, CT 06518

12/12/2014

**ASBESTOS PRE-RENOVATION INSPECTION
SITE #013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION #1486, CS#187-240, 11/21/2014, PAGE 1 OF 4**

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Limitations of the Inspection	4
Recommendations	4

Attachments:

- Scope of Inspection Drawing(s) – 1 page(s)
- PLM Certificate of Analysis report with chain of custody - 5 page(s)
- Sample location drawing(s) – 1 page(s)

Report Distribution:

Scott Feulner, DTC Scott.Feulner@teamdtc.com
Curtis Graham, DTC graham.curtis@teamdtc.com
Michael Casey, DTC michael.casey@teamdtc.com

File Location:

NAS AAUM-Reports\Asblnsp\LH-Prereno_2014.doc

**ASBESTOS PRE-RENOVATION INSPECTION
SITE #013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION #1486, CS#187-240, 11/21/2014, PAGE 2 OF 4**

INTRODUCTION

EXECUTIVE SUMMARY: Asbestos containing materials (ACM) were not detected within the scope of this inspection.

BUILDING DESCRIPTION: The subject building is a two-story, single family, residential structure totaling approximately 1700 sq ft, which was built in 1930 of wood-frame construction. In addition to the two floors of living space there is a basement with a crawlspace. The house is heated from a boiler located in the west corner of the first floor. The crawlspace is unfinished with a gravel floor and a ceiling insulated with a combination of fiberglass and mineral wool. At the time of our inspection the heat, electricity and water were all in service and the house was occupied. See attached drawings for detail.

BACKGROUND: We understand the subject house suffered damage as a result of hurricane Sandy on October 29-30, 2012. We understand the house suffered mainly from water damage in mechanical areas in relation to the storm. We understand the scope of the renovations still to be completed as follows: mitigation to electrical service, water heater, replacement of boiler room walls and insulation, and work in the foyer from the lower entry, and electrical wiring repairs below the first floor.

SCOPE OF INSPECTION: Asbestos Pre-Renovation Inspection:

Our work included the following:

- Collection and analysis of building materials within the scope of renovation for asbestos, as directed by our client.
- A list with quantity, type and location of asbestos containing materials (ACM) in the scope.
- Report of the findings including ACM location drawings.

This investigation and information provided in this report depends partly on background information provided by the client. This report is intended for the use of the client. The scope of services performed may not be appropriate for other users and any use of this report by third parties is at their sole risk. This report is intended to be used in its entirety. No excerpts may be taken to be representative of this report.

TEST PARAMETERS: This is an Asbestos Pre-Renovation Inspection intended to identify the presence, location, and quantity of any asbestos containing building materials which are part of the Renovation for compliance with OSHA 1926.1101 (k)(2)(i) and CT DPH 19a-332a-1 through 16.

For sampling, EPA Wet Methods are used to prevent fiber release. Building materials sampled are analyzed at our laboratory by EPA method 600/R-93/116. This is currently the approved EPA Test method, which uses Polarized Light Microscopy with Dispersion Staining. The laboratory is accredited by NIST/NVLAP and AIHA, Lab Accreditation, LLC, and is a Connecticut Approved Environmental Laboratory for Asbestos Analysis.

**ASBESTOS PRE-RENOVATION INSPECTION
SITE #013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION #1486, CS#187-240, 11/21/2014, PAGE 3 OF 4**

INSPECTION REPORT SYNOPSIS

LOCATION NAME AND ADDRESS: Site #013 (Cady) Application #1486
21 Danbury Avenue, Westport, CT

INSPECTION DATE(S): 11/21/2014.

QUALIFICATIONS: The Inspection was conducted by Leigh H. Elijah.

Leigh H. Elijah is certified as follows:

- State of Connecticut Licensed Asbestos Inspector (#000874)
- State of Connecticut Licensed Project Monitor (#000756)

For information about Chem Scope, Inc., log onto <http://www.chem-scope.com>.

SITE OBSERVATIONS: We met Mike Casey of Diversified Technology Consultants (DTC) at the site. He showed us the area and provided some background information. The following observations were made:

- CS-1 Hall had plywood floors, wood shingle/wood/fiberglass/sheetrock walls, and wood/fiberglass ceilings. Approximately 24 linear feet of cloth wrap was present on wires. Pipes were bare metal.
- CS-2 Boiler Room had concrete floors, sheetrock walls, and sheetrock ceilings. Approximately 12 linear feet of cloth wrap was present on wires. Pipes, the boiler, and the hot water heater were bare metal.
- CS-3 Entry had concrete floors, cinderblock/wood/fiberglass, and wood/fiberglass/sheetrock ceilings. The stairs were wood. The piping was bare metal/PVC.
- CS-4 Crawlspace 1 and CS-5 Crawlspace 2 had gravel with paper floors, Styrofoam/cinderblock/wood walls, and wood beam/fiberglass ceilings. Spray on foam insulation was present. The oil tank and piping were bare metal/PVC.
- Rooms on the first floor and second floor, beyond CS-1 Hall, were beyond the scope of the asbestos inspection and planned renovations, as understood by ChemScope.

The following is a summary table of the materials that tested as non-Asbestos Containing Material (ACM) (<1%) within the Scope of Work:

Material	Location	Sample #'s	Findings
Grey crumbly sheetrock with brown fibrous paper backing (and white hard taping compound from C wall, by B corner/from B wall by door)	CS-2 Boiler Room	187-240-1, 2	No Asbestos Detected
White hard taping compound (from sample #1/2)	CS-2 Boiler Room	187-240-3, 4	No Asbestos Detected
Brown fibrous cloth wire wrap (from ~12 lf 1/8 inch OD wire above hot water tank/by door/over 1 st stair step)	CS-2 Boiler Room/ CS-1 Hall	187-240-5, 6, 7	No Asbestos Detected

**ASBESTOS PRE-RENOVATION INSPECTION
SITE #013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION #1486, CS#187-240, 12/01/2014, PAGE 4 OF 4**

LIMITATIONS OF THE INSPECTION

It is important to note that every effort is made to detect asbestos (ACM) in the path of the renovation by our inspectors. It is not practical or prudent to demolish the entire floor, wall, and ceiling systems during an inspection. Only accessible finish materials were inspected. The owner should be aware of this in case suspect materials or concealed suspect materials are uncovered during the actual renovation.

If suspect materials that were previously not accessible or not sampled during this inspection are discovered during the renovation, or if the scope of the renovation changes to include disturbance of new materials not inspected, then renovation must stop and the materials must be sampled by a CT DPH licensed asbestos inspector prior to disturbance of these materials.

RECOMMENDATIONS

Although no asbestos containing materials were detected within the scope of this inspection it is important to understand that asbestos removal is regulated by federal and state agencies.

If you have any questions or need more information please call me. Thank you for calling on us.

Sincerely,

Leigh H. Elijah



Asbestos Inspector

Certificate Of Analysis

*Diversified Technology Consultants (DTC) - Scott Feulner
2321 Whitney Avenue
Suite 301
Hamden CT 06518*

12/01/2014
CS#: 187-240
Page 1 of 3

*Bulk sample(s) from Site #013 (Cady) - Application #1486, 21 Danbury Avenue, Westport, CT collected by
Leigh Honorof on 11/21/2014*

*Asbestos Identification in the samples. Examination made by Polarized Light Microscopy (PLM) per EPA Test Method
600/R-93/116*

Sample Identification

*187-240-1 Grey crumbly sheetrock with brown fibrous paper
backing (and white hard taping compound, from C wall, by B
corner)/CS-2 Boiler Room*

Findings (Analyzed 12/01/2014)

*No Asbestos Detected
64% Non- Fibrous Particles
25% Volatile on Ignition
11% Fiberglass*

*187-240-2 Grey crumbly sheetrock with brown fibrous paper
backing (and white hard taping compound, from B wall by
door)/CS-2 Boiler Room*

*No Asbestos Detected
66% Non- Fibrous Particles
22% Volatile on Ignition
12% Fiberglass*

*187-240-3 White hard taping compound (from sample #1)/CS-2
Boiler Room*

*No Asbestos Detected
93% Non- Fibrous Particles
7% Volatile on Ignition*

*187-240-4 White hard taping compound (from sample #2)/CS-2
Boiler Room*

*No Asbestos Detected
91% Non- Fibrous Particles
9% Volatile on Ignition*

*187-240-5 Brown fibrous cloth wire wrap (from ~ 12 lf 1/8 inch
OD wire above hot water tank)/CS-2 Boiler Room*

*No Asbestos Detected
3% Non- Fibrous Particles
97% Volatile on Ignition
<1% Fiberglass*

Bulk sample(s) from Site #013 (Cady) - Application #1486, 21 Danbury Avenue, Westport, CT collected by Leigh Honorof on 11/21/2014

Asbestos Identification in the samples. Examination made by Polarized Light Microscopy (PLM) per EPA Test Method 600/R-93/116

Sample Identification

187-240-6 Brown fibrous cloth wire wrap (from ~ 24 lf 1/8 inch OD wire by door)/CS-1 Hall

Findings (Analyzed 12/01/2014)

*No Asbestos Detected
4% Non- Fibrous Particles
96% Volatile on Ignition
<1% Fiberglass
<1% Wollastonite*

187-240-7 Brown fibrous cloth wire wrap (from ~ 24 lf 1/8 inch OD wire over 1st stair step)/CS-1 Hall

*No Asbestos Detected
5% Non- Fibrous Particles
95% Volatile on Ignition
<1% Fiberglass
<1% Wollastonite*

**PARAMETERS
ASBESTOS PLM ANALYSIS
(Revised 3/22/13)**

1. *Materials which contain >1% asbestos (greater than 1%) by PLM (polarizing light microscopy) analysis are considered to be asbestos containing materials under EPA and the State of Connecticut Regulations. OSHA still regulates material with <1%. (Contact laboratory for information.) (Note: A more sensitive method is available called TEM (transmission electron microscopy). TEM may detect asbestos fibers that PLM cannot see, but the above agencies' enforcement is based on PLM analysis. Rules may differ for states other than Connecticut. It is best to check with the individual state. For example, New York State requires TEM confirmation of negative PLM results on floor tile).*
2. *If no asbestos is detected in a sample, or if the asbestos content is less than 1% by PLM, additional samples of the same material should be submitted for confirmation. Please check with the laboratory for guidance on the number of samples needed. Sample collection in Connecticut must be by a DPH Licensed Asbestos Inspector. Many other states also require licensing.*
3. *Floor Tile Mastic: Mastic under floor tile should be separately sampled by scraping some of the mastic from the floor to avoid contamination from the floor tile.*
4. *Although Chem Scope, Inc. takes great effort to insure accuracy in the estimation of asbestos in the materials analyzed, no quantitation method is without some uncertainty. Based on independent calibration studies and comparison of Chem Scope's quantitative results with NVLAP and AIHA round robin programs we estimate our uncertainty in quantitation to be relatively small. The average relative uncertainty of the estimate is calculated to be 35% for samples that contain less than 10% asbestos. This means a estimate of 10% asbestos in a sample has a probable range of 6.5% to 13.5% while an estimate of 1% has a range of 0.65% to 1.35%.*
5. *The presence of non-asbestos components, which are recognized by the PLM analyst, is reported with the estimated amounts. This is not an exhaustive analysis for the non-asbestos materials since the primary purpose is to determine if asbestos is present and, if so, how much is present of each type of asbestos.*
6. *Results reported apply only to the sample(s) analyzed.*
7. *Special treatment of samples: Chem Scope, Inc. routinely uses gravimetric sample reduction techniques such as low temperature ashing or acid dissolution on samples like floor tile, roofing materials, glue dots, or high cellulose content samples prior to PLM analysis. These methods are used to aid in the PLM analysis and to provide better quantitative data. Layered samples, if possible, are analyzed separately as individual layers. However, in accordance with the method, if any layer contains >1% asbestos (greater than 1%) it is to be considered an asbestos containing material. All results are reported to the original sample basis.*
8. *Sample results are not corrected for blanks. Analytical blanks are run daily and if contamination is suspected the samples are rerun.*
9. *Chem Scope, Inc. performs "400 point" point counting when the asbestos content is visually estimated to be less than 10%. There is no additional charge for this analysis.*

The Scope of Accreditation referenced in this report applies to bulk asbestos fiber analysis by PLM (Polarized Light Microscopy).

Accreditation does not imply endorsement by NVLAP, NIST or any Federal or State Agency.

This report pertains only to the samples tested and may not be reproduced in part.

Condition of the samples at the time of receipt was acceptable unless otherwise noted on the Certificate of Analysis.

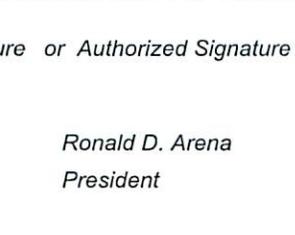
See test parameters above and attached chain of custody form.

We would love to hear from you. Comments? Questions? Please call or email us at chem.scope@snet.net

ChemScope, Inc. is accredited by AIHA LAP, LLC LAB #100134

NVLAB Lab Code 101061-0.

Connecticut Department of Public Health (DPH) Approval Environmental Lab PH 0581

				
Signature Analyst	Signature (if applicable) Inspector	Authorized Signature Suzanne Cristante Laboratory Director	Authorized Signature Izabela Kremens Quality Manager	Authorized Signature Ronald D. Arena President

Dear Laboratory Customer or Potential Customer,

New laboratory accreditation standards require us to provide our clients information about our services to make sure that your requirements for testing are adequately defined, documented and understood. The following is for your information. Please call us if you have any questions or comments.

Type of Samples

// PCM cassettes are routinely run by NIOSH Method 7400.

// Bulk materials are run by EPA Method: #600/R-93/116.

Air Samples: NIOSH 7400 Method counts all fibers. This method may be used for personal air samples and for finals. Two field blanks must be submitted for each set of samples. In the unlikely event that there is to be any deviation from the standard test, you will be consulted by phone before the work begins. Those clients who have not had NIOSH 582 or AHERA asbestos training courses (either supervisor or project monitor) should consult with the lab director for more information. The test parameters are further explained in the analytical report.

Bulk materials: sampled are analyzed by the latest EPA Method: (#600/R-93/116) which uses polarized light microscopy (PLM). When asbestos is detected and the amount is estimated to be less than 10%, we automatically point count the samples. When there are interfering substances present, we may use ashing, acid washing or other procedures described in the method to handle the interference. Those clients who have not had AHERA asbestos training courses (either inspector, supervisor or project designer) should consult with the lab director for more information. The test parameters are further explained in the analytical report.

All Samples must be clearly labeled with source name and identification number or sufficient information from the client to make this sample uniquely identified. (We will then add our notebook #, page # (batch) and unique number within the batch.) Samples must be in a clean, air tight package such as a zip loc bag. Appropriate completed paperwork must accompany the sample. Bulk and air samples may not be submitted in the same package.

As soon as available bench top results will be faxed to you and reports will then be mailed. We will retain air samples for at least three months and bulk samples for 6 months unless you advise us otherwise.

You are welcome to visit the laboratory at any time to discuss the work, monitor the work or verify our testing services. We appreciate your business and encourage any feedback regarding improving our services or our quality system. Please take a minute to complete the following survey and mail/fax it to ChemScope, Inc.

Customer Service Survey

To help us improve our services give your opinions to the following:

1- The printed laboratory report was complete and easy to understand. YES__ NO__
If no, please explain _____.

2- The turn around time for results met your expectations/needs. YES__ NO__
If no, please explain _____.

3- How likely are you to recommend ChemScope Inc. to someone?
Excellent__ Very Good__ Good__ Fair__ Poor__

4- How likely are you to return to ChemScope in the future if the need arises?
Excellent__ Very Good__ Good__ Fair__ Poor__

5. On a scale of 1 to 5 where 1 represents "Satisfied" and 5 represents "Dissatisfied", how would you rate your level of overall satisfaction.
1__ 2__ 3__ 4__ 5__

6- Please add any additional comments or suggestions that would be helpful when you use our services:

Name _____ Company _____

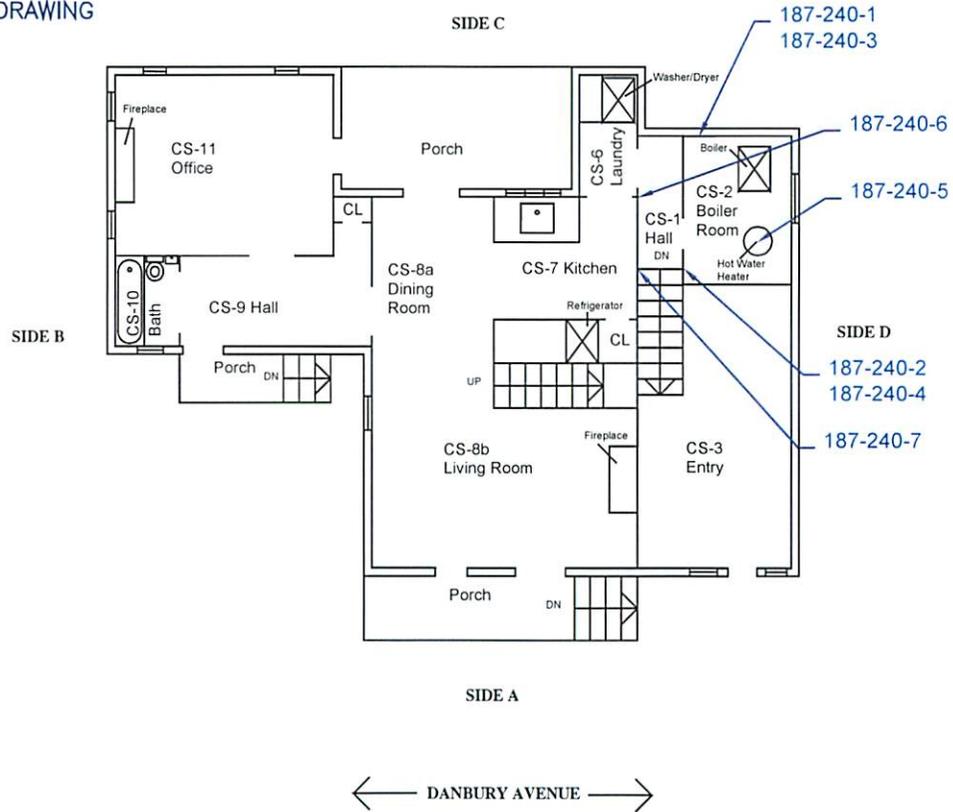
Address _____ Telephone/e-mail _____

Can we contact you regarding this survey? YES__ NO__

ChemScope Inc.

Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 First Floor

BULK SAMPLE LOCATION DRAWING



LEGEND OF SYMBOLS

#	Bulk Sample No.

NOTATIONS

DESIGNED BY: LEIGH HONOROF

ChemScope Inc.

FIRST FLOOR

PROJECT TITLE

LEAD/MOLD/ASBESTOS
 RADON INSPECTION

21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NUMBER
 187-240

SCALE
 NOT TO SCALE

DATE
 11/21/14

1

ChemScope

INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610 • chem-scope.com

Scott Feulner
Diversified Technology Consultants (DTC)
2321 Whitney Avenue, Suite 301
Hamden, CT 06518

12/30/2014

**RADON AIR SAMPLING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486
CS#187-240, 11/21/2014-11/24/2014, PAGE 1 OF 4**

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Radon Sampling Report Synopsis	3
Limitations of the Sampling	4
Recommendations	4

Attachments:

- Radon Analysis report, 2 page(s)
- Chain of Custody Document(s), 2 page(s)
- Sample Location Drawing(s), 1 page(s)
- Radon Occupant Notification Forms, 1 page(s)
- Radon Training Qualification, 1 page(s)

Report Distribution:

Scott Feulner, DTC Scott.Feulner@teamdtc.com
Curtis Graham, DTC graham.curtis@teamdtc.com
Michael Casey, DTC michael.casey@teamdtc.com

File Location:

NAS D(dan):\myfilesds\mydocuments\DS_Radon_2014.doc

RADON AIR SAMPLING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486
CS#187-240, 11/21/2014-11/24/2014, PAGE 2 OF 4

INTRODUCTION

EXECUTIVE SUMMARY: Radon activity detected was below 4.0 pCi/L. Since the initial results are less than 4.0 pCi/L follow-up testing is probably not needed. The EPA recommends re-testing a home every two years.

PURPOSE: To determine if Radon is present in the in the subject home and at what levels.

BUILDING DESCRIPTION: The subject building is a two-story, single family, residential structure totaling approximately 1700 sq ft, which was built in 1930 of wood-frame construction. In addition to the two floors of living space there is a basement with a crawlspace. The house is heated from a boiler located in the west corner of the first floor. The crawlspace is unfinished with a gravel floor and a ceiling insulated with a combination of fiberglass and mineral wool. At the time of our inspection the heat, electricity and water were all in service and the house was occupied. See attached drawings for detail.

BACKGROUND: We understand the subject house suffered damage as a result of hurricane Sandy on October 29-30, 2012. We understand the house suffered mainly from water damage in mechanical areas in relation to the storm. We understand the scope of the renovations still to be completed as follows: mitigation to electrical service, water heater, replacement of boiler room walls and insulation, and work in the foyer from the lower entry, and electrical wiring repairs below the first floor.

SCOPE OF INSPECTION: We conducted short-term simultaneous radon testing.

This investigation and information provided in this report depends partly on background information provided by the client. This report is intended for the use of the client. The scope of services performed may not be appropriate for other users and any use of this report by third parties is at their sole risk. This report is intended to be used in its entirety. No excerpts may be taken to be representative of this report.

METHOD OF TESTING: For sampling we followed protocols outlined in "Protocols for Radon and Radon Decay Product Measurements in Homes" (EPA, May 1993). EPA recommends that testing take place in the lowest level of the home, which is currently suitable for occupancy. This means the lowest level that is currently lived in. Measurements should be made in a room, which is used regularly. The basement in this case is unfinished, so samples were run in the living room. Measurements were taken in an area at least 20" above the floor and at least 3' from any door, window or exterior wall. Measurements were not taken near HVAC vents, fans or in an area of frequent drafts.

Samples were collected by ChemScope and analyzed at EMSL (Cinnaminson, NJ). EMSL is a DPH approved Environmental Lab and a NEHA certified Analytical Laboratory. (See analytical reports enclosed). Samples were analyzed using liquid scintillation radon detectors and counted on a liquid scintillation counter using approved EPA testing protocols for Radon in Air testing. For more information on this method go to:
http://www.epa.gov/radon/pdfs/homes_protocols.pdf

RADON AIR SAMPLING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486
CS#187-240, 11/21/2014-11/24/2014, PAGE 3 OF 4

INSPECTION REPORT SYNOPSIS

LOCATION NAME AND ADDRESS: Site #013 (Cady) Application #1486
 21 Danbury Avenue, Westport, CT

INSPECTION DATE(S): 11/21/2014 – 11/24/2014.

QUALIFICATIONS: The survey team consisted of inspector, Dan Sullivan. Dan is a NRPP (National Radon Proficiency Program) trained technician and his certification number is 107005RT.

For information about Chem Scope, Inc., log onto <http://www.chem-scope.com>.

FINDINGS: The following chart is a summary of the results of our Radon sampling:

Sample Location	Canister #	Sample #'s	Radon Activity (pCi/L)
CS-8b Living Room - Bookcase	178774	187-240-1R	0.4
CS-8b Living Room - Bookcase	178802	187-240-2R	0.4
CS-8b Living Room - Bookcase Duplicate Sample	178809	187-240-3R	0.5

Note: None of the samples collected were equal to or greater than 4.0 pCi/L. The EPA recommends a follow-up test (either short-term or long-term) if the average of the two short-term simultaneous tests is greater than or equal to 4.0 pCi/L and less than 10 pCi/L. If the average of the follow-up and initial tests is equal to or greater than 4.0 pCi/L then remedial action is required.

Temperature & Humidity Results

Location	%RH 11/21/14 9:30am	Air Temp (°F) 11/21/14	Pressure (mm Hg) 11/21/14	%RH 11/24/14 9:30 am	Air Temp (°F) 11/24/14	Pressure (mm Hg) 11/24/14
CS-8b Living Room	34	68	767	56	64	755
Exterior	42	32	767	93	59	755

The sling psychrometer is the classical method for measuring humidity. Two ASTM thermometers are secured to a device that is spun through the air. One of the thermometers has a wick on the end soaked in water (WB or wet bulb reading). The other thermometer has no wick (DB or dry bulb reading = room temperature). The principle is that for a given temperature, the difference in WB and DB readings is a direct measure of the amount of water in the air. If air were very dry, it would evaporate much more water from the DB and the evaporation causes cooling. Results can be converted to %RH and dew point (DP). The dew point is a measure of the absolute amount of water in the air and is more useful in comparisons than the relative humidity, which is also affected by temperature.

RADON AIR SAMPLING
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486
CS#187-240, 11/21/2014-11/24/2014, PAGE 4 OF 4

GENERAL INFORMATION ABOUT RADON

From "Protocols for Radon and Radon Decay Product Measurements in Homes" (EPA, May 1993): "The average year-round residential indoor radon level is estimated to be about 1.3 pCi/L, and about 0.4 pCi/L of radon is normally found in outside air. The U.S. Congress has set a long-term goal that indoor radon levels be no more than outdoor levels. There is some risk from radon levels below 4 pCi/L, and EPA recommends that the homeowner consider reducing the radon level if the average of the first and second short-term measurements or if a long-term follow-up measurement is between 2 and 4 pCi/L (0.01 and 0.02 WL). While it is not yet technologically achievable for all homes to have their radon levels reduced to outdoor levels, the radon levels in some homes today can be reduced to 2 pCi/L or below."

LIMITATIONS OF SAMPLING

The radon test run was a short-duration test (2-90 days). The test is designed to be run under Closed- building conditions. The occupants were given notice of the testing by our client prior to our testing and given instructions on maintaining Closed-building conditions during the test. ChemScope is not responsible for maintaining Closed-building conditions; that is the responsibility of the occupants. The building conditions appeared to meet Closed-building conditions when we arrived to set-up the test and again when we arrived to pick-up the canister at the conclusion of the test. The occupants have signed our form indicating that Closed-building conditions were kept during the duration of the test (48 hrs). See attached notification forms.

RECOMMENDATIONS

Radon activity detected was below 4.0 pCi/L. Since the initial results are less than 4.0 pCi/L follow-up testing is probably not needed. The EPA recommends retesting a home every two years or if the basement becomes more frequently used.

Please call me if there are any questions about this report or if you need further assistance.

Thank you for calling on us.



Dan Sullivan
Vice President, Operations

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (800) 220-3675 / (856) 786-0327
<http://www.EMSL.com> cinnaminsonradonlab@emsl.com

EMSL Order:	381406690
CustomerID:	CHEM51
CustomerPO:	1371
ProjectID:	

Attn: Dan Sullivan ChemScope, Inc. 15 Moulthrop Street North Haven, CT 06473	Phone: (203) 865-5605 Fax: (203) 498-1610 Received: 11/26/14 2:48 PM Analysis Date: 11/27/2014 Collected: 11/21/2014
Project: CS #: 187-240	

Test Site: **Cady**
 21 Danbury Avenue
 Westport, CT 06880

Test Report: Radon in Air Test Results**Samples for EMSL Kit 106481**

Liquid Scintillation ID	Location	Radon Activity pCi/L	Start	Stop	Temperature F	Humidity %	Sample Type
178774 381406690-0001	First Floor, Living Room Countertop/CS#187-240-1R	0.4	11/21/2014 9:30:00 AM	11/24/2014 8:35:00 AM	64	56	Customer

Sample Notes:**Samples for EMSL Kit 106482**

Liquid Scintillation ID	Location	Radon Activity pCi/L	Start	Stop	Temperature F	Humidity %	Sample Type
178802 381406690-0002	First Floor, Living Room Countertop/CS#187-240-2R	0.4	11/21/2014 9:30:00 AM	11/24/2014 8:35:00 AM	64	56	Customer

Sample Notes:

178909 381406690-0003	First Floor, Living Room Countertop/CS#187-240-3R	0.5	11/21/2014 9:30:00 AM	11/24/2014 8:35:00 AM	64	56	Duplicate
--------------------------	--	-----	--------------------------	--------------------------	----	----	-----------

Sample Notes:**Duplicate RPD = 22.2%**

The radon test was performed using a liquid scintillation radon detector/s and counted on a liquid scintillation counter using approved EPA testing protocols for Radon in Air testing. The EPA recommends fixing your home if the average of two short-term tests taken in the lowest lived-in level of the home show radon levels that are equal to or greater than 4.0pCi/L. The EPA recommends retesting your home every two years.

Please contact EMSL Analytical, Inc. or your State Health Department for further information.
 All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of Radon in Air.

Report Note



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-0327
<http://www.EMSL.com> cinnaminsonradonlab@emsl.com

EMSL Order: 381406690
CustomerID: CHEM51
CustomerPO: 1371
ProjectID:

Attn: **Dan Sullivan**
ChemScope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Phone: (203) 865-5605
Fax: (203) 498-1610
Received: 11/26/14 2:48 PM
Analysis Date: 11/27/2014
Collected: 11/21/2014

Project: **CS #: 187-240**

Test Site: **Cady**
21 Danbury Avenue
Westport, CT 06880

Test Report: Radon in Air Test Results

Analyst(s)

Tiffanie Cosgrove (3)

Garrett A. Ray, Laboratory Manager
Certified Radon Measurement Specialist NRSB 5SS0093
NJ MES12264, FL R2001, NE 116, PA 2572

In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. In no event shall EMSL be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder. The test results meets all NELAC requirements unless otherwise specified. Accreditations: NRSB ARL6006, NJ DEP 03036, MEB 92525, PA 2573, IN 00455, IA L00032, RI RAS-024, ME 20200C, NE RMB-1083, NY ELAP 10872, NM 885-10L, FL RB2034, OH RL-39, NRPP #106178AL, KS-LB-0005

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 12/01/2014 16:36:38

Please visit www.radontestinglab.com



130 North
Cinnaminson, NJ 08077
Tel: 800-220-3675 • Fax: 856-786-0327
www.radontestinglab.com

381406690

RECEIVED
CINNAMINSON, N.J.
2014 NOV 26

CS# 187-240
PO# 1371

Chem 1
5day

Radon In Air Data Sheet

Send Written Report To:

Name Dan Sullivan - Cheshire
Address 15 Maultsby Street
City North Haven State CT Zip 06473
Phone 203-865-5605 Fax 203-498-1610
Email Sullivan,Cheshire@snet.net
Technician Name Dan Sullivan
Technician Certification # 0411/24 1007, 107005RT
Technician Signature [Signature]

1ST RED VIAL # 178774
LOCATION CS# 187-240-1R

Basement First Floor Bedroom Den
 Living Room Other 12/11/21
 Location in Room Master Countertop

2ND RED VIAL # _____
(If Purchased)

The device has been scientifically tested to provide reliable indoor radon measurements when exposed to temperatures between 60 and 80 degrees F; temperatures outside this range will invalidate the test results.

Kit # 106481 (Outside of Box)

The test device must remain open for 48 to 96 hours • Return this section with the test device to the laboratory

Property Tested:

Name Cady
Address 21 Danbury Road Avenue
City Westport
Municipality _____ County Fairfield
State CT Zip 06

Check here if this is a Post Mitigation test.

Technician Name _____
Technician Certification # _____
Technician Signature _____

INDOOR CONDITIONS

Temperature 67 / 64 °F Humidity 37 / 56 %
11-21 11-24 11-21 11-24

EXPOSURE PERIOD

Beginning Date: 11 / 21 / 2014

Time: 9:30 (AM) / PM (Circle)

Ending Date: 11 / 24 / 2014

Time: 8:35 (AM) / PM (Circle)

Tear Here



EMSL, Inc.
Route 130 North
Cinnaminson, NJ 08077
Tel: 800-220-3675 • Fax: 856-786-0327
www.radontestinglab.com

EMSL
CINNAMINSON, N.J.

381406690

CS#187-240
PO#1371

ChemS
5day

Radon In Air Data Sheet

Send Written Report To:

Name Dan Sullivan - ChemSage
Address 15 mainthrop Street
City North Haven State CT Zip 06473
Phone 203-565-5605 Fax 203-498-1610
Email sullivan.chemsage@snet.net
Technician Name Dan Sullivan
Technician Certification # 107005 RT
Technician Signature [Signature]

1ST RED VIAL # 178802
LOCATION CS#187-240-2R

Basement First Floor Bedroom Den
 Living Room Other 12A 11/21
 Location in Room master's bedroom

2ND RED VIAL # 178909 Dup
(If Purchased) CS#187-240-3R

The device has been scientifically tested to provide reliable indoor radon measurements when exposed to temperatures between 60 and 80 degrees F; temperatures outside this range will invalidate the test results.

Kit # 106482 (Outside of Box)

The test device must remain open for 48 to 96 hours • Return this section with the test device to the laboratory

Property Tested:

Name Cady
Address 21 Danbury Avenue
City Westport
Municipality _____ County Fairfield
State CT Zip 064

Check here if this is a Post Mitigation test.
Technician Name _____
Technician Certification # _____
Technician Signature _____

INDOOR CONDITIONS

Temperature ¹¹⁻²¹ 67 / ¹¹⁻²⁴ 64 °F Humidity ¹¹⁻²¹ 37 / ¹¹⁻²⁴ 56 %

EXPOSURE PERIOD

Beginning Date: 11 / 21 / 2014

Time: 930 AM PM (Circle)

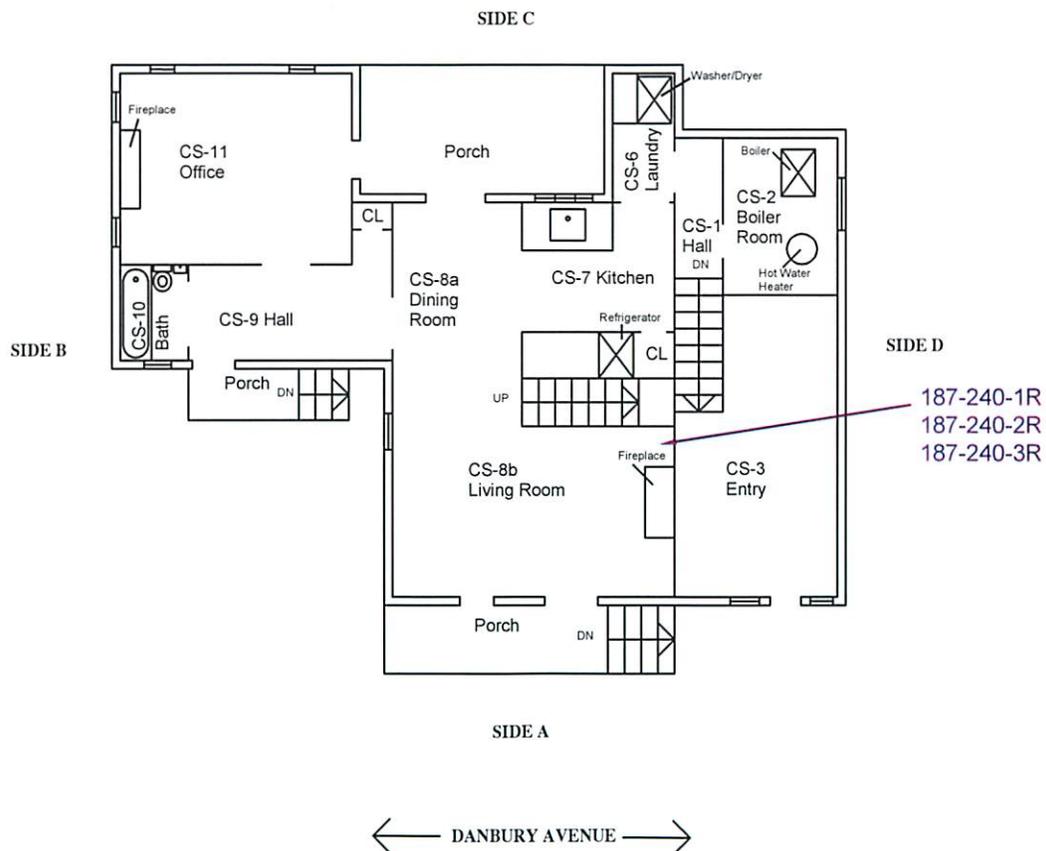
Ending Date: 11 / 24 / 2014

Time: 835 AM PM (Circle)

ChemScope Inc.

Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 First Floor

RADON TESTING LOCATION DRAWING



LEGEND OF SYMBOLS

#R	Radon Test Location

NOTATIONS

DRAWN BY: LEIGH HONOROF

ChemScope Inc.

FIRST FLOOR

SHEET 1/14

LEAD/MOLD/ASBESTOS
 RADON INSPECTION
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NUMBER

187-240

SCALE

NOT TO SCALE

DATE

11/21/14

1R

ChemScope INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610

PRIOR NOTICE OF INSPECTION

Site #013 (Cady) - Application #1486
A radon test is scheduled for the property at 21 Danbury Avenue, Westport, CT

Tentative device placement

Day Friday Date 11/21/2014 Time 9:30AM

Tentative device pick-up

Day Monday Date 11/24/2014 Time 8:30AM

Please inform the occupant. *We will request a signature on our standard form to ensure required conditions can be met to help assure the test is accurate.*

Required Closed-building conditions

- Closed-building conditions must be maintained for 12 hours prior to the initiation of measurements lasting less than four days and throughout the test period.
- All windows on all levels must be kept closed and external doors must be kept closed (except for momentary entry and exit).
- Heating and cooling systems must be set to normal, occupied operating temperatures; fan/blower controls must be set to intermittent activity unless continuous activity is a permanent setting.
- Whole house fans must not be operated.
- Occupants should avoid excessive operation of clothes dryers, range hoods, bathroom fans and other mechanical systems that draw air out of the building.
- Wood burning fireplaces must not be operated unless they are the primary sources of heat for the dwelling.

We thank you for your cooperation in helping to assure safe and healthy homes. For any concerns or questions please contact me at 203-865-5605.

Sincerely,



Daniel P. Sullivan
Vice President, Operations

D(dan):\myfilesds\mydocuments\Radon\Radon Forms 2014.doc

National Radon Proficiency Program



February 20, 2013

Daniel Sullivan
Chem Scope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Residential Measurement Provider

NRPP Certification Number: 107005 RT

NRPP Expiration Date: 2/28/2015

Your NRPP identification card is enclosed. Your certification will expire on the date indicated above. Information regarding the National Radon Program may be obtained by visiting our web site located at nrpp.info.

Comments:

Best regards.

Angel Anderson Price, Executive Director, NRPP

Non-Photo ID

ChemScope INDUSTRIAL HYGIENE • ENVIRONMENTAL CHEMISTRY

15 Moulthrop Street, North Haven, CT 06473-3686 • Phone (203) 865-5605 • Fax (203) 498-1610

Scott Feulner
Diversified Technology Consultants (DTC)
2321 Whitney Avenue, Suite 301
Hamden, CT 06518

12/30/2014

**PRELIMINARY MOLD ASSESSMENT
SITE 013 (CADY) – 21 DANBURY AVENUE, WESTPORT, CT
APPLICATION # 1486
CS#187-240, 11/21/2014, PAGE 1 OF 4**

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Attachments:

- Mold Location Drawing(s) – 1 page(s)
- Mold Sample Analysis Report and Chain of Custody Document, 3 page(s)
- Mold Sample Location Drawing – 1 page(s)

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File Location:

D(dan):\myfilesds\mydocuments\Mold\indoorfo_2014.doc

This investigation and information provided in this report depends partly on background information provided by the client. This report is intended for the use of the client. The scope of services performed may not be appropriate for other users and any use of this report by third parties is at their sole risk. This report is intended to be used in its entirety. No excerpts may be taken to be representative of this report.

It is possible that hidden mold may be growing inside the building cavities. Some floor, wall or ceiling demolition would be needed to find hidden mold.

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INTRODUCTION

EXECUTIVE SUMMARY: The only mold visible within the scope of our assessment was on stored materials in the basement crawlspace. The floor of the crawlspace is a gravel floor which tested as damp and may contain mold growth.

BUILDING DESCRIPTION: The subject building is a two-story, single family, residential structure totaling approximately 1700 sq ft, which was built in 1930 of wood-frame construction. In addition to the two floors of living space there is a basement with a crawlspace. The house is heated from a boiler located in the west corner of the first floor. The crawlspace is unfinished with a gravel floor and a ceiling insulated with a combination of fiberglass and mineral wool. At the time of our screening, there were no children under the age of six residing at this subject house and the house was not being used as a daycare facility. At the time of our inspection the heat, electricity and water were all in service and the house was occupied.

BACKGROUND: We understand the subject house suffered damage as a result of hurricane Sandy on October 29-30, 2012. We understand the house suffered mainly from water damage in mechanical areas in relation to the storm. We understand the scope of the renovations still to be completed as follows: mitigation to electrical service, water heater, replacement of boiler room walls and insulation, and work in the foyer from the lower entry, and electrical wiring repairs below the first floor.

INSPECTION AND TESTING: Dan Sullivan of Chem Scope, Inc. was at the site on 11/21/2014 to conduct the subject tests. All of the doors and windows were closed at the time of our inspection. Our work included:

- Visual inspection
- Temperature/Humidity and Moisture in building materials

SCOPE OF WORK: Our client has hired us to do a preliminary mold assessment of the basement and crawlspace only, where there was past water damage.

MOLD ASSESSMENT REPORT SYNOPSIS

Observations from Visual Inspection/temperature and humidity testing: We arrived on site at around 9:00 AM. The weather was cold and clear at the time of our assessment. The temperature at the time of our assessment was about 30 deg F. We were let into the house by our client and the homeowner. There was no visible mold growth on the first floor level and there were no unusual smells or odors.

The crawlspace has a gravel floor and a wood ceiling. The walls of the crawlspace were concrete with a blue Styrofoam insulation board adhered to them. The wood ceiling was covered with a combination of rockwool and fiberglass insulation. No suspect mold growth was seen above the insulation and the insulation tested as dry. The gravel floor of the crawlspace tested as 40% wme (wood moisture equivalents). The stored materials in the crawlspace has signs of visible mold growth. The wood ceiling, wood beams, fiberglass and rockwool insulation all tested as < 20% wme. There were no unusual smells or odors in the basement or crawlspace.

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MOLD ASSESSMENT REPORT SYNOPSIS (cont)

Interior dew point levels indicate that the air is dry in the subject house. The Relative humidity in the basement crawlspace is elevated, which is expected with a gravel floor and no dehumidifier running in the space. The temperature and humidity, inside vs outside was determined using a sling psychrometer. Normal dew point levels are generally considered between 10 and 21 °C (50 and 69 °F). In areas with dew points under 10 °C (50 °F), the air is considered too dry. In areas with dew points above 21 °C (69 °F), the air is considered too humid. Normal relative humidity for a house is 30-50% depending on the outdoor climate.

Table 1 - Temperature & Humidity Results (11/21/2014, 767 mm Hg)

Location	Dry Bulb (°F) (Room / Air Temperature)	Wet Bulb (°F)	%RH	Dew Point (°F)
CS-8b Living Room	68	53	34	39
CS-7 Kitchen	68	53.5	36	40
CS-2 Boiler Room	66.5	53	39	41
CS-15 Bedroom 1	67	53	37	40
Crawlspace	49	43	60	36
Exterior	32	26	42	11

MOLD IN BULK SAMPLE RESULTS: two bulk samples were collected for analysis. The pink fiberglass outside the Boiler Roof had areas of a black discoloration. The black was thought to be soot perhaps from an old chimney exhaust leak. The black insulation was sampled (187-240-2M) and a reference sample of pink insulation was also sampled (187-240-1M). Mold growth was not detected on either of the pink insulation samples.

Table 3 - Principal Molds detected on surfaces – 11/17/2014

Sample #	Location / Surface Tested	Principal Mold Detected
187-240-1M (Bulk)	Pink fiberglass ceiling insulation / Stairs outside Boiler Room (Reference Sample) <10% wme	None Detected
187-240-2M (Bulk)	Pink fiberglass ceiling insulation with black discoloration/ Stairs outside Boiler Room (Reference Sample) <10% wme	None Detected

General Information about Mold: EPA does not call for routinely air testing for mold in assessment. Mold is always present indoors and outdoors and is a natural and necessary part of the environment. There are no Connecticut or federal health based standards for molds. EPA and other agencies report that molds have the potential to cause health effects. The main concerns are people with allergies, asthma and compromised immune systems. There are thousands of mold species, and many are not yet identified. There is much more to learn and new information is becoming available regularly. In mold assessment, we strive to detect moisture problems that cause excessive biological growth and when appropriate, recommend a plan of corrective action. When moisture problems occur, mold growth is likely if organic materials are not promptly dried up. Hidden mold may exist which cannot be seen without demolition.

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RECOMMENDATIONS

In general, correction of water damage requires first eliminating the source of the water. The moisture in the crawlspace is coming up through the gravel floor. If the gravel floor is to remain and stored items are to be kept in the space, a dehumidifier should be run to a fixed drain.

For guidance on mold, log onto EPA.gov and search mold remediation or the CT-DPH web site.

1. Begin drying the subject rooms and continue drying until standard dry conditions are reached.
2. Dehumidifiers and air scrubbers should be throughout the subject rooms and if possible, installed into a fixed drain so that it can run without interruption.
3. Perform mold remediation (see below).

Crawlspace (For Removal and/or Disposal of Stored materials with Mold Contamination):

1. The work area must be unoccupied except for authorized personnel during subsequent work. Use poly to isolate the work area (entire air) from the rest of the house. Critical barriers must be put over the return air plenum openings to the second floor. The HVAC system must be shut down (locked-out/tagged-out) and isolated.
2. Stored materials and furniture should be removed for the cleanup. Any visible dust should be cleaned from the items before moving. Porous materials should be removed and disposed of providing owner approves. An inventory of such materials should be kept.
3. Non-porous materials should be carefully cleaned and moved to a storage area for a visual inspection by the owner.
4. Negative air must be used to purge out the areas using HEPA filtered blowers, at least 2000 CFM per area.
5. After the work is complete, a final visual inspection is suggested for quality control. Air samples could be run at the conclusion of the work at the owner's discretion. Any testing should be done after the negative air units have been shut off for at least a day.

Limitations of Mold Removal: It is well known in the industry that mold can never completely be removed from a site because of the constant presence of mold spores in the outdoor environment and the ability of molds to remain dormant within a building. If moisture problems recur, mold growth is likely.

For guidance on mold, log onto EPA.gov and search mold remediation or the state DPH web site.

See our separate Asbestos Pre-Renovation Inspection Report and Lead Report for details regarding asbestos and lead present in these areas.

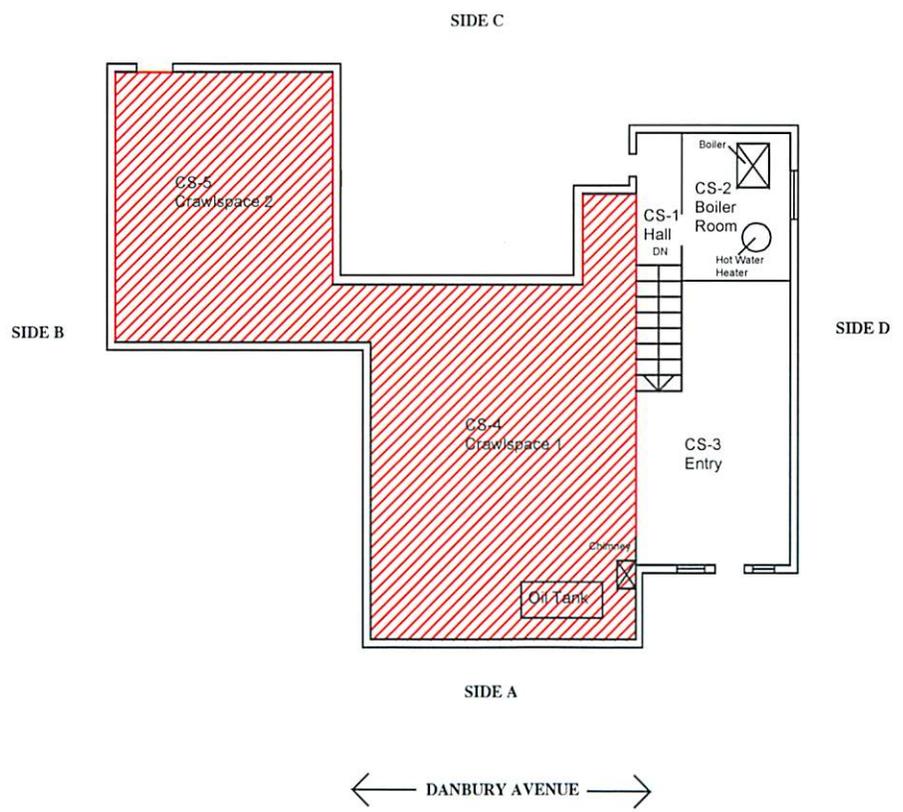
Please call me if there are any questions about this report or if you need further assistance.

Thank you for calling on us.



Dan Sullivan
Vice President, Operations

ChemScope Inc.
 Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 Mechanical Areas
 MOLD LOCATION DRAWING



Legend of Abbreviations	
	Location of Mold on Stored Materials

NOTATIONS

Drawn by: LEIGH HONOROP

ChemScope Inc.

MECHANICAL AREAS

LEAD/MOLD/ASBESTOS
 RADON INSPECTION
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NO.	187-240
SCALE	NOT TO SCALE
DATE	11/21/14

3



EMSL Analytical, Inc.

29 North Plains Highway, Unit # 4 Wallingford, CT 06492
Phone/Fax: 203-284-5948 / (203) 284-5978
<http://www.EMSL.com> / wallingfordlab@emsl.com

Order ID: 241404659
Customer ID: CHEM51
Customer PO: 1372
Project ID:

Attn: Dan Sullivan
ChemScope, Inc.
15 Moulthrop Street
North Haven, CT 06473

Phone: (203) 865-5605
Fax: (203) 498-1610
Collected:
Received: 11/21/2014
Analyzed: 12/01/2014

Proj: CS#187-240

Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Bulk Samples (EMSL Method: M041)

Lab Sample Number:	241404659-0001	241404659-0002			
Client Sample ID:	187-240-1M	187-240-2M			
Sample Location:	Pink fiberglass ceiling insulation	Black/pink fiberglass ceiling insulation			
Spore Types	Category	Category			
Agrocybe/Coprinus	-	-			
Alternaria	-	-			
Ascospores	-	-			
Aspergillus/Penicillium	-	-			
Basidiospores	-	-			
Bipolaris++	-	-			
Chaetomium	-	-			
Cladosporium	-	-			
Curvularia	-	-			
Epicoccum	-	-			
Fusarium	-	-			
Ganoderma	-	-			
Myxomycetes++	-	-			
Paecilomyces	-	-			
Rust	-	-			
Scopulariopsis	-	-			
Stachybotrys	-	-			
Torula	-	-			
Ulocladium	-	-			
Unidentifiable Spores	-	-			
Zygomycetes	-	-			
Fibrous Particulate	-	-			
Hyphal Fragment	-	-			
Insect Fragment	-	-			
Pollen	-	-			

Sample Comment: 241404659-0001 None Detected
Sample Comment: 241404659-0002 None Detected

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut
* = Sample contains fruiting structures and/or hyphae associated with the spores.

Gloria V. Oriol, Laboratory Manager
or Other Approved Signatory

No discernable field blank was submitted with this group of samples.

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation of the data contained in this report is the responsibility of the client. "-" denotes not detected. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Wallingford, CT AIHA-LAP, LLC--EMLAP Accredited #165118

Initial report from: 12/01/2014 14:24:50

For information on the fungi listed in this report please visit the Resources section at www.emsl.com



EMSL ANALYTICAL, INC.
LABORATORY-PRODUCTS-TRAINING

Chain of Custody

EMSL Order Number (Lab Use Only):

241404659

Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5978

Company : Chem Scope, Inc.		EMSL-Bill to: <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 15 Moulthrop Street		Third Party Billing requires written authorization from third party	
City: North Haven	State/Province: CT	Zip/Postal Code: 06473	Country: United States
Report To (Name): Dan Sullivan		Telephone #: 2038655605	
Email Address: sullivan.chemscope@snet.net		Fax #: 203-498-1610	Purchase Order: 1372
Project Name/Number: CS#187-240		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: CT		Connecticut Samples: <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

Asbestos

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ 8hr. TWA TEM - Air <input type="checkbox"/> 4-4.5hr TAT(AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Water Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	PLM - Bulk <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative) Other:
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Lead (Pb) Flame Atomic Absorption <input type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> TCLP SW846-1311/7420/SM 3111B Graphite Furnace Atomic Absorption <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9	ICP <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C	Materials Science <input type="checkbox"/> Common Particle ID (large particles) <input type="checkbox"/> Full Particle ID (environmental dust) <input type="checkbox"/> Basic Material ID (solids) <input type="checkbox"/> Advanced Material ID <input type="checkbox"/> Physical Testing (Tensile, Compression) <input type="checkbox"/> Combustion-by-products (soot, char, etc.) <input type="checkbox"/> X-Ray Fluorescence (elem. analysis) <input type="checkbox"/> X-Ray Diffraction (Crystalline Part.) <input type="checkbox"/> MMVF's (Fibrous glass, RCF's) <input type="checkbox"/> Particle Size (sieve/microscopy/laser) <input type="checkbox"/> Combustible Dust <input type="checkbox"/> Petrographic Examination Other: <input type="checkbox"/>
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Microbiology

Wipe and Bulk Samples <input checked="" type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> Pseudomonas aeruginosa Water Samples <input type="checkbox"/> Total Coliform & E.coli (P/A) <input type="checkbox"/> Fecal Coliform (SM 9222D) <input type="checkbox"/> Sewage Screen <input type="checkbox"/> Heterotrophic Plate Count (SM 9215)	Air Samples <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing Real Time Q-PCR (See Analytical Guide for Code) Code: Legionella <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 Other: <input type="checkbox"/>	IAQ Nuisance Dust NIOSH <input type="checkbox"/> 0500 <input type="checkbox"/> 0600 Airborne Dust <input type="checkbox"/> PM10 <input type="checkbox"/> TSP Silica Analysis: <input type="checkbox"/> All Species Silica Analysis - Single Species <input type="checkbox"/> Alpha Quartz <input type="checkbox"/> Cristobalite <input type="checkbox"/> Tridymite <input type="checkbox"/> HVAC Efficiency <input type="checkbox"/> Carbon Black <input type="checkbox"/> Airborne Oil Mist Radon Testing: Call for Kit and COC Other: <input type="checkbox"/>
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**Comments/Special Instructions: Bill To: Chem Scope, Inc., 15 Moulthrop Street, North Haven, CT, 06473, United States
Attention: Gina Eisensmith Phone: 2038655605 Email: gina.chemscope@snet.net Purchase Order: 1372

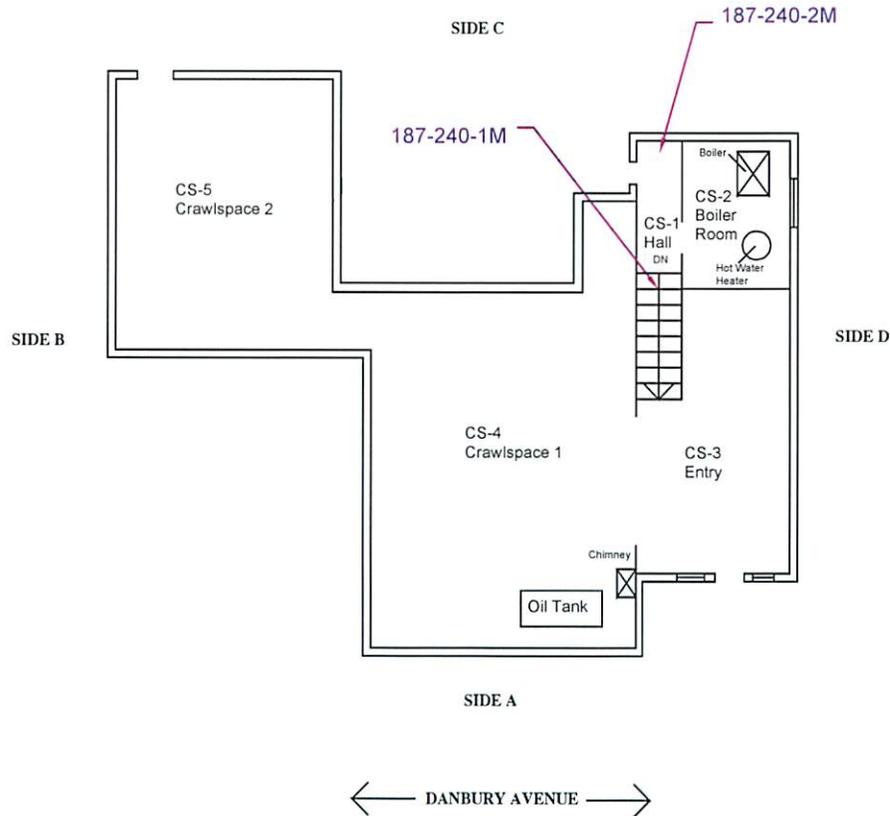
Client Sample #'s	=187-240-(1M-2M)	Total # of Samples: 2
Relinquished (Client):	Date: 11/21/14	Time:
Received (Lab):	Date:	Time:

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

ChemScope Inc.

Site # 13 (Cady) - Application #1486
 21 Danbury Avenue, Westport, CT
 CS#187-240, 11/21/14
 Mechanical Areas

MOLD SAMPLE LOCATION DRAWING



LEGEND OF SYMBOLS

#M	Mold Sample Location

NOTATIONS

LEIGH HONOROF

ChemScope Inc.

MECHANICAL AREAS

LEAD/MOLD/ASBESTOS
 RADON INSPECTION
 21 DANBURY AVENUE
 WESTPORT, CT

PROJECT NO.	187-240
SCALE	NOT TO SCALE
DATE	11/21/14

3

Appendix B

DECED/SHPO/DOH Professional Certification Form

For all General Permit Applications submitted as part of the Flood Management Certification for Disaster Recovery Activities, the following certification must be signed and sealed by a professional engineer licensed to practice in Connecticut.

Property: 21 Danbury Ave. Westport, CT 06880

Application Number: 1486

"I certify that in my professional judgment, the above referenced project has been designed consistent with the Flood Management Certification for Disaster Recovery Activities as approved by DEEP and that the information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement made in the submitted information may, pursuant to Section 22a-6 of the General Statutes, be punishable as a criminal offense under Section 53a-157b of the General Statutes, and may also be punishable under Section 22a-438 of the General Statutes."

03/26/2015

Signature of Applicant

Date

Name of Applicant (print or type)

Title



03/26/2015

Signature of Professional Engineer

Date

J. Andrew Belivacqua

18477

Name of Professional Engineer (print or type)

P.E. Number

Affix P.E. Stamp Here

