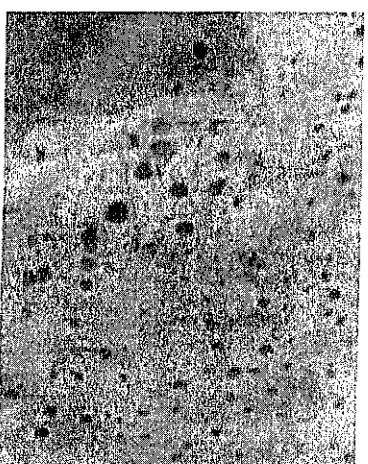
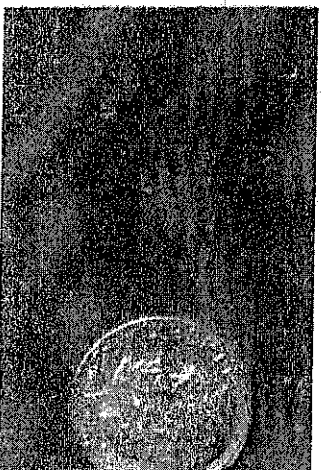
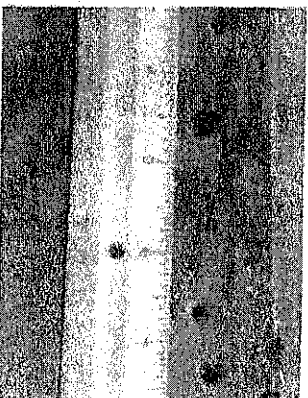


# Wood Boring Beetles

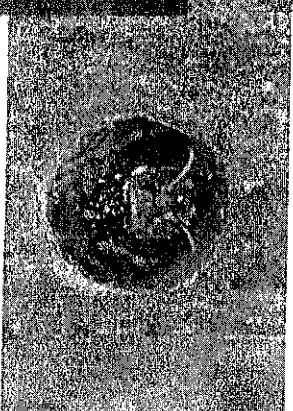
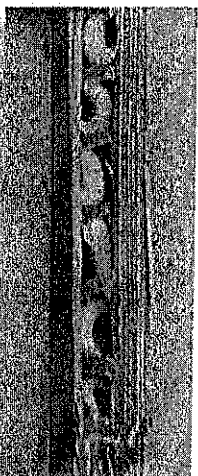
## Powderpost Beetles

- The term "powderpost" comes from the fact that the larvae of these beetles feed on wood and, given enough time, can reduce it to a mass of fine powder.
- They infest and can reinfest dry seasoned wood.
- Infestations are often built into structures as a result of using infested lumber or are frequently brought into homes in infested firewood.
- The first evidence of infestation is usually piles of very fine sawdust on or beneath wood and small holes in the wood surface.
- Adults emerge between 1 and 5 years
- Adults are short-lived and active mainly at night
- Will only lay eggs on/in natural, bare wood
- Have specific moisture requirements for survival.
- PPB larvae spend months or years inside wood while developing. They feed mainly on the starch content.
- Their presence is only apparent when they emerge as adults, which leaves behind pinhole-sized openings, often called "shot holes".
- Pin-sized exit holes
- Feed on Starch, Sugar, or Proteins
- Leave fine powder
- Larvae determines Activity
- Damage hardwood floors, trim, molding, furniture
- Can continue cycle for generations
- Wooden tools or tool handles, frames, furniture, gun stocks, books, toys, bamboo, flooring, and structural timbers are just some of the items Powder Post Beetles will nest in.



# Carpenter Bees

- Active Mid May through August
- Female excavates chambers to lay eggs (6 – 48 inches)
- Male appears aggressive but has no stinger
- Female tends to larvae and young
- Typically larger than bumble bee
- Males have white patches on their face
- One pair per nest
- Next generation will come back to same area the following year to lay eggs
- Carpenter bees prefer natural wood



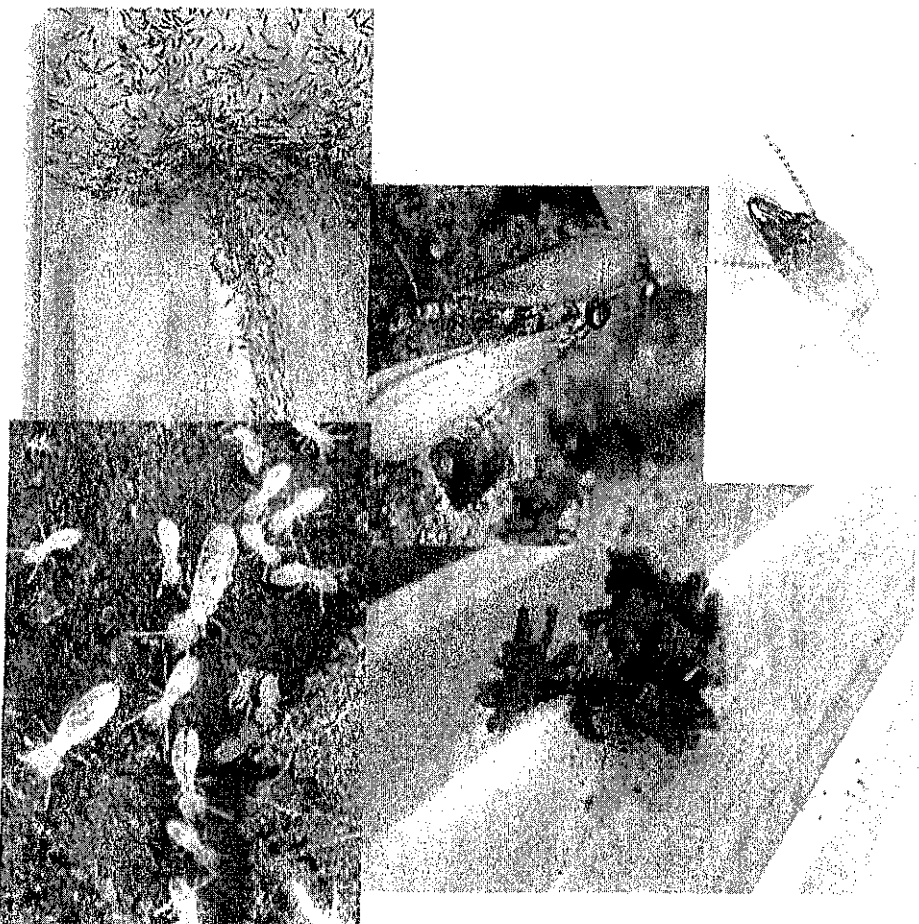
# Carpenter Ants

- Feed on sugar and protein: dead and living insects, honeydew, honey, meat, jelly
- Forage up to 100 yards to find food
- Can have more than one colony
- Typically forage between sunset and midnight
- Distinguishable by their bent antennae, pinched waist, 2 separate sized sets of wings
- Destroy wood for colonization; nesting purposes and laying eggs
- Prefer damp wood but will chew into adjacent sound wood as the population grows
- Nests are created by excavating extensive networks or galleries by chewing moist or decaying wood
- Frass is made when the carpenter ant "cleans" out the wood and waste products (excrement, dead insects, cast skins, uneaten food)
- Frass is used to help locate carpenter ant activity/nests



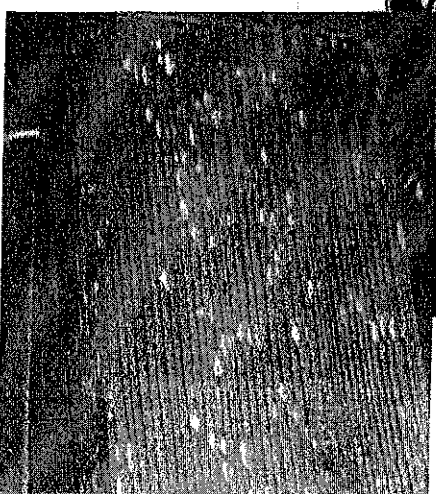
# Subterranean Termite Facts

- 13 to 14 colonies of termites in an acre of land.
- As many as 2 million termites per colony -- depending on age of colony.
- A typical home may have 3 to 4 colonies situated under or around it.
- The termites on Earth outweigh the humans on Earth.
- Termites cause more damage to homes in US than storms and fires combined.
- Every year, termites cause more than two billion dollars in property damage, repair and control costs in the United States alone.
- Caste system of King, Queen, Soldiers, and Workers.



# White Pocket Rot

- Wood decayed by white-rot fungi is fibrous and spongy, and is bleached.
- Sometimes it has thin, dark lines around decayed areas.
- The wood does not shrink until decay is advanced.
- Fungus that attacks the heartwood of living trees.
- Once the tree is harvested the fungus dies.
- No control measures are necessary.



# Brown Rot

- More commonly attacks softwoods, however occasionally colonizes both types of wood.
- Fungi decay wood and reduce its strength.
- Grows only on moist wood.
- Wood becomes greatly weakened even before decay can be seen
- Wood is more brown in color than normal, tending to crack across the grain
- When dry, wood will turn to powder when crushed
- Fungi can be present in the wood when it is brought into the house, or can grow from spores that are **always** present in the air and soil.



# Water Conducting Fungus

- *Poria incrassata* is the only fungus that can conduct water very far
- *Poria* infested wood is often mistakenly identified as subterranean termite damage
- This type of fungus can transport water for several feet through large root-like structures called rhizomorphs
- Once established, it can quickly spread through a building and destroy large areas of flooring and walls in as little as a year or two
- The rhizomorphs that characterize these fungi can be up to an inch in diameter and white to black depending on their age.



# Causes of Fungus

## MOISTURE:

- Plumbing leakage
- Downspouts
- A/C drip tubes
- Condensation of ventilation systems
- Improper ventilation
- 18% - 20%:

Potential moisture problem (Fungi will begin to grow)

- 22% - 25%:

Active fungi

- 28% and over:

**WET!**



- 212 6. **Seller's Property Disclosure.** Pursuant to the requirements of the Tennessee Residential Property Condition Disclosure  
213 Act at Tenn. Code Ann. § 66-5-201, et seq. as amended, a Property Condition Disclosure Statement, Exemption, or if  
214 Buyer waives Disclosure, a Disclaimer, has been or will be provided prior to the Binding Agreement Date.
- 215 7. **Lead-Based Paint Disclosure (Select the appropriate box below. Items not selected are not part of this**  
216 **Agreement).**  
217  does not apply.  does apply (Property built prior to 1978 – see attached Lead-Based Paint Disclosure).
- 218 8. **Inspections.**
- 219 A. **Buyer's Right to Make Inspection(s).** All inspections/reports, including but not limited to the home inspection  
220 report, those required/recommended in the home inspection report, Wood Destroying Insect Infestation  
221 Inspection Report, septic inspection and well water test, are to be made at Buyer's expense, unless otherwise  
222 stipulated in this Agreement. The parties hereto agree that in the event Buyer shall elect to contract with a third  
223 party inspector to obtain a "Home Inspection" as defined by Tennessee law, said inspection shall be conducted by a  
224 licensed Home Inspector. However, nothing in this paragraph shall preclude Buyer from conducting any inspections  
225 on his/her own behalf, nor shall it preclude Buyer from retaining a qualified (and if required by law, licensed)  
226 professional to conduct inspections of particular systems or issues within such professional's expertise or licensure,  
227 including but not limited to inspection of the heating/cooling systems, electrical systems, foundation, etc., so long as  
228 said professional is not in violation of Tenn. Code Ann. § 62-6-301, et seq. as may be amended. **Seller shall cause**  
229 **all utility services and any pool, spa, and similar items to be operational so that Buyer may complete all**  
230 **inspections and tests under this Agreement.** Buyer agrees to indemnify Seller from the acts of himself, his  
231 inspectors and/or representatives in exercising his rights under this Purchase and Sale Agreement. Buyer's  
232 obligations to indemnify Seller shall also survive the termination of this Agreement by either party, which shall  
233 remain enforceable. **Buyer waives any objections to matters of purely cosmetic nature (e.g. decorative, color or**  
234 **finish items) disclosed by inspection. Buyer has no right to require repairs or alterations purely to meet**  
235 **current building codes, unless required to do so by governmental authorities. In the event Buyer fails to timely**  
236 **make such inspections and respond within said timeframe as described herein, the Buyer shall have forfeited any**  
237 **rights provided under this Paragraph 8, and in such case shall accept the Property in its current condition,**  
238 **normal wear and tear excepted.**
- 239 B. **Initial Inspections.** Buyer and/or his inspectors/representatives shall have the right and responsibility to enter the  
240 Property during normal business hours, for the purpose of making inspections and/or tests of the Property. Buyer  
241 and/or his inspectors/representatives shall have the right to perform a visual analysis of the condition of the  
242 Property, any reasonably accessible installed components, the operation of the Property's systems, including any  
243 controls normally operated by Seller including the following components: heating systems, cooling systems,  
244 electrical systems, plumbing systems, structural components, foundations, roof coverings, exterior and interior  
245 components, any other site aspects that affect the Property, and environmental issues.
- 246 C. **Wood Destroying Insect Infestation Inspection Report.** If desired by Buyer or required by Buyer's Lender, it  
247 shall be Buyer's responsibility to obtain *at Buyer's expense* a Wood Destroying Insect Infestation Inspection Report  
248 (the "Report"), which shall be made by a Tennessee licensed and chartered pest control operator.  
249 **The foregoing expense may be subject to governmental guidelines relating to VA Loans (See VA/FHA Loan**  
250 **Addendum if applicable).**  
251 The inspection shall include each dwelling, garage, and other permanent structure on the Property excluding  
252 \_\_\_\_\_ for evidence of active infestation and/or damage.  
253 Buyer shall cause such Report to be delivered to Seller simultaneously with the delivery of the Buyer Inspection  
254 Contingency Removal / Notification or equivalent written notice. If the Report indicates evidence of active  
255 infestation, Seller agrees to treat infestation at Seller's expense and provide documentation of the treatment to Buyer  
256 prior to Closing. Requests for repair of damage, if any, may be addressed in the Buyer Inspection Contingency  
257 Removal/Notification form or equivalent written notice pursuant to Subparagraph 8.D., Buyer's Inspection and  
258 Resolution below.
- 259 D. **Buyer's Inspection and Resolution.** Within \_\_\_\_\_ days after the Binding Agreement Date ("Inspection  
260 Period"), Buyer shall cause to be conducted any inspection provided for herein, including but not limited to the  
261 Wood Destroying Insect Infestation Inspection Report AND shall provide written notice of such to Seller using the  
262 Buyer Inspection Contingency Removal/Notification form or equivalent written notice as described below. **In said**  
263 **notice Buyer shall either:**  
264 (1) furnish Seller with a list of written specified objections and immediately terminate this Agreement,  
265 provided Buyer has conducted a Home Inspection or other inspection(s) as allowed herein, and in good  
266 faith discovers matters objectionable to Buyer within the scope of such inspection(s). As additional  
267 consideration for Buyer's right to terminate, Buyer shall deliver to Seller or Seller's representative, upon



# Wood Destroying Insect Inspection Report

Notice: Please read important consumer information on page 2. 243395

## Section I. General Information

Inspection Company, Address & Phone

Arrow Exterminators, Inc.  
10517 Kingston Pike, Suite 200  
Knoxville, TN 37922

Company's Charter Number

204

Date of Inspection

Address of Property Inspected

Inspector's Name, Signature & Certification, Registration, or Lic. #

Structure(s) Inspected

## Section II. Inspection Findings

This report is indicative of the condition of the above identified structure(s) on the date of inspection and is not to be construed as a guarantee or warranty against latent, concealed, or future infestations or defects. Based on a careful visual inspection of the readily accessible areas of the structure(s) inspected:

A. No visible evidence of wood destroying insects was observed.

B. Visible evidence of wood destroying insects was observed as follows:

1. Live insects (description and location):

2. Dead insects, insect parts, frass, shelter tubes, exit holes, or staining (description and location):

3. Visible damage from wood destroying insects was noted as follows (description and location):

**NOTE: This is not a structural damage report. If box B above is checked, it should be understood that some degree of damage, including hidden damage, may be present.** If any questions arise regarding damage indicated by this report, it is recommended that the buyer or any interested parties contact a qualified structural professional to determine the extent of damage and the need for repairs.

Yes  No  It appears that the structure(s) or a portion thereof may have been previously treated. Visible evidence of possible previous treatment:

The inspecting company can give no assurances with regard to work done by other companies. The company that performed the treatment should be contacted for information on treatment and any warranty or service agreement which may be in place.

## Section III. Recommendations

No treatment recommended: (Explain if Box B in Section II is checked)

Recommend treatment for the control of:

## Section IV. Obstructions and Inaccessible Areas

The following areas of the structure(s) inspected were obstructed or inaccessible:

- Basement
- Crawlspace
- Main Level
- Attic
- Garage
- Exterior
- Porch
- Addition
- Other

The inspector may write out obstructions or use the following optional key:

- |                         |  |
|-------------------------|--|
| 1. Fixed ceiling        | 13. Only visual access                 |
| 2. Suspended ceiling    | 14. Cluttered condition                |
| 3. Fixed wall covering  | 15. Standing water                     |
| 4. Floor covering       | 16. Dense vegetation                   |
| 5. Insulation           | 17. Exterior siding                    |
| 6. Cabinets or shelving | 18. Window well covers                 |
| 7. Stored items         | 19. Wood pile                          |
| 8. Furnishings          | 20. Snow                               |
| 9. Appliances           | 21. Unsafe conditions                  |
| 10. No access or entry  | 22. Rigid foam board                   |
| 11. Limited access      | 23. Synthetic stucco                   |
| 12. No access beneath   | 24. Duct work, plumbing, and/or wiring |

## Section V. Additional Comments and Attachments (these are an integral part of the report)

Attachments

**Signature of Seller(s)** or Owner(s) if refinancing. Seller acknowledges that all information regarding W.D.I. infestation, damage, repair, and treatment history has been disclosed to the buyer.

**Signature of Buyer.** The undersigned hereby acknowledges receipt of a copy of both page 1 and page 2 of this report and understands the information reported.

X

X

# Important Consumer Information Regarding the Scope and Limitations of the Inspection

Please read this entire page as it is part of this report. This report is not a guarantee or warranty as to the absence of wood destroying insects nor is it a structural integrity report. The inspector's training and experience do not qualify the inspector in damage evaluation or any other building construction technology and/or repair.

- About the Inspection:** A visual inspection was conducted in the readily accessible areas of the structure(s) indicated (see Page 1) including attics and crawlspaces which permitted entry during the inspection. The inspection included probing and/or sounding of unobstructed and accessible areas to determine the presence or absence of visual evidence of wood destroying insects. The WDI inspection firm is not responsible to repair any damage or treat any infestation at the structure(s) inspected, except as may be provided by separate contract. Also, wood destroying insect infestation and/or damage may exist in concealed or inaccessible areas. The inspection firm cannot guarantee that any wood destroying insect infestation and/or damage disclosed by this inspection represents all of the wood destroying insect infestation and/or damage which may exist as of the date of the inspection. For purposes of this inspection, wood destroying insects include: termites, carpenter ants, carpenter bees, and reinfesting wood boring beetles. This inspection does not include mold, mildew or noninsect wood destroying organisms. This report shall be considered invalid for purposes of securing a mortgage and/or settlement of property transfer if not used within ninety (90) days from the date of inspection. This shall not be construed as a 90-day warranty. There is no warranty, express or implied, related to this report unless disclosed as required by state regulations or a written warranty or service agreement is attached.
- Treatment Recommendation Guidelines Regarding Subterranean Termites:** FHA and VA require treatment when any active infestation of subterranean termites is found. If signs of subterranean termites --- but no activity --- are found in a structure that shows no evidence of having been treated for subterranean termites in the past, then a treatment should be recommended. A treatment may also be recommended for a previously treated structure showing evidence of subterranean termites --- but no activity --- if there is no documentation of a liquid treatment by a licensed pest control company within the previous five years unless the structure is presently under warranty or covered by a service agreement with a licensed pest control company.
- Obstructions and Inaccessible Areas:** No inspection was made in areas which required the breaking apart or into, dismantling, removal of any object, including but not limited to: moldings, floor coverings, wall coverings, siding, fixed ceilings, insulation, furniture, appliances, and/or personal possessions; nor were areas inspected which were obstructed or inaccessible for physical access on the date of inspection. Your inspector may write out inaccessible areas or use the key in Section IV. Crawl spaces, attics, and/or other areas may be deemed inaccessible if the opening to the area is not large enough to provide physical access for the inspector or if a ladder was required for access. Crawl spaces (or portions thereof) may also be deemed inaccessible if there is less than 24 inches of clearance from the bottom of the floor joists to the surface below. If any area which has been reported as inaccessible is made accessible, the inspection company may be contacted for another inspection. An additional fee may apply.
- Consumer Maintenance Advisory Regarding Integrated Pest Management for Prevention of Wood Destroying Insects.** Any structure can be attacked by wood destroying insects. Homeowners should be aware of and try to eliminate conditions which promote insect infestation in and around their structure(s). Factors which may lead to wood destroying insect infestation include: earth to wood contact, foam insulation at foundation in contact with soil, faulty grade, improper drainage, firewood against structure(s), insufficient ventilation, moisture, wood debris in crawlspace, wood mulch or ground cover in contact with the structure, tree branches touching structure(s), landscape timbers and wood decay. Should these or other conditions exist, corrective measures should be taken in order to reduce the chances of infestation of wood destroying insects and the need for treatment.
- Neither the inspecting company nor the inspector has had, presently has, or contemplates having any interest in the property inspected.



# INSPECTION GRAPH

# 242407

~~214073~~

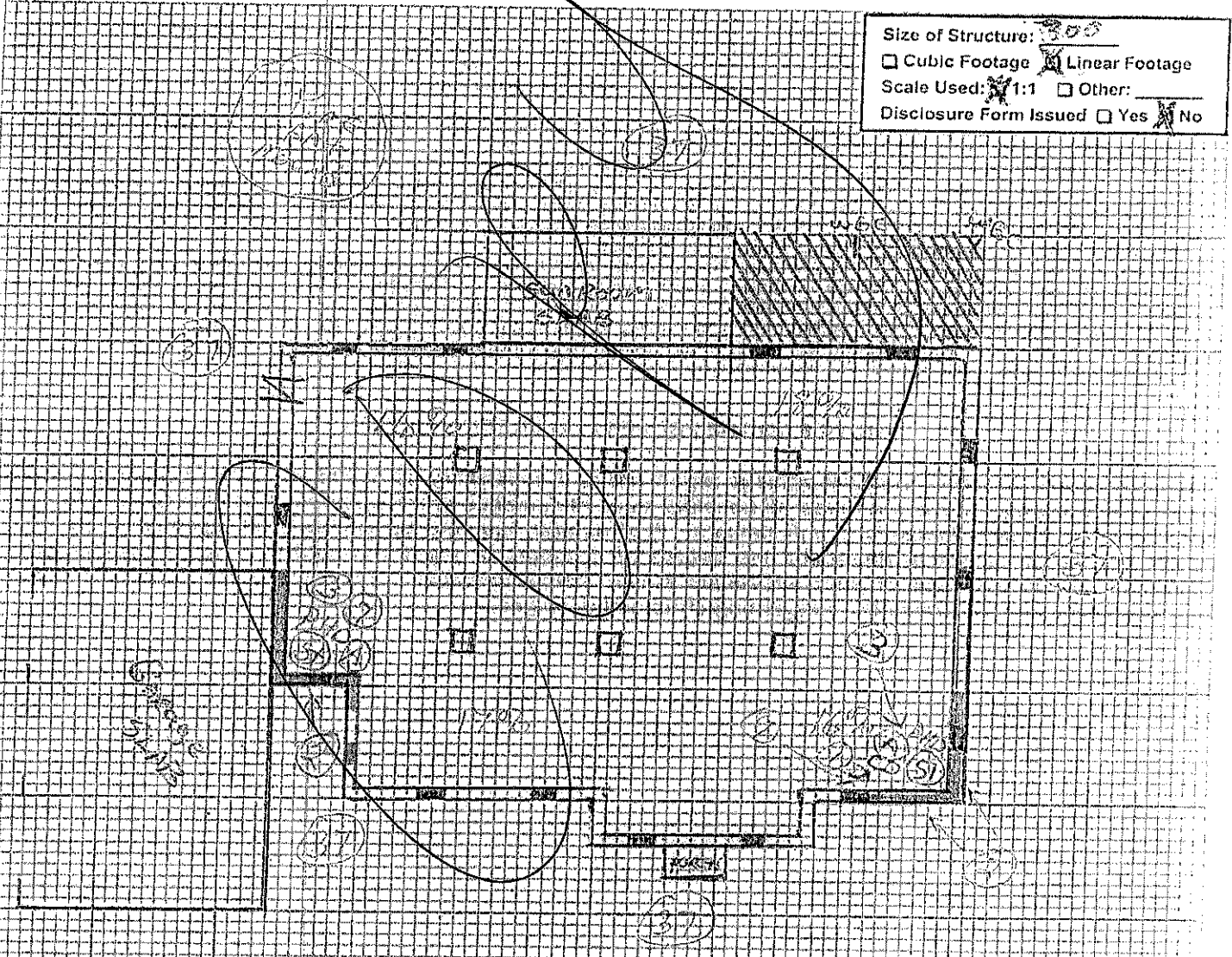
Date: 1/22/13

Inspector: Your Name

Owners/Agents Name: Al Smith Hm Ph: 555-5555 Other Ph: 555-5556 Email: ASM@THRAADL.COM

Occupants/Purchasers Name: \_\_\_\_\_ Hm Ph: \_\_\_\_\_ Other Ph: \_\_\_\_\_ Email: \_\_\_\_\_

Service Address: 10517 Kingston Pike City: Knoxville State: TN Zip Code: 37922



Size of Structure: 300  
 Cubic Footage  Linear Footage  
 Scale Used:  1:1  Other:  
 Disclosure Form Issued  Yes  No

**NOTE: This is not a structural damage report. If visible damages are noted the customer should have a structural engineer or a professional qualified in structural repairs to access the structural integrity of any noted damages.**

FOUNDATION WALLS:  BLOCK  POURED  \_\_\_\_\_ EXTERIOR CLADDING:  BRICK  STUCCO  SIDING  \_\_\_\_\_  
 CONSTRUCTION TYPE:  Finished  Unfinished:  Basement  Floating Slab  Supported Slab  Monolithic Slab  Crawl  Pier & Beam

CODE:  ACTIVE INFESTATION VISIBLE=A  SUBTERRANEAN TERMITES=ST  DRYWOOD TERMITES=DT  WOOD BORERS=WB  
 POWDER POST BEETLES=PPB  \*WOOD DECAY FUNGI=WDF  \*MOISTURE CONDITION=M  PREVIOUS INFESTATION

CONDUCTIVE CONDITIONS:  POSSIBLE HIDDEN DAMAGE=PHD  EXISTING VISIBLE DAMAGE=⊙  INACCESSIBLE AREAS=\*  
 WOOD TO GROUND CONTACT=WGC  INADEQUATE VENTILATION=IV  STANDING WATER=SW  CELLULOSE DEBRIS=CD

INSPECTORS STATEMENT LOCATION OF VISIBLE DAMAGE: NONE AT TIME OF INSPECTION  
 TYPE OF TREATMENT:  Baiting System  Liquid Treatment  Physical Barrier  Partial Treatment  Other:

TREATMENT DATE: 1/23/13 PRODUCT: SENTRION / PREMISE ESTIMATED  GALLONS /  STATIONS: 20  
 Water Well:  NO  Yes - # of Feet \_\_\_\_\_ Access Information: \_\_\_\_\_

FOR OFFICE USE ONLY:  
 Outside Power  Take Generator  Take Inspection Report  Label To Customer  Collect Payment: \$ 651.00