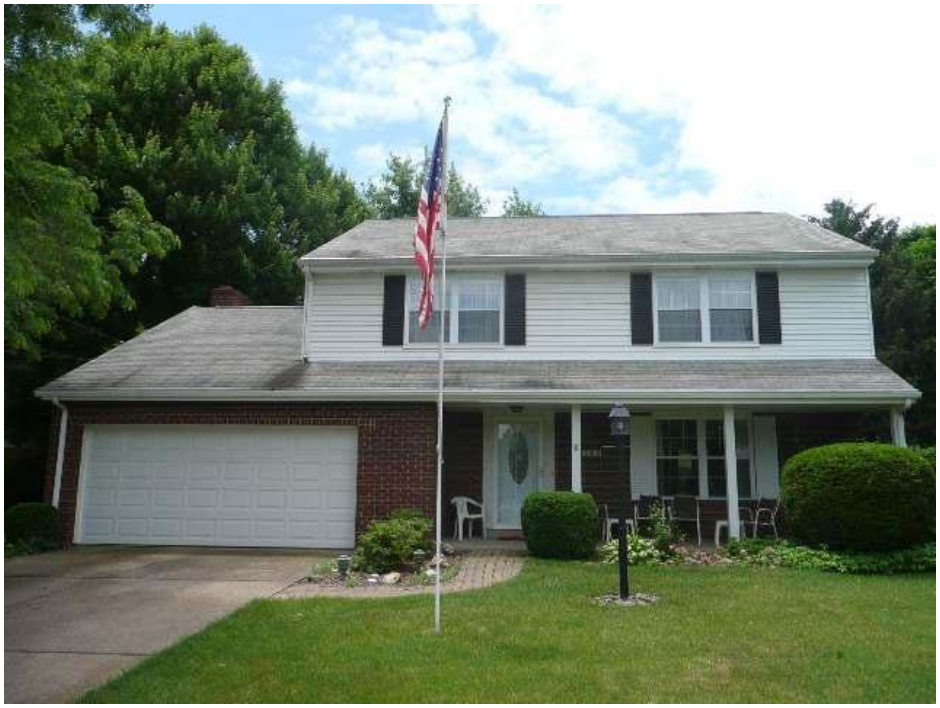
Inspection Report

This inspection performed in accordance with current "Standards of Practice" of the American Society of Home Inspectors.

This home inspection report prepared specifically for:

Robert Needsahome
200 Foundone Lane
Pittsburgh, PA 15101



Inspected by: **Brendan E. Ryan**

Component & System Analysis
216 Logan Road
Valencia, PA 16059
Ph: 724-898-1414
Fx: 724-898-7887
Residential • Commercial • Multi Unit • Radon • Pest • Well • Septic

Table of Contents

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PHIC ASHI Member

PROPERTY / CLIENT INFORMATION

Report Date: 6/17/2008

Customer File # **20080617-2**
Buyers Agnt **Sue Sellsmore**
Buyer **Robert Needsahome**
Address: **100 Outahere Ave.**
Chicago , IL 60120
Phone:
Fax:
Email:

Inspection location: **200 Foundone Lane**
Pittsburgh , PA 15101
Send report to:
Phone:
County: **Allegheny**
Area/Neighborhood:
Sub-division:

GENERAL INFORMATION

Main entry faces: **North**
Estimated Age: **42**
Type Structure: **Single Family Dwelling**
Stories: **Two**
Type Foundation: **Basement**
Soil condition: **Damp**

Weather: **Overcast** Temp: **65**
Date: **6/17/2099** Time: **1:50:10 PM**

Unit occupied: **yes** Client present: **yes**
Attendees: ☒ **Buyer** ☐ **Buyer & Buyer's Agent** ☐ **Buyer & Family** ☐ **Client** ☐ **Client's Agent** ☐ **Client's Ag**

General Overview

As purchaser of a resale property, keep in mind that the home will have components and systems that reflect their age. Some may be older wear items and others my be suggested up grades. Please keep in mind that this is not a new house, and new conditions cannot be expected.

Inspector: Brendan E Ryan
Brendan E. Ryan

REPORT LIMITATIONS

This report has been prepared for the sole and exclusive use of the client indicated above and is limited to an impartial opinion which is not a warranty that the items inspected are defect-free, or that latent or concealed defects may exist as of the date of this inspection or which may have existed in the past or may exist in the future. The report is limited to the components of the property which were visible to the inspector on the date of the inspection and his opinion of their condition at the time of the inspection.

Deficiency Summary

Component & System Analysis, 216 Logan Road, Valencia, PA, 16059 Ph. 724-898-1414

Insp Date: **6/17/2099** **200 Foundone Lane** File # **20080617-2**

Please read the entire report. This summary is NOT a substitute for reading all sections. This summary is NOT a substitute for compiling your own list of items in the report that you feel should be addressed prior to closing. The items listed below are conditions that in the opinion of the inspector meet the criteria of a Material Defect as defined in the Pennsylvania State Home Inspection Law and specified in your Pre-Inspection Agreement. There may be other items detailed in the report that are significant in your opinion and should be addressed in your request letter.

ROOF

Separations in the flashing materials will allow water to enter the roof and attic structures. Evaluation by a qualified roofing contractor for repair and proper flashing installation technique is recommended to help prevent further water entry. Noted at the plumbing vents.

GROUNDS

Create and maintain a slope of soil away from the foundation to divert water to the yard. Areas of negatively sloped soil will direct water to the foundation area and contribute to dampness or water entry into the foundation. Constructing a slope of soil that ideally would be equivalent to one inch of rise per foot of run away from the foundation is suggested. This slope should extend approximately six feet away from the building exterior to bridge the disturbed soil in the foundation trench. These dimensions are suggestions only and may be limited by proximity to other objects and siding materials.

HVAC

The automatic gas valve at the furnace is leaking fuel through to the burners. Evaluation is recommended.

The furnace did not respond in a timely manner to normal controls. This appears to be a thermocouple defect. These heat sensing devices commonly go bad for several reasons including age and are replaceable. Over five minutes elapsed before the burners responded.

What appears to be a crack was noted at the right rear upper portion of the right chamber. Further evaluation is recommended due to the lack of visual access being blocked by the automatic gas controls.

Readily accessible natural gas fittings were tested for leakage using an electronic combustible gas detector. Discovered leaks are marked with ribbon. Not all portions of the gas supply lines are visible or accessible. Further evaluation and repair by a qualified contractor are recommended.

Water related fittings were noted to be installed at the gas lines. Water valves and / or compression fittings are not rated for gas usage and should be replaced with appropriate fittings or rated appliance connectors. Noted to be leaking at the dryer service.

PLUMBING

Seller disclosed that there are roots in te sewer lateral. Evaluation of the lateral by a qualified plumber with a camera is recommended.

ELECTRICAL

Double tapping was found at one or more of the terminals. Only one wire may be located under a terminal screw unless it is specifically designated for such use. Replacement with an approved breaker(s) or is recommended. Noted in the sub panel.

Deficiency Summary

Component & System Analysis, 216 Logan Road, Valencia, PA, 16059 Ph. 724-898-1414

Insp Date: **6/17/2099** **200 Foundone Lane** File # **20080617-2**

Neutral and ground wires are connected at the sub panel. Each of these conductors should be kept seperate to provide designated return paths to the main panel. Repairs or alteration by a qualified electrician are recommended. Noted at the sub panel.

A wire is exiting the main panel through an un protected opening in the top of the box and through the wall. A proper wire connector is recommended.

Improper wiring was noted in the garage attic area.

Un protected wiring was noted at ground level leading to the lamp post.

ATTIC
What potentially appears to be mold was noted in the attic area on the sheathing. Possible causes for this condition include attic ventilation deficiencies, bathroom ventilation deficiencies, roof leakage and the maintaining of excessively high humidity levels in the living area. Testing of the discolored area for the presence of mold is recommended by a qualified contractor.

Roof

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
1	Roof coverings:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
2	Ventilation:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
3	Flashings:	Defects Noted	Evaluate for repair or replacement. See comments.	
4	Skylights:	N/A	N/A	
5	Chimneys:	Defects Noted	Evaluate for repair. See comments.	
6	Gutter system:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
7	:			
8	:			

INFORMATION

9	Main roof age:	18 Mid-Life w/ Common Aging	14	Ventilation:	Ridge, Soffitt & Gable Vents
10	Other roof age:	N/A	15	Chimney:	Brick
11	Inspection method:	Walked partial roof	16	Chimney flue:	Clay Tile Liner
12	Roof covering:	Asphalt Shingle	17	Gutters:	Aluminum
13	Roof Layers:	One	18	:	

ROOF COMMENTS

18 **Areas of the roof that could be safely evaluated were viewed. If no other recommendations are made, regular inspection for wear or damage to the roofing components will help to maintain the watertightness of the roof.**

Gutters & downspouts that discharge onto roof surfaces may result in ice build-up or deterioration that can lead to leakage. Alteration should be considered where practical.

Separations in the flashing materials will allow water to enter the roof and attic structures. Evaluation by a qualified roofing contractor for repair and proper flashing installation technique is recommended to help prevent further water entry. Noted at the plumbing vents.

Algae growth on shingles can shorten the life of the roofing materials it is growing on. Application of an algaecide will help to reduce the effect of the algae growth. Trimming overhanging branches will help to provide sunlight that will also reduce algae growth.

Exposed nail heads at the flashings are prone to leakage even if covered with mastic. This is not a recommended installation practice. Regular inspection including application of additional mastic will help to reduce the possibility of leakage.

Cracks and separations were noted at the masonry chimney shroud. Openings at this upper most portion of the chimney structure will allow water entry to the brick and mortar components. The appearance of white staining, known as efflorescence, may occur and is an indication of moisture entry into the chimney. More commonly the result is deteriorated mortar and loose or damaged brick at the upper portions of the chimney. Repair or replacement of the mortar shroud with appropiate materials will help to prevent damage to the chimney.

Sub surface drainage of downspouts is not water tested.

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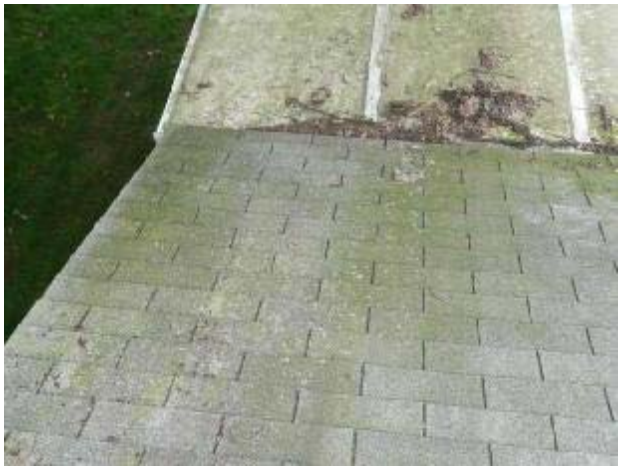
INSPECTION PHOTOS

Roof **# R1**

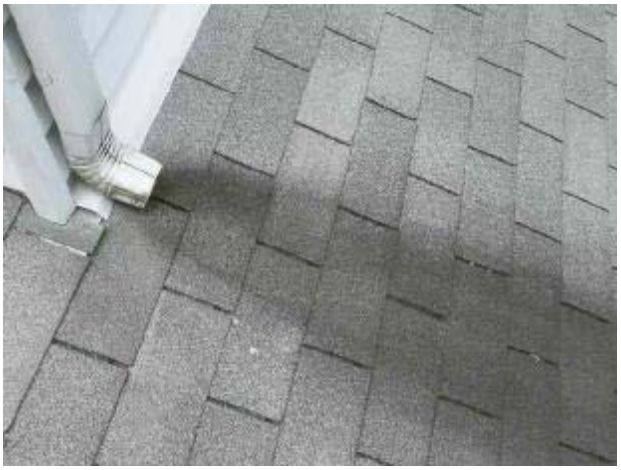
Deterioration at the mortar chimney cap

Roof **# R2**



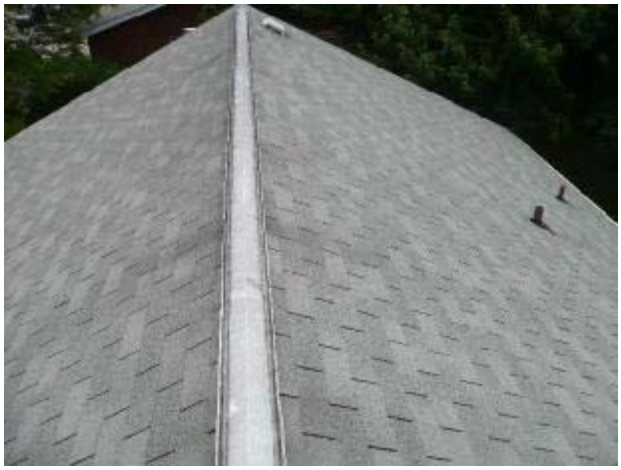
Algae and debris at the roof

Roof **# R3**



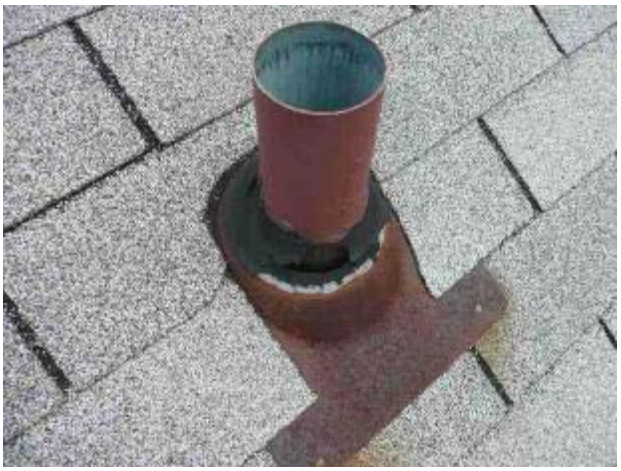
Downspouts discharge onto lower roof surfaces.

Roof **# R4**



Roof

Roof **# R5**



Separations at plumbing flashings and exposed nail heads.

Heating & Cooling

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
1	A/C operation:	**Acceptable**	**Monitor for timely maintenance or replacement.**	
2	Heating operation:	**Defects Noted**	**Evaluate for repairs. See comments below.**	
3	System back-up:	**N/A**	**N/A**	
4	Exhaust system:	**Acceptable**	**See comments below.**	
5	Distribution:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
6	Heat Exchanger:	**Defects Noted**	**Evaluate for repairs. See comments below.**	
7	Burner Flame:	**Not Inspected**	**See comments below.**	
8	Humidifier:	**Marginal**	**Monitor for timely maintenance or replacement.**	
9	Fuel Lines:	**Defects Noted**	**Evaluate for repairs. See comments below.**	
10	Filter:	**Acceptable**	**Monitor for timely maintenance or replacement.**	

INFORMATION

11	# Heating Units:	**1**	18	# Cooling Units:	**One**
12	Heating Types:	**Forced Air**	19	A/C Types:	**Electric Central Air**
13	Heating Ages:	**Apro. 20** years	20	A/C age:	**Apro. 20**
14	Heating Fuels:	**Gas**	21	Filter:	**Disposable Media**
15	Distribution:	**Ductwork**	22		
16	Duct Insulation Type:	**None**	23		
17	Gas Shutoff Location:	**Exterior Meter**			

HEATING & COOLING COMMENTS

24 **The HVAC system is at or has exceeded it's expected useful life. Many modern safety features are not included in this age of system. This system is also inefficient by today's standards. Annual inspection is recommended along with budgeting for replacement.**

The automatic gas valve at the furnace is leaking fuel through to the burners. Evaluation is recommended.

The furnace did not respond in a timely manner to normal controls. This appears to be a thermocouple defect. These heat sensing devices commonly go bad for several reasons including age and are replaceable. Over five minutes elapsed before the burners responded.

What appears to be a crack was noted at the right rear upper portion of the right chamber. Further evaluation is recommended due to the lack of visual access being blocked by the automatic gas controls.

The humidifier water pad is clogged with mineral deposits. Changing the pad should be done prior to the heating season and then when needed throughout he winter. The humidifier should be turned off and the damper closed for the cooling season. Evidence of leaks were visible at the water service and drain.

Readily accessible natural gas fittings were tested for leakage using an electronic combustible gas detector. Discovered leaks are marked with ribbon. Not all portions of the gas supply lines are visible or accessible. Further evaluation and repair by a qualified contractor are recommended.

Water related fittings were noted to be installed at the gas lines. Water valves and / or compression fittings are not rated for gas usage and should be replaced with appropriate fittings or rated appliance connectors. Noted to be leaking at the dryer service.

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INSPECTION PHOTOS

HVAC **# HC1**

Gas service.

HVAC **# HC2**

Air conditioner

HVAC **# HC3**

Example of gas leaks

HVAC **# HC4**

Compression fittings at the dryer branch

HVAC **# HC5**

Furnace

Plumbing

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
1	Supply pipes:	**Marginal**	**Monitor for timely maintenance or replacement.**	
2	Waste/vent pipes:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
3	Funct'l water flow:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
4	Funct'l waste drain:	**Acceptable**	**See comments below**	
5	Well system:	**N/A**	**N/A**	
6	Septic system:	**N/A**	**N/A**	
7	Water heater:	**Defects Noted**	**Monitor for timely maintenance or replacement.**	
8	TPR Valve:	**Defects Noted**	**Evaluate for repairs. See comments below.**	

INFORMATION

9 Water supply represented as: **Municipal**

10 Supply pipes: **Copper**

11 Pipe insulation type: **None**

12 Water Shutoff Location: **Basement**

13 Well location: **N/A**

14 Waste system represented as: **Municipal**

15 Septic location: **N/A**

16 Waste piping: **Cast Iron & Copper**

17 DHW Manufacturer: **Kenmore**

18 DHW gallons: **40** DHW Age: **Apro. 16** years

19 DHW Fuel Type: **Gas**

PLUMBING COMMENTS

20 **Water was run at all accessible fixtures and all readily accessible piping was visually inspected. Much of the plumbing system is concealed within the framing of the structure. Keep in mind that not all of the plumbing fixtures may be used on a regular basis and this can have an effect on discovering the presence of leaks.**

Regular maintenance of the water heater is recommended. This includes draining sediment from the tank, checking for back drafting and monitoring for leaks. 1

The water heater appears to be an older unit. Keep in mind that the average useful life of a water heater is 12 years. Budgeting for replacement prior to failure of the water heater tank should be considered.

The flame guard door is missing at the water heater.

The water heater drain valve is leaking. This may be due to mineral build up in the bottom of the tank. 2

Temperature/pressure relief valve extension pipe is not installed at the water heater. Install an approved, properly sized TPR overflow pipe that discharges to a safe, visible location. This inexpensive addition to the TPR valve is required to help reduce the potential for burns in the event that boiling water or steam is being discharged due to appliance malfunction. Evidence of leakage was noted at the TPR valve. 3

Corrosion is visible on the plumbing supply lines. Reasons for this condition include leakage and contact with ferrous metals. Although no active leaking was visible, monitoring is recommended for timely maintenance.

Seller disclosed that there are roots in te sewer lateral. Evaluation of the lateral by a qualified plumber with a camera is recommended. 4

INSPECTION PHOTOS

Plumbing **# P1**

Water service

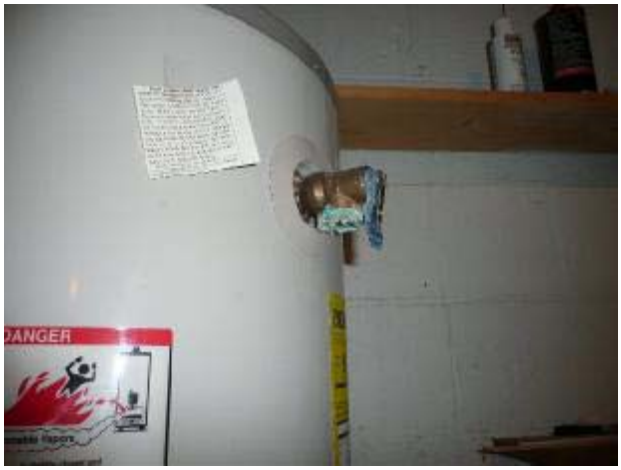
Plumbing **# P2**

Water heater

Plumbing **# P3**

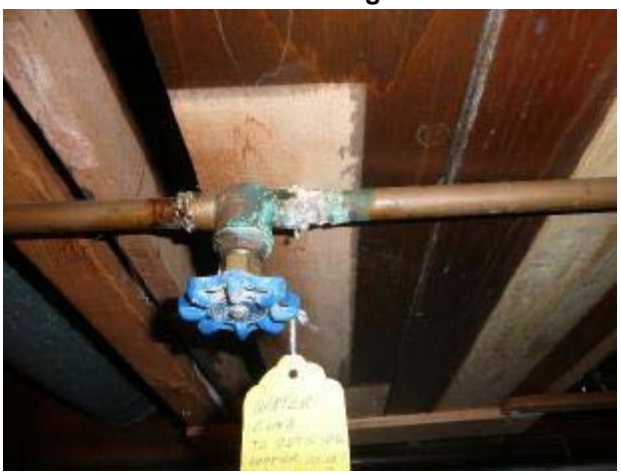
Leaking drain valve, missing flame guard

Plumbing **# P4**



Evidence of leakage at TPR valve, missing TPR pipe

Plumbing **# P5**



Example of corrosion at supply lines

Plumbing **# P6**

Example of corrosion at supply lines

Electrical System

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
1	Wiring at main box:	Defects Noted	Evaluate for repair. See coments below.	
2	Ground:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
3	GFCI:	N/A	Up grade is suggested for safety enhancement.	
4	Amperage:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
5	Wiring:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
6	Service Entry:	Acceptable	No Action Needed, Inspect & Maintain Regularly	
7	Sub Panel #1:	Defects Noted	Evaluate for repair. See coments below.	
8	:			

INFORMATION

9	Amps:	125	14	Branch circuit wiring:	Copper & Aluminum
10	Volts:	120/240	15	Grounding:	Water Service & Ground Rod
11	Main box location:	Garage	16	Ground fault protection at:	None Present
12	Main Disconnect:	Integral to Main Panel			
13	Main service conductor:	Aluminum	17	Main box type:	Breakers
			18	Wiring type:	Romex

ELECTRICAL SYSTEM COMMENTS

19 **Occupant's belongings conceal some of the electrical fixtures. A representative sampling of the electrical fixtures are tested in each room.**

The circuits in the panel(s) are not all labeled. Labeling is suggested for identification purposes in case of an emergency and for safety when working on any electrical component on the property.

1

Double tapping was found at one or more of the terminals. Only one wire may be located under a terminal screw unless it is specifically designated for such use. Replacement with an approved breaker(s) or is recommended. Noted in the sub panel.

Neutral and ground wires are connected at the sub panel. Each of these conductors should be kept seperate to provide designated return paths to the main panel. Repairs or alteration by a qualified electrician are recommended. Noted at the sub panel.

2

A wire is exiting the main panel through an un protected opening in the top of the box and through the wall. A proper wire connector is recommended.

Improper wiring was noted in the garage attic area.

Un protected wiring was noted at ground level leading to the lamp post.

3

Ground Fault Circuit Interrupter (GFCI) protection is recommended in areas of possible water contact with electrical devices and areas that have exposed bare concrete floors. These areas are primarily bathrooms, kitchens, garages, exterior and basements. Installation of GFCI protection at any unprotected areas is recommended for safety enhancement.

4

INSPECTION PHOTOS

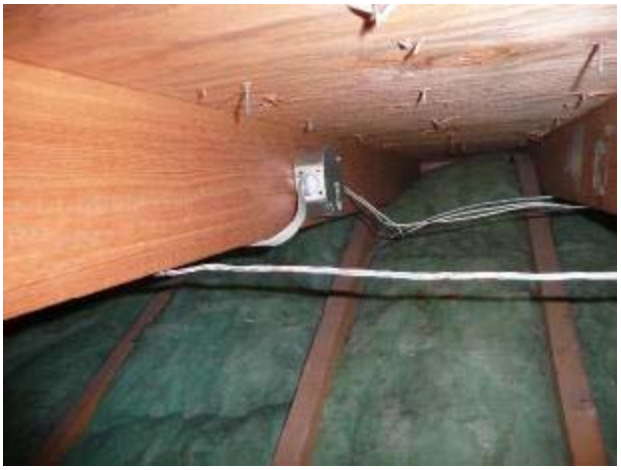
Electrical **# EL1**

Exposed electrical wire at ground level

Electrical **# EL2**

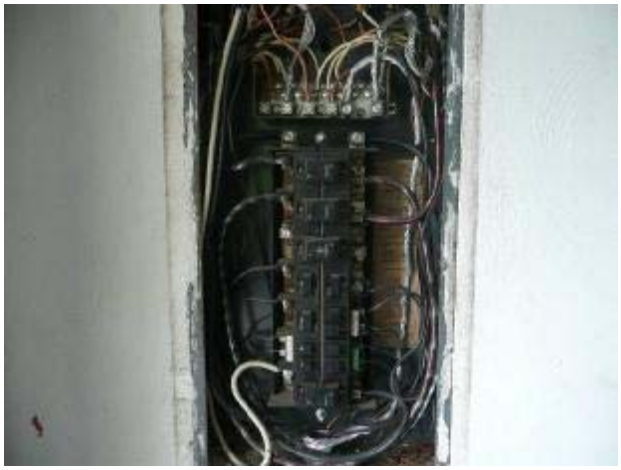
Electrical service

Electrical **# EL3**



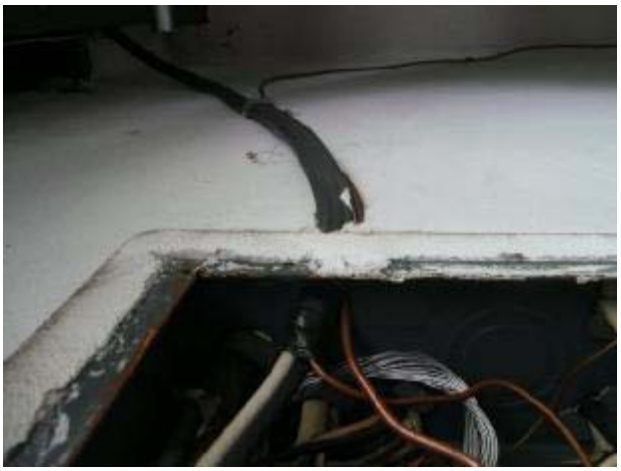
Improper wiring found at the garage attic.

Electrical **# EL4**



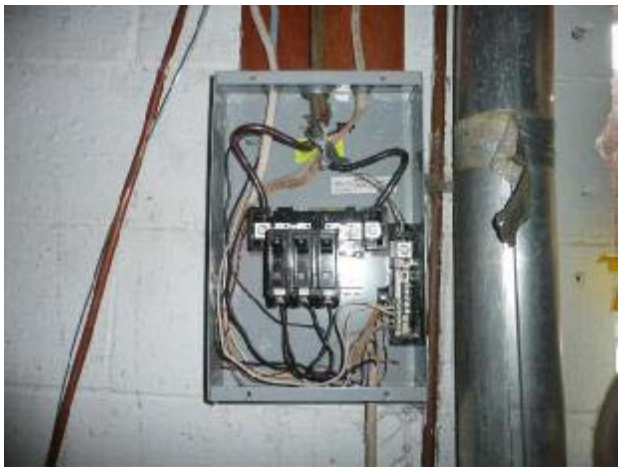
Main panel

Electrical **# EL5**



Improperly routed electrical wire.

Electrical **# EL6**



Basement sub panel.

Attic

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
1	Access:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
2	Framing:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
3	Sheathing:	**Defects Noted**	**See Comments Below.**	
4	Insulation:	**Acceptable**	**Evaluation for enhancement should be considered.**	
5	Ventilation:	**Acceptable**	**Evaluation for enhancement should be considered.**	
6	Exposed wiring:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
7	Plumbing vents:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
8	Chimney & flues:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
9	Vapor Retarder:	**N/A**	**N/A**	
10	:			

INFORMATION

11	# of Attic areas:	**2**	14	Framing:	**Rafter & Joist**
12	Access locations:	**Garage & Closet**	15	Sheathing:	**Plywood & Particle Board**
13	Access by:	**Pull Down Stairs & Hatch**	16	Insulation:	**Fiberglass Batt**

ATTIC COMMENTS

17 **Small to moderate water stains were noted in the attic area. These stains are typically found in the areas of roofing penetrations and flashing. Although accessible stains tested dry at the time of the inspection, we cannot guarantee inactivity. Unless otherwise noted in the Roofing section of the report, there were no readily visible conditions that would lead to leakage. Action to correct the leakage may have been previously performed. Inquiry with the sellers to document any past leakage or previous repairs is recommended. Monitoring the attic area for signs of future water leakage is recommended so that timely repairs may be made.**

1

Installation of additional ventilation has several benefits. Ventilation helps to control temperature and humidity conditions that may have an adverse effect on energy usage, life expectancy of roofing materials, development of mold growth and several other aspects of roofing performance. Consulting with a qualified roofing contractor to enhance the ventilation characteristics of the roofing structure should be considered.

2

The depth or R-Value if the insulation in the attic is marginal. Current insulation recommendations for this climate zone are an R-Value of 30 or approximately 10 inches of insulation. Properly installed insulation will result in increased efficiency for both the heating and cooling seasons.

What potentially appears to be mold was noted in the attic area on the sheathing. Possible causes for this condition include attic ventilation deficiencies, bathroom ventilation deficiencies, roof leakage and the maintaining of excessively high humidity levels in the living area. Testing of the discolored area for the presence of mold is recommended by a qualified contractor.

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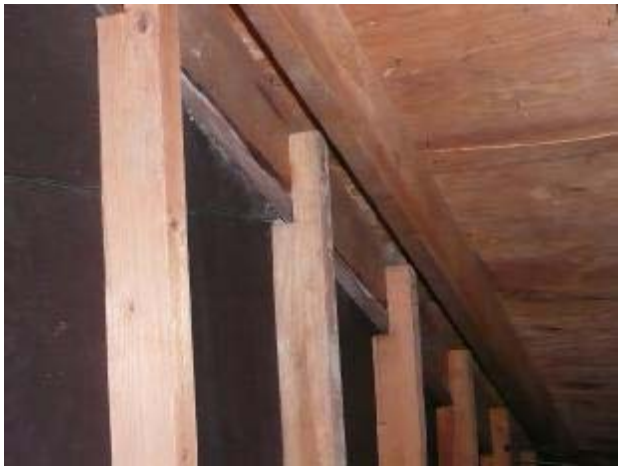
INSPECTION PHOTOS

Attic **# A1**

Smaller area of mold found at left rear corner of the garage attic

Attic **# A2**

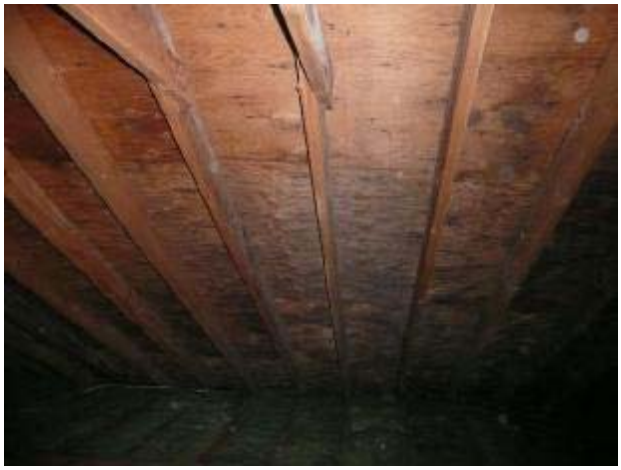


Smaller areas of staining at the chimney area.

Attic **# A3**

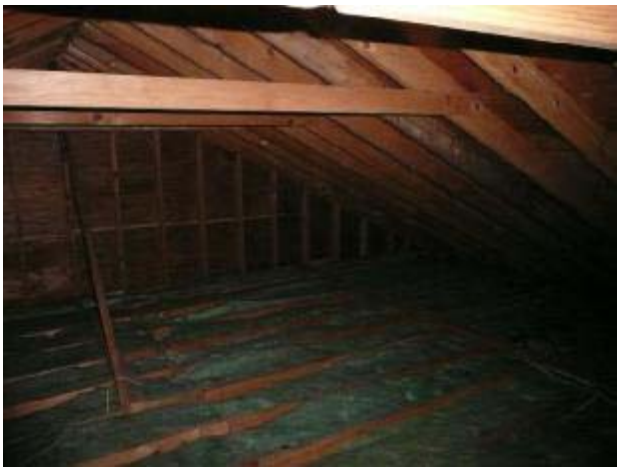
Mold above the bathroom

Attic **# A4**



Mold at the front field

Attic **# A5**



attic

Foundation

	COMPONENT	CONDITION	ACTION RECOMMENDED	PERSPECTIVE
	Foundation Type	**Basement**		
1	Access:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
2	Foundation walls:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
3	Floor framing:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
4	Insulation:	**N/A**	**N/A**	
5	Ventilation:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
6	Sump pump:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
7	Dryness/drainage:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
8	Floor/Slab:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
9	Vapor Retarder:	**Acceptable**	**No Action Needed, Inspect & Maintain Regularly**	
10	Stairs:	**Acceptable**	**Up grade suggested for safety enhancement.**	

INFORMATION

11	Foundation walls:	**Block**	14	Beams:	**Steel I Beam**
12	Floors:	**Concrete Floor**	15	Piers:	**Steel Columns**
13	Joist/Truss Detail:	**Conventional Framing**	16	Sub Floor:	**Plywood**
			17	Insulation:	**None**

FOUNDATION COMMENTS

18 **Occupant's belongings obstruct the view of portions of the foundation walls. Moving of personal property is not performed. Inquiry with the seller for documentation concerning any moisture entry, unusual cracking or corrective actions is recommended. Careful examination of the walls after the occupant's belongings have been removed is recommended.**

Evidence of moisture entry into the foundation area was visible. The most common causes for moisture entry to the foundation area include soil or walking surfaces sloping toward the foundation, malfunctioning roof drainage systems, over grown vegetation and improperly directed sprinkler systems. Any and all applicable exterior contributing conditions should be addressed to keep as much water away from the foundation as possible. Moisture entry is a reoccurring condition that is weather and seasonally related. We cannot guarantee inactivity of any visible staining. Inquiry with the seller to document the frequency and degree of moisture or water entry is recommended. Minor staining at the right side of the basement.

The presence of an interior water removal system and sump pump was noted. Inquiry with the seller about the reason for the installation and extent of the system is recommended. Most basement "waterproofing" companies offer transferrable warranties, looking into this is recommended. Installed at the right rear area of the basement.

The stairs to the basement either are missing a mid-point guard rail or the hand rail is missing. Installation of the missing component(s) is recommended for safety enhancement.

The family room appears to be wood framing on top of a slab. This area is not visible for inspection.

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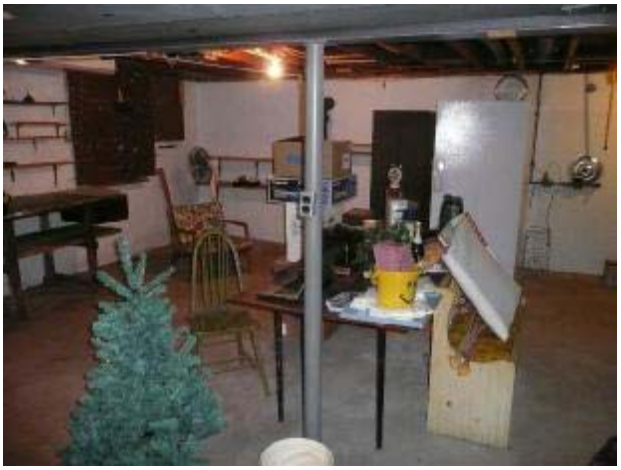
Foundation

FOUNDATION COMMENTS - Continued

18	**Horizontal cracking within three feet of the exterior grade was visible. Evidence of movement such as this in our climate zone is commonly referred to as frost heaving. Although not only a result of freezing soil, other factors that may contribute to this condition include saturated soil, expansive soil and improper soil slope toward the foundation. These cracks will typically get slightly larger during the winter and wet seasons due to lateral pressure. During the summer and dry seasons the cracks will diminish due to the shrinkage of the drying soil and the vertical load of the building structure. Concerning this seasonal movement of the wall it is important not to fill the created opening with a solid material, like mortar, as this will create a "wedge" that does not allow to move back towards plumb during the dry seasons. Although this type of cracking is common and currently does not appear to have created a significant problem, monitoring for any unusual movement is recommended so that timely and minimally invasive correction can be performed. Any and all exterior contributing factors concerning landscaping and roof drainage conditions should be addressed in order to keep water away from this particular section of the foundation.**	5

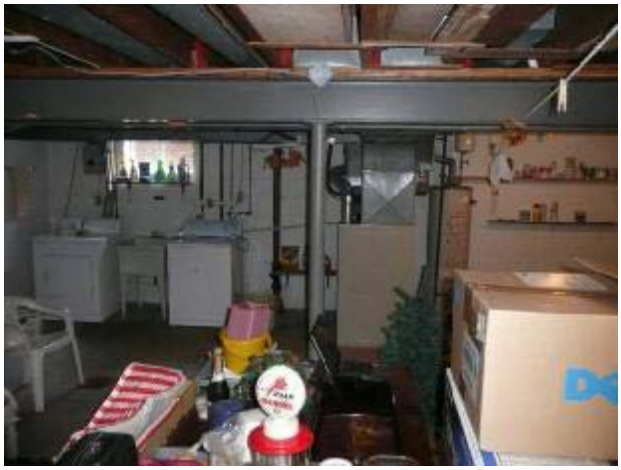
INSPECTION PHOTOS

Foundation **# F1**



Foundation area

Foundation **# F2**



Foundation area

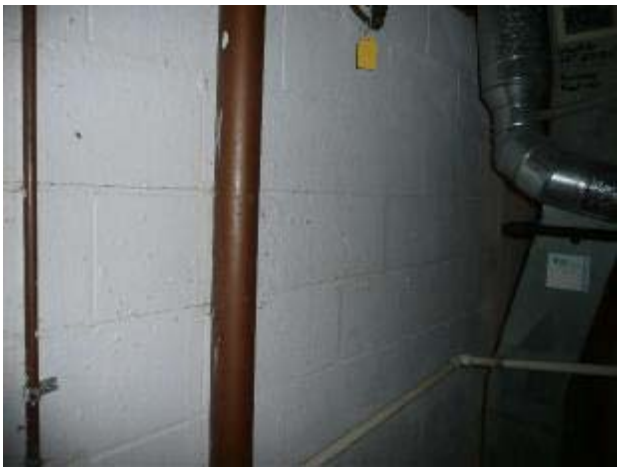
Foundation **# F3**

Evidence of moisture entry at the right side

Foundation **# F4**

Water removal system

Foundation **# F5**



Horizontal cracking at the rear wall.