

Building Inspection Report

----- **Essex, VT**

Inspection Date:
11/05/2011

Prepared For:

Prepared By:
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4539.1111

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Report Overview / Summary

THE HOUSE IN PERSPECTIVE

This is a good quality, 9+- yr. old contemporary vernacular style that has been reasonably well maintained. The house can be considered in good, general, up to date condition. The street setting is pleasant and it is in a well kept section. With recommendations followed, this should remain a comfortable, relatively easily maintained home.

As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. *The improvements that are recommended in this report are not considered unusual for a home of this age and location.*

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report:

Major Concern: a system or component that is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

Repair: denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

Improve: denotes improvements that are recommended but not required right away.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

Deferred Cost: denotes significant improvements that are imminent – likely in the short term.

Links: URL links (colored in blue) will bring you to a helpful web page by using **Ctrl + click**



A qualified professional will be recommended to effect repairs/replacement in many of the recommendations in this report. Where not specifically stated, this recommendation should be assumed as noted at the beginning of each section.

Please note that those observations listed under “Discretionary Improvements” are not essential repairs, but represent logical long-term improvements/suggestions.

Adobe Acrobat Reader Tips:



<http://www.adobe.com/products/reader/>

1. Use the ‘zoom tool’ for the photos.

2. You can use the *pages (or thumbnails)* found on the left hand Navigation Pane to skip around this report quickly.

SUMMARY OF DEFECTS / OBSERVATIONS

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term along with other selected observations. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations you may consider significant and/or necessary.

Any professionals consulted or contracted for the following should read the pages of the report that are relative to the concern.

Major Item/Concern(s):

-

Safety Concern(s):

- **Repair, Safety Issue:** There is evidence of a gas leak in the vicinity of the boiler. **Page 15**
- **Safety Issue:** The electric system revealed the need for improvements and a few repairs. **Page 13**
- **Safety Issue:** Bee nests were noted in various locations. **Page 11**
- **Safety Issue:** A partially blocked dryer exhaust arrangement was observed at the rear soffit/return. **Page 9, 11, 26**
- **Safety Issue:** The overhead garage door is damaged and needs to be repaired or replaced. **Page 11**
- **Safety Issue:** The garage door opener did not automatically reverse under mechanical resistance **Page 11**
- **Safety Issue:** The exhaust vent clamps may employ gaskets that are known to deteriorate. **Page 16**
- **Safety Issue:** Combustion air for the boiler may be less than ideal. **Page 16**
- **Safety Issue:** For improved safety, it is recommended that a handrail be provided for the basement stairway. **Page 22**
- **Safety Issue, Repair:** The gas range top is lower than the counter. This can burn the counter. **Page 24**

Repair Item(s):

- **Repair:** Rippled areas and damaged flashing were noted on the rear return roof. **Page 9**
- **Repair:** The siding is not properly flashed around exterior vents. **Page 11**
- **Repair:** The front door hardware or strike should be adjusted so the door latches properly. **Page 11**
- **Repair:** A proper deck flashing should be provided at the intersection of the exterior wall. **Page 12**
- **Repair:** Repairs to the heating system are necessary. **Page 15, 16**
- **Repair:** The exterior hood of the propane gas tank is leaning badly. **Page 20**
- **Repair:** It is recommended that the water heater be serviced. **Page 19**
- **Repair:** The vent stack that penetrates to the attic should extend above the roof **Page 20**

Improve:

- **Improve:** Damaged/cracked siding in a few locations should be repaired or replaced. **Page 11**

Monitor:

- **Monitor:** The installation of the roof/wall flashing is less than ideal. **Page 9**
- **Monitor:** A ground fault circuit interrupter (GFCI) should be installed on the circuit for the whirlpool. **Page 26**

Deferred Cost:

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END OF SUMMARY

THE SCOPE OF THE INSPECTION

All components designated for inspection in the NAHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report. A copy is available upon request. These can also be accessed on the NAHI website: : [National Association of Home Inspectors](http://www.nahi.org) or my website: <http://burlingtonhomeinspection.net>.



It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

This inspection is visual only. Representative samples of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection.
The estimated outside temperature was 26+- degrees F.

RECENT WEATHER CONDITIONS

Occasional rain has been experienced in the days leading up to the inspection.



For the purpose of this report, it is assumed that the house faces east.

Structure/Basement

DESCRIPTION OF STRUCTURE/BASEMENT

Foundation Material:	•Poured Concrete
Foundation Design:	•Basement Walk-Out Configuration •Mostly Finished Basement
Basement Floor:	•Concrete Floor
Columns:	•Not Visible
Floor Carrying Beams:	•Wood: - Size: Triple 2x10 inch •Steel 'I' Beam in the Garage
Floor Structure:	•Wood Joist - Size: 2x10 inch @ 16 inches oc •Sub Floor: 3/4 inch tongue and groove OSB Board (Waferboard)
Wall Structure:	•Wood Frame •Wall Frame Thickness – 6 Inch
Attic Access:	•In the 2 nd Floor Hall
Ceiling Structure:	•Bottom Chord of Trusses
Roof Structure:	•Trusses •Roof Sheathing: OSB Board (Waferboard)

STRUCTURE/BASEMENT ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Attributes

The inspection did not discover evidence of substantial structural movement. The construction of the home is considered to be good quality. The materials and workmanship, where visible, appear to employ average to above average characteristics. The wood frame exterior walls of the home appear to be at least 6 inches thick. This typically provides for extra exterior wall insulation. When sighted down their length they were observed to be straight and flat.



The spans of all observed joists and rafters appear to be within acceptable limits and no appreciable movement was noted when floors were 'bounced upon'. They were observed to be clean and free of rot with only minor, typical cracks. The carrying beams and support columns were reasonably straight and in good condition with no significant rust or rot. The exterior plane of the roof was even and flat.

The foundation walls were straight and even. No severe cracks or bulges were noted in the observed walls. With exception of a few spots, ample ground clearance from wood sills and trim was noted. The basement floor slab observed is in good condition – flat and even. It has typical cracks usually the result of shrinkage and/or settling of the slab.

General Comments

No major defects were observed in the accessible structural components of the house. Typical minor flaws were detected. No repair to structural components is necessary at this time.

DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Foundations

- **Monitor:** Settlement and cracks were observed in the north foundation wall adjacent the foundation joint. This implies that some structural movement of the building has occurred. Cracks of this type should be watched for any sign of additional movement. In the absence of any sign of ongoing movement, repair should not be necessary.

Basement

- **Improve:** An exterior 'Perimeter Drain' or 'Footing Drain' apparently exists in the boiler room. The cap for this pipe is missing. Debris can be introduced to the drain system this way. It should be capped right away.

Basement Leakage

- **Monitor:** No evidence of moisture penetration was visible in the basement at the time of the inspection. *It should be understood that it is impossible to predict whether moisture penetration will pose a problem in the future.* The vast majority of basement leakage problems are the result of insufficient control of storm water at the surface. Think of the home as sitting on top of the Pitcher's mound in Baseball. The ground around the house should be sloped to encourage water to flow away from the foundation. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information.

In the event that basement leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step.

An exterior 'Perimeter Drain' or 'Footing Drain' apparently exists. These are designed to carry away ground water and/or runoff water from the basement before it can get in. [See Lot Drainage – page 11](#)



LIMITATIONS OF STRUCTURE/BASEMENT INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected.
- Only a representative sampling of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.
- The roof space/attic was viewed from the access hatch only.
- No access was gained to the wall cavities of the home.
- Limited access was gained to the floor cavities.
- Interior finishes and/or insulation restricted the inspection of the basement.
- Extensive storage in the basement limited the inspection in this area.



Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•# of Layers: 1 •Asphalt Composition Shingle
Roof Flashings:	•Steel Valleys •Galvanized Metal Dripedge
Chimneys:	•None
Roof Drainage System:	•Seamless Aluminum •Full Installation •Downspouts discharge above grade
Skylights:	•None
Method of Inspection:	•Viewed from Ladder at Eave •Viewed from the Ground with Binoculars

ROOFING ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.



Positive Attributes

The composition shingle roofing on the entire house is considered to be in good condition. The shingles are, for the most part, bright with even, square corners and laying flat. No missing or damaged shingles were noted. You should expect several years of performance from this roof covering. This material is reported by the owner to be 4+- years old.

No active roof leaks were noted from the underside of the roof sheathing observed or from interior surfaces observed. Roof flashing details appear to be in good order with exception of the rear return. The installation of the roofing materials has been performed in a professional manner. Installation details look neat and trim. A plumbing vent pipe was observed to penetrate the roof at normal height and in good condition.

General Comments

The design of the roofing system is such that a vulnerable areas exists at the rear slope. There is a higher potential for snow build up and related leaks. Annual inspections and ongoing maintenance will be critical to the performance of the roofing system.



DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Gutters & Downspouts

- **Repair:** The downspout(s) should discharge water at least five (5) feet from the house. Storm water should be encouraged to flow away from the building at the point of discharge.
- **Monitor:** A water stop could be installed at the bottom of each valley if water overshoots the gutters..

Sloped Roofing

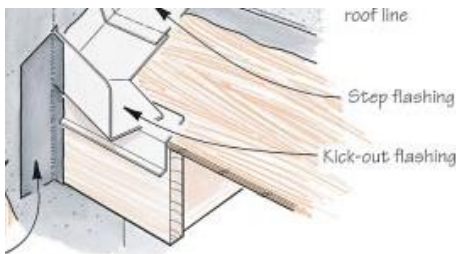
- **Repair:** Rippled areas were noted on the rear return roof. This is suspected to be from warped sheathing. This, in turn is likely from the dryer venting into the return. Moisture damage could be present. recommend further investigation and any repairs deemed necessary. See also **Flashings** – below; **Dryer** - page 26 and **Exterior Eaves** - page 11

Flashings

- **Repair:** The roof/wall flashing along the west return section is damaged and should be repaired to avoid leaks.
- **Monitor:** The installation of the roof/wall flashing is less than ideal. Step flashing does not appear to be present. This can cause damage to go unnoticed. Recommend professional repairs if needed.
- **Repair:** The roof/wall (step) flashing, at the front slope could leak or ‘dribble’ at the bottom of the roof/wall detail. It could be adjusted to include a ‘kick out’ flashing. A qualified experienced carpenter or roofing contractor should perform this work.



Dryer "Vent"



LIMITATIONS OF ROOFING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not all of the underside of the roof sheathing is inspected for evidence of leaks.
- Interior finishes may disguise evidence of prior leaks.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection was limited to binoculars because of access and other safety concerns. This roof was very high.
- The roof surface was wet. This condition can restrict a proper assessment of the condition of the roofing materials.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Vinyl Siding •Vinyl Corners and Trim
Eaves, Soffits, and Fascias:	•Vinyl Soffits •Aluminum Fascia
Exterior Doors:	•Insulated Metal with Storm Doors •Atrium Patio Doors (one panel is fixed, one swings open)
Window Frames and Trim:	•Vinyl Windows
Entry Driveways and Parking:	•Gravel
Entry Walkways and Patios:	•Hardened Concrete 'Brick' Patio @ Rear •Hardened Concrete 'Brick' Walk @ Front
Porches, Decks, Steps, Railings:	•Wood Entry Porch @ Front •Treated Wood Deck @ Rear •Wood Steps •Wood Railings
Overhead Garage Door(s):	•Vinyl •Automatic Opener Installed (infrared light beam)
Surface Drainage:	•Graded Away From House •Steep Slope
Retaining Walls:	•Natural Stone
Fencing:	•None
Other	•Canvas Awning

EXTERIOR ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Attributes

The overall lot drainage was good. It looks like it will conduct surface water away from the building and off the lot (see observations below). The walkway, gravel driveway and parking area appeared in good general condition. There were no serious dips, cracks, ruts, or holes. Expect to have to occasionally grade this area.

The exterior siding that has been installed on the house is relatively low maintenance. It was observed to be lying flat and in good condition with only a few loose or damaged pieces. The aluminum fascia and vinyl soffits are a low-maintenance feature of the exterior of the home. There is no significant wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. Window frames are clad, for the most part, with a low maintenance material. A sample of doors were opened and operated freely. The deck(s) appear to be constructed from pressure treated wood – a rot resistant material. It appears that the surface of the rear deck is wood fiber/plastic composite, a water resistant material. The deck/porch railings are firm. The canvas awning opened and closed with ease. No holes or badly worn areas were noted.



The infrared light auto reverse mechanism on the overhead garage door responded properly to testing. This safety feature should be tested regularly as a door that doesn't reverse can injure someone or fall from the ceiling. Refer to the owner's manual or contact the manufacturer for more information. The garage is completely finished but needs a professional touch. The garage floor slab observed is in good condition – flat and even with exception of the settled section. It has typical cracks usually the result of shrinkage and/or settling of the slab.

General Comments

The exterior of the home is generally in good condition and has lacked some maintenance; repairs are needed.

DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Exterior Walls

- **Improve:** Damaged/cracked and loose siding in a few locations should be repaired or replaced. A qualified experienced carpenter should perform this work.



- **Repair:** The siding is not properly flashed around exterior vents. A qualified, experienced siding carpenter can perform this work.
- **Safety Issue:** Bee nests were noted in various locations. A qualified exterminator should be consulted.

Exterior Eaves

- **Repair:** The fascia (trim around the roofline) is loose at the south slope. It should be repaired to prevent wind damage and leaks. A qualified carpenter or siding contractor should perform this work.
- **Possible Safety Issue:** A partially blocked dryer exhaust arrangement was observed at the rear soffit/return. It should be vented to the building exterior. Blocked exhaust vents can be a fire risk. See also **Sloped Roofing and Flashing** - page 9

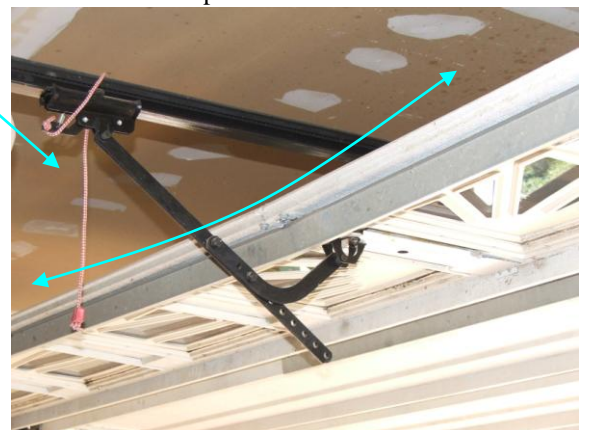


Windows & Doors

- **Repair:** The front door hardware or strike should be adjusted so the door latches properly. A qualified carpenter can perform this work.

Garage

- **Safety Issue:** The overhead garage door is damaged and needs to be repaired or replaced. It could malfunction or even fall in its present condition. A qualified experienced overhead door contractor should perform this work.
- **Safety Issue:** The garage door opener did not automatically reverse under mechanical resistance to closing. A qualified overhead garage door technician should adjust it. See also Positive Observations above – *The infrared light...*
- **Monitor:** The slope of the garage floor is not conducive to good drainage. The slab appears to have settled. Improvement is not a priority but you should be aware improper slope risks sending water towards the building interior. Puddles can occur which can freeze.



Lot Drainage

- **Improve:** The grading in a few locations could be improved to promote the flow of storm water away from the foundation. This can usually be accomplished by the addition of topsoil. In some cases, grading is required to accomplish the required slope. The

ground should slope away from the house. A rate of one inch per foot for at least the first ten feet is a good rule of thumb. Ideally, at least eight (8) inches of clearance should be maintained between soil level and the top of the foundation walls.

- **Monitor:** An exterior ‘Perimeter Drain’ or ‘Footing Drain’ apparently exists. This item carries water away from the base of the foundation. Recommend capping the exit pipe (usually found at the low point on the lot) with a vermin screen. Recommend periodic flushing with water and monitoring the end of this pipe.

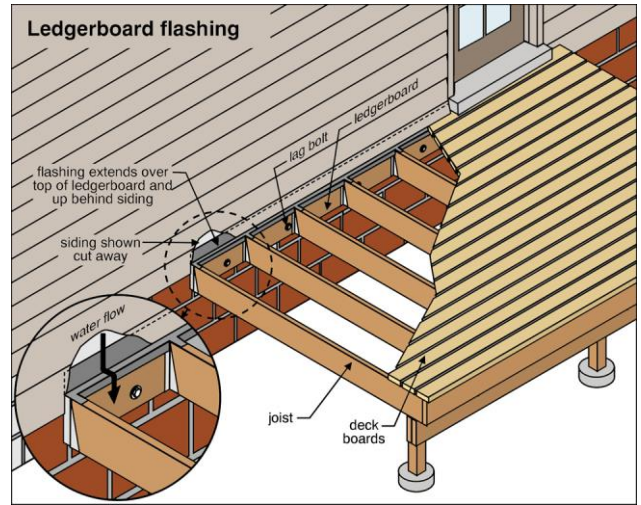
Deck

- **Repair:** A proper flashing should be provided at the intersection of the exterior wall of the house and the deck/porch at the rear wall. This will help avoid water penetration and eventual rot. A qualified carpenter or contractor can perform this work.
- **Repair:** The rear deck landing should be better secured to the house to reduce risk of falling. A qualified experienced carpenter should perform this work.

LIMITATIONS OF EXTERIOR INSPECTION

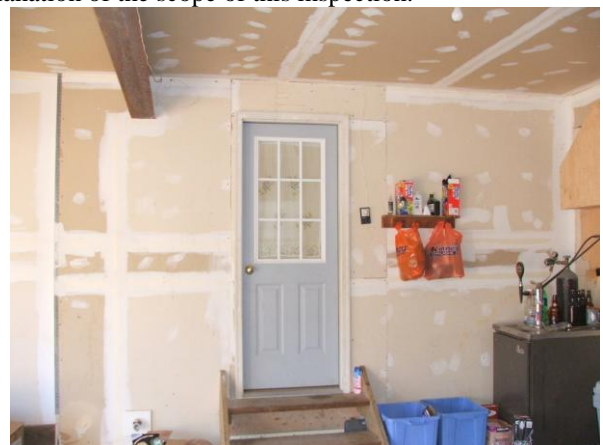
As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.
- Storage in the garage restricted the inspection.



not

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.



Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•120/240 Volt Main Service - Service Size Approximated to be: 150 amp, Entrance and Meter Located at the south side of the home
Service Drop:	•Underground
Service Entrance Conductors:	•Aluminum
Service Grounding:	•Copper •Ground Connection Not Visible
Main Disconnects:	•Breakers •Main Service Rating 150 Amps
Service Panel:	•Breakers •Location: near the boiler •Panel Rating: 225 Amp
Sub-Panel(s):	•None Visible
Circuit Sizes:	•120V Circuits: 15, 20 amps •240V Circuits: 30 amps
Distribution Wiring:	•Copper
Wiring Method:	•Non-Metallic Sheathed Cable "Romex" •Armored Cable "BX"
Switches & Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Garage Outlet(s) •Bathroom(s) •Exterior Outlets •Kitchen
Smoke Detectors:	•Present - Hard Wired- Ionization Type
Carbon Monoxide Detectors:	•None Found

ELECTRICAL ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Attributes

The size of the electrical service is sufficient for typical single family needs. Generally speaking, the electrical system is in good order. The electrical panel is well arranged and rated for both copper and aluminum. Three prong outlets were tested randomly with a plug in circuit analyzer. Most 3-prong outlets that were tested were appropriately grounded and light fixtures that were tested operated satisfactorily. The distribution of electricity within the home is good. The observed wiring within the home is copper, with exception of the larger aluminum wires. These are good quality electrical conductors.

Ground fault circuit interrupter (GFCI) devices have been provided in some areas of the home. These devices are extremely valuable, as they offer an extra level of shock protection. Most GFCI's that were tested responded properly. A dedicated 220-volt circuit has been provided for the well pump.

General Comments

The electric system revealed the need for improvements and a few repairs. These improvements should be considered high priority for safety reasons. **Unsafe electrical conditions represent a shock and/or fire hazard.** A licensed electrician should be consulted to undertake the improvements recommended below and further review the system.

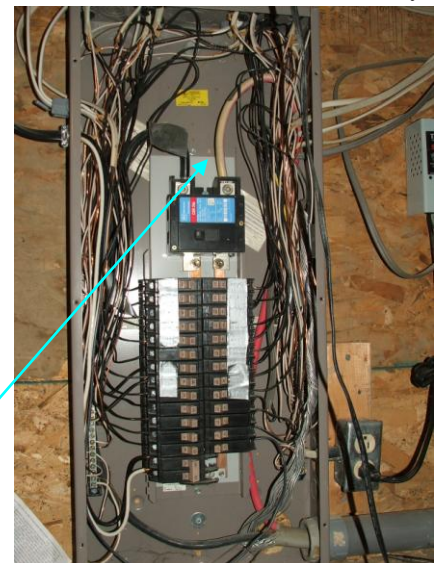
DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Grounding

- **Repair:** Additional bonding to ground is needed. The presence of yellow flexible gas piping requires the gas piping to be bonded to the ground system.

Main Panel

- **Monitor: Possible Safety Issue:** One of the main feeds is highly discolored. Overheated wiring within the main distribution panel should be examined by a licensed electrician and repaired as necessary.



- **Improve:** The panel circuits should all be clearly and accurately marked by an electrician.
- **Repair:** The main panel cover plate (sometimes called the “Dead Front”) is missing screws. They should be replaced.
- **Repair:** Circuits within the main distribution panel that are doubled up (referred to as “double taps”) should be separated. A separate fuse or breaker should serve each circuit.
- **Repair:** Long sheathing over distribution wiring is discouraged in a panel box and is considered unprofessional. An electrician should correct this condition.
- **Monitor:** Oversized breakers within the main distribution panel should be evaluated. Well pumps are usually sized at twenty (20) amps.

Distribution Wiring

- **Safety Issue:** Unfinished wiring in the basement bathroom should be made temporarily safe from shock hazard until complete.



Outlets

- **Safety Issue:** A ground fault circuit interrupter (GFCI) outlet is inoperative in the garage. This circuit should be repaired.
- **Safety Issue:** A ground fault circuit interrupter (GFCI) outlet in the master bathroom did not respond correctly to testing during the inspection. This receptacle should be replaced.

Smoke and Carbon Monoxide Detectors

- **Repair:** The smoke detector(s) are required be replaced with photo electric type detectors adjacent all sleeping areas and one on each floor including the basement.
- **Repair:** The installation of carbon monoxide detectors is required outside all sleeping areas. See also **Environmental Issues** – page 22.

LIMITATIONS OF ELECTRICAL INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components that may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Propane Gas
Heating System Type:	•Hot Water Boiler
Heating Unit:	•Boiler Manufacturer: Smith •Approximate Age: 8 •Serial Number: G/2002-532 •BTU output: 104,000 •# of Zones: 4 w/ One for Hot Tap Water
Heat Distribution Methods:	•Baseboard Heaters
Vents, Flues, Chimneys:	•Metal-Single Wall Flue
Other Components/Features:	•Fan Assisted Direct Venting

HEATING ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

The central heating system appears in generally good condition. Heat distribution within the home appears adequate. The boiler was determined to be 8 years old as read on the information plate. The expected lifespan for this type of unit is 25+- Years. It operated quietly, heated up, and distributed hot water throughout the activated zones as expected. No leaks were detected in the baseboard heaters.

The distribution of heat is divided into “zones,” allowing for greater ease of balancing heat flow. A manual emergency shut off switch was noted at the top of the basement stair. A “set back” thermostat controls the main floor zone of the heating system. This type of thermostat helps reduce heating costs.

Heating a home with this type of heating system should be relatively economical. The flue has a fan assist. This is an important safety consideration for a heating system of this type and eliminates the need for a chimney for this appliance.

General Comments

The boiler requires service by a qualified, professional heating technician before use and every year thereafter. This should be a regular maintenance item to assure safe, reliable heat.

The heating system shows no visible evidence of major defects. Minor repairs to the heating system are necessary.

OBSERVATIONS / DEFECTS / RECOMMENDATIONS

Boiler

- **Repair, Safety Issue:** There is evidence of a gas leak in the vicinity of the boiler. *This is a serious safety concern. It is recommended that the gas utility be engaged immediately. The current occupants of the home should be notified.*
- **Repair:** Sloppy wire connections at the boiler should be improved. A qualified licensed heating technician or licensed electrician should perform this work.
- **Repair:** A serious amount of corrosion was observed on and above the expansion tank and on the air vent. Damages like this at heating equipment should be repaired promptly to avoid equipment failure and to assure reliable system operation. A qualified licensed heating technician should perform this work.
- **Monitor:** The boiler shows evidence of prior leakage at a circulation pump. Watch for and repair any leaks promptly as prolonged leakage can damage the boiler.



Combustion / Exhaust

- **Safety Issue:** The boiler gets combustion air from its basement room and two small screened vents. This means that oxygen for the unit may be less than ideal. This could result in incomplete combustion and increased levels of Carbon Monoxide. Providing fresh air for combustion would be a wise improvement. See also **Environmental Issues** – page 22

Flue

- **Safety Issue:** The exhaust vent clamps may employ gaskets that are known to deteriorate. The flue connection is somewhat loose. This condition should be evaluated by a qualified licensed heating technician right away..



LIMITATIONS OF HEATING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not inspected.
- The interiors of flues or chimneys, which are not readily accessible, are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

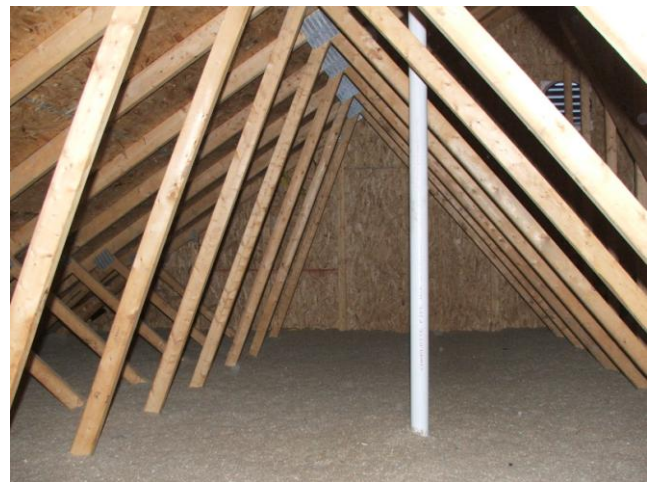
Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•10+- inches Blown Cellulose in the Attic Floor
Roof Cavity Insulation:	•Unknown in the sloped roof
Roof Ventilation:	•Gable Vents •Soffit Vents with Attic Baffles
Exterior Wall Insulation:	•Unknown in the finished walls
Vapor Retarders:	•'Tyvec' Building Wrap– Seen in the Garage
Basement Wall Insulation:	•Unknown in the finished walls •None Visible on the Unfinished Walls
Floor Cavity Insulation:	•Unknown over the Garage
Rim Joist Insulation:	•Yes
Exhaust Fan/vent Locations:	•Bathroom •Kitchen •Dryer

INSULATION / VENTILATION ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.



Positive Attributes

Insulation levels are typical for a home of this age and construction. No mildew or rot was noted on the underside of the roof sheathing. Based on the insulation seen and the evidence of insulation seen, this can be considered a well insulated home.

DEFECTS / RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic Mechanicals

- **Improve:** Ideally, the attic access hatch should be better insulated and weather-stripped. A fair amount of heat is lost through this type of opening.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Any estimates of insulation R values or depths are rough average values.
- The attic was viewed from the access hatch only.
- No access was gained to the roof cavity of the sloped ceilings.
- No access was gained to the wall cavities of the home.
- Interior finishes restricted the inspection of the basement and garage insulation.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	<ul style="list-style-type: none"> •Private Water Supply – Evidenced by Pressure Tank, Gage and Switch adjacent the Main Valve •Drilled Well Located at the front of the property
Service Pipe to House:	<ul style="list-style-type: none"> •Plastic
Main Water Valve Location:	<ul style="list-style-type: none"> •Front Wall of Basement
Interior Supply Piping:	<ul style="list-style-type: none"> •Copper •Plastic
Waste System:	<ul style="list-style-type: none"> •Private Sewage System •Mound System utilizing Septic Tank, Pump Station and Mound
Drain, Waste, & Vent Piping:	<ul style="list-style-type: none"> •Plastic
Water Heater:	<ul style="list-style-type: none"> •Boiler Combination Unit •Manufacturer: Vaughn - Located next to the Boiler•TPRV Valve with Extension Going Toward the Floor •Approximate Capacity (in gallons): 70 / Read on the information Plate •Approximate Age: 8 years / Read on the information Plate •Serial Number: 050341628
Gas Storage & Distribution:	<ul style="list-style-type: none"> •Below Ground Propane Gas Tank – Located: at the north side of the home
Gas Shut-Off Valves:	<ul style="list-style-type: none"> •LP Gas Main Valve at the Tank •Valves at the Boiler and Hot water Heater •Valve at the Fireplace •Valve at the Kitchen Range not visible (access impractical)
Other Components/Features:	<ul style="list-style-type: none"> •Pressure Regulator on the Pressure Tank •Septic Tank alarm

PLUMBING ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Attributes

The plumbing system is in generally good condition. The piping system within the home, for both supply and waste, seems a good system. All feeds and drains operated freely. No leaks or sewer odors were detected. The water pressure supplied to the fixtures is considered above average. Only a slight drop in flow was experienced when all fixtures in each bath were operated simultaneously. A plumbing vent pipe was observed to penetrate the roof in good condition. The plumbing fixtures appear to have been well-maintained. The septic tank test alarm sounded when the button was pushed. Freeze resistant hose bibs (exterior faucets) have been installed. Exterior hose bibs operated when turned on.

Hot Water

Connections were tight and no serious corrosion was seen. The water heater temperature should be set such that accidental scalding is minimized. Families with small children should be especially aware of this.

DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Water Heater

- **Repair:** It is recommended that the water heater be serviced. In addition to checking the anodes, the circulation pump installed over hot water tank is makeshift and should be properly installed - if needed. A qualified licensed plumber should perform this work.

Gas Tank and Piping

- **Repair, Safety Issue:** There is evidence of a gas leak in the vicinity of the boiler. *This is a serious safety concern. It is recommended that the gas utility be engaged immediately. The current occupants of the home should be notified.*



- **Repair:** The exterior hood of the propane gas tank is leaning badly. It could interfere with piping under this condition and cause a gas leak. The gas company should correct this right away.
- **Monitor:** Be mindful of the soft copper gas line leading from the tank to the home when digging, gardening etc.
- **Monitor:** A shut off valve could not be seen behind the dryer. The gas technician should install one if needed.

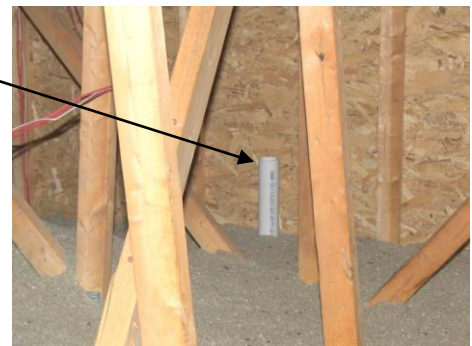


Supply Plumbing

- **Monitor:** Mineral build up was observed at components such as the boiler air vent and circulation pump. This is a symptom of “hard” water. Continued build up at faucets and within pipes could affect the performance of the supply plumbing system. Water conditioning equipment should be evaluated for performance. A qualified experienced water treatment contractor should perform this work.

Waste / Vent

- **Repair:** Although all drains operated freely and no ‘suspicious’ areas were seen, heard or smelled outside, it is recommend the septic tank be cleaned and serviced by a qualified technician.
- **Repair:** The vent stack that penetrates to the attic should extend at least 12 inches above the roof and should be at least 2 inches in diameter.



LIMITATIONS OF PLUMBING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested unless explicitly contracted-for and discussed in this or a separate report.
- Interiors of flues or chimneys, which are not readily accessible, are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.
- An inspection of the sewage system is outside the scope of this inspection. It is reported by the owner that the septic tank has recently been serviced/pumped.
- An inspection of the well is outside the scope of this inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Interior

DESCRIPTION OF INTERIOR

Wall and Ceiling Materials:	•Drywall
Floor Surfaces:	•Carpet •Ceramic Tile •Hardwood
Window Type(s) & Glazing:	• <u>Double Glazed</u> : •Double Hung with Tilt Feature •Casement
Doors:	•Stamped-Panel (Hollow Core)
Other Components Observed:	•Central Vacuum

INTERIOR ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.



General Condition of Interior Finishes

On the whole, the interior finishes of the home are in above average condition. Typical minor flaws were observed in some areas.

General Condition of Windows and Doors

The doors and windows are average quality. The windows have, for the most part, been well maintained. A sample of windows and doors were opened and seemed to operate freely. No rotted parts or inoperable hardware was noted in the windows that were opened. No fogged glass was observed.

General Condition of Floors

The floors of the home are relatively level and walls are relatively plumb. The observed hardwood flooring was very good. The finish was bright and the floor was lying flat and even with very little wear. The ceramic tile was in good condition – no obvious cracks were observed.

DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Floors

- **Monitor:** The floor in the second floor has a noticeable squeak.

Doors

- **Improve:** The door between the house and garage could be fitted with an automatic closer or spring hinge. This will reduce the potential of toxic automobile gases entering the house.

Stairways

- **Safety Issue:** For improved safety, it is recommended that a handrail be provided for the basement stairway. A qualified experienced carpenter should perform this work.

Environmental Issues

- **Monitor:** Radon gas is a naturally occurring gas that is invisible, odorless and tasteless. A danger exists when the gas percolates through the ground and enters a tightly enclosed structure (such as a home). Long term exposure to high levels of radon gas can cause cancer. *The Environmental Protection Agency (E.P.A.) states that a radon reading of 4.0 picocuries per liter of air or more represents a health hazard.* A radon evaluation is beyond the scope of this inspection (unless specifically requested).



- For more information, consult the Environmental Protection Agency (E.P.A.) <http://www.epa.gov/radon/pubs/hmbyguid.html> or the Vermont Occupational and Radiological Health (1-800-640-0601) for further guidance and a list of testing labs in your area.
- **Monitor:** Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, range, dryer, water heater, space heater, automobile, or wood stove. Proper maintenance of these appliances paired with installing Carbon Monoxide detectors within the home is one of the best ways to reduce the risk of carbon monoxide poisoning. <http://www.dps.state.vt.us/fire/co.htm>

DISCRETIONARY IMPROVEMENTS

Install new exterior lock sets upon taking possession of the home.

LIMITATIONS OF INTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Fireplaces / Wood Stoves

DESCRIPTION OF FIREPLACES / WOOD STOVES

- | | |
|--------------------------------|--------------------------|
| Fireplaces: | •Gas (see also Plumbing) |
| Pilot: | •Manual |
| Vents, Flues, Chimneys: | •Metal Flue-Single Wall |

FIREPLACES / WOOD STOVES ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Comments

The gas unit fired a quiet blue flame when the switch was activated and shut off the same. On the whole, the fireplace and its components are in good condition. The wood surrounding mantelpiece was well attached and in good condition. The ceramic tile hearth and trim was good. Joints were reasonably tight. No cracks were noted.

General Comments

The gas stove and chimney should be inspected and serviced by an N.F.I. appliance specialist at least every other year for safe and reliable operation.

DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Fireplaces

- **Safety Issue:** The glass of the fireplace will get too hot to touch. Carelessness here will result in a serious burn. Recommend providing a screen for this area. Families with children should be especially aware of this.



LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- The interiors of flues or chimneys are not inspected.
- Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Kitchen and Appliances

DESCRIPTION OF KITCHEN AND APPLIANCES

- | | |
|-----------------------------------|--|
| Kitchen Sink: | •Enameled Cast Iron |
| Kitchen Countertops: | •Plastic Laminate Countertops installed |
| Observed Appliances: | •mid aged Frigidaire Gas Range •mid aged Frigidaire Dishwasher •mid aged Frigidaire Refrigerator •mid aged Hotpoint Microwave Oven |
| Other Components Observed: | •Wood Cabinets Installed •Kitchen Exhaust Hood – Vented to the Exterior |

KITCHEN AND APPLIANCES ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Attributes

Cabinets and counters were in good condition. No obvious damage, scratches or chips were observed. All cabinet hardware tested was firm and operated smoothly. The cabinets were firmly attached. The counters were secure. The cast iron sink is considered above average quality. Most of the major appliances in the home are newer. The appliances are considered to be in generally good condition.



DEFECTS / OBSERVATIONS / RECOMMENDATIONS

SINK

- **Repair:** The sink drain was observed to drip slowly, this is an easy task to fix.

Gas Range

- **Potential Safety Issue:** An anti-tip device could not be seen behind the oven. One should be installed according to the manufacturer's directions. This will reduce the risk of tipping of the appliance from abnormal usage or by excessive loading of the oven door.
- **Safety Issue, Repair:** The gas range top is lower than the counter. This can burn the counter. It should be adjusted up according to the manufacturer recommendations. A qualified appliance repair technician should perform this work.

LIMITATIONS OF KITCHEN AND APPLIANCES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Bathrooms and Laundry

DESCRIPTION OF BATHROOMS AND LAUNDRY

- | | |
|-----------------------------------|--|
| Bathroom Location: | •1 on the first Floor: - Half bath, •2 on the Second Floor: - Common Bath (tub & shower), - Master Bath (3/4 bath), with Whirlpool •1 in the Basement Level: roughed in only |
| Floor Covering: | •Ceramic Tile |
| Laundry Facility: | •Located: in the second floor •Gas Piping for Dryer •Dryer Vented to Building Exterior •120 Volt Circuit for Washer •Hot and Cold Water Supply for Washer |
| Tested Appliances: | •Waste Standpipe for Washer |
| Other Components Observed: | •Not tested – Not Staying
•Bathroom Exhaust Fan •Whirlpool |

BATHROOMS AND LAUNDRY ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

Positive Comments

The bathroom, and laundry facilities appear neat, clean, well organized and in good working condition. The bathroom fixtures were in good working condition. The sinks drained as expected when the stoppers were pulled at every location. No leaks were noted under the sinks. Faucets were secure and gave water with no leaks. The sinks and toilets were firmly secured. The toilets flushed completely. The bathtub drain held an inch of water and then drained when released. The tub/shower surrounds were in good condition. Surfaces were bright with no serious damage/scratches or rot. The whirlpool circulated a full tub of water and the air bubbles increased when the controls were turned on. It drained with no leaks observed. No leaks under these fixtures were noted in the basement. The ceramic tile was in good condition – no obvious cracks were observed.

General Comments

Minor repairs are needed.





DEFECTS / OBSERVATIONS / RECOMMENDATIONS

Clothes Dryer

- **Safety Issue:** The clothes dryer exhaust vent pipe should be improved and cleaned of lint. If ignored, this can become a fire hazard.
- **Repair:** The clothes dryer should be vented to the building exterior. This condition will produce unacceptable levels of dust and moisture. A qualified, licensed plumber, carpenter or electrician should perform this work. **See also Sloped Roofing - page 9**

Bathroom Components

- **Monitor:** A ground fault circuit interrupter (GFCI) should be installed on the circuit for the whirlpool if not found near the motor or elsewhere. A ground fault circuit interrupter offers protection from shock or electrocution.

DISCRETIONARY IMPROVEMENTS

The clothes dryer exhaust vent pipe should be periodically cleaned of lint. If ignored, this can become a fire hazard.

LIMITATIONS OF BATHROOMS AND LAUNDRY INSPECTION

As prescribed in the pre-inspection contract, this is a visual inspection only. The inspection was limited by (but not restricted to) the following conditions:

- Clothes washing machine connections are not inspected.
- Components concealed behind finished surfaces could not be inspected.
- The bathtub overflow drain(s) are not tested.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Radon Test Report

INSPECTION INFORMATION

Device(s) Name: •AccuStar Inc.
Device Serial Number(s): •2142747, 2142748
Device Type(s): •Activated Charcoal Adsorption Devices
Number Of Devices Used: •2

TEST CONDITIONS

Foundation Type: •Basement Walk Out
Foundation Material: •Concrete
Basement Living Area: •Yes
Below Floor Ventilation: •None
Test Area: •Occupied
Test Location: •in the basement family room
Test Area Closed Prior To Test? •Yes
Time Test Area Closed: •At Least 12 Hours
Smokers In Home: •None



WEATHER CONDITIONS AT TIME OF TEST:

Wind: •Light
Rain: •None
Humidity: •Average

TEST RESULTS

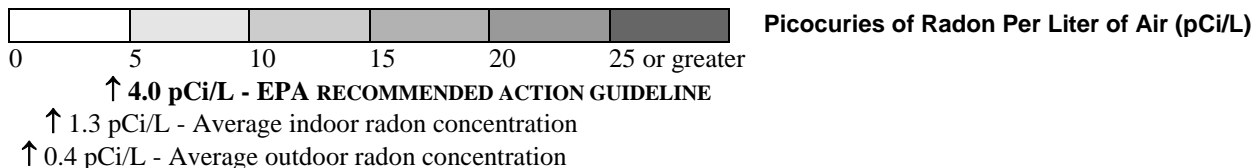
Date / Time Placed: **Date: 11/05/2011 Time: 11:30** Date / Time Removed: **Date: 11/07/2011 Time: 18:00**
 Time In Place: **55 Hours**

RADON LEVEL: 2.1, 2.1 = and average of 2.1pCi/L (Picocuries of Radon Per Liter of Air)



EPA RADON RISK INFORMATION

Use the chart below to compare your radon test results with the EPA guideline. The higher a home's radon level, the greater the health risk to you and your family.



The U.S. Environmental Protection Agency (EPA) and the Surgeon General Strongly recommend taking further action when the home's radon test results are 4.0 pCi/L or greater. The concentration of radon in the home is measured in picocuries per liter of air (pCi/L). Radon levels less than 4.0 pCi/L still pose some risk and in many cases may be reduced. If the radon level in your home is between 2.0 and 4.0 pCi/L, EPA recommends that you **consider** fixing your home. The national average indoor radon level is about 1.3 pCi/L. The higher a home's radon level, the greater the health risk to you and your family. Smokers and former smokers are at especially high risk. There are straightforward ways to fix a home's

radon problem that are not too costly. Even homes with very high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

What do radon test results mean?

If your radon level is **below 4 pCi/L**, you do not need to take action.

If you radon level is **4 pCi/L or greater**, use the following charts to determine what your test results mean. Depending upon the type of test(s) you took, you will have to either test again or fix the home.

NOTE: All tests should meet EPA technical protocols.

Chart 1: Radon Test Conducted Outside Real Estate Transaction

Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Home
One Long-Term Test	Fix The Home

* If your first short term test is several times greater than 4.0 pCi/L - for example, about 10.0 pCi/L or higher - you should take a second short-term test immediately.

Chart 1: Radon Test Conducted During a Real Estate Transaction (Buying or Selling a Home)

Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Active Short-Term Test (this test requires a machine)	Fix The Home
Average of 2 Passive Short-Term Tests* (these tests do not require machines)	Fix The Home
One Long-Term Test	Fix The Home

* Use two passive short-term tests and average the results.

What should I do after testing?

If your radon level is 4.0 pCi/L or greater, you can call your State radon office to obtain more information, including a list of EPA or State-approved radon contractors who can fix or can help you develop a plan for fixing the radon problem. Reduction methods can be as simple as sealing cracks in floors and walls or as complex as installing systems that use pipes and fans to draw radon out of the building.

EPA has a National Radon Program to inform the public about radon risks, train radon mitigation contractors, provide grants for state radon programs, and develop standards for radon-resistant buildings. EPA works with health organizations, state radon programs, and other federal agencies to make the program as effective as possible.

For more information about radon, its risks and what you can do to protect yourself, call 1-800-SOS-RADON and request a free copy of EPA's *A Citizen's Guide to Radon*. You may also call the Radon Fix-It Line at 1-800-644-6999 between noon and 8pm Monday through Friday, EST/EDT, for information and assistance. This toll-free line is operated by Consumer Federation of America, a nonprofit consumer organization.