

**Specialty Home Inspections
Presents**



**A Mobile Home Inspection Report On
30611 Towering Oaks, Magnolia, TX
Sold by Jesus Vargas, Listed By**



Specialty Home Inspections

www.SpecialtyInspections.com

Thursday, September 7, 2023

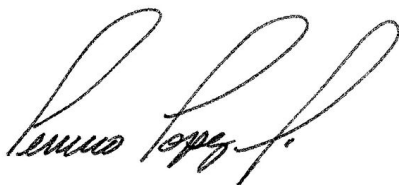
Damon Miles
Home Buyer
Houston, Texas

Dear Damon:

Thank you for selecting our company for your inspection needs. I enjoyed working with you to develop the attached deficiency report. Attached you will find your formal home inspection report as per current modified TREC guidelines. Please review the report and if all is well noted, you may forward the report to your Realtor and/or other party that is assisting you in the home buying process. Please note that the home inspection is part of your due diligence as noted on the TREC cover of this report and additional investigations may be necessary during your option period at which you may find additional issues.

If you have any questions please feel free to call me.

Yours Truly

A handwritten signature in black ink, appearing to read "Genaro Lopez". The signature is fluid and cursive, with the first name "Genaro" and last name "Lopez" clearly distinguishable.

Genaro Lopez
Professional Inspector No. 3078

Tel 281-477-0893

e-mail: Houstonss@aol.com

Specialty Home Inspections

www.SpecialtyInspections.com
Houston, TX 77065

Phone: 281-477-0893
Fax: 281-477-0612

INVOICE

CLIENT'S NAME: Damon Miles TX
--

INVOICE NUMBER	GL20230907-01
INVOICE DATE	September 7, 2023
TERMS	Due on receipt

INSPECTION DESCRIPTION	PRICE	AMOUNT
Structural & Mechanical Inspection	\$550.00	\$550.00
Septic System Inspection	\$150.00	\$150.00
PAYMENTS:		
9/8/2023	(\$700.00)	(\$700.00)
	SUBTOTAL	\$700.00
	TAX	\$0.00
	TOTAL	\$700.00
	BALANCE DUE	\$0.00

THANK YOU FOR CHOOSING OUR COMPANY FOR YOUR INSPECTIONS!

TABLE OF CONTENTS

<u>Cover Pages</u>	1
<u>Cover Page</u>	1
<u>Invoice</u>	3
<u>TOC</u>	4
<u>Title Pages</u>	7
<u>Additional Info Provided By Inspector</u>	7
<u>Structural Systems</u>	16
<u>Foundations</u>	16
<u>Grading and Drainage</u>	23
<u>Roof Covering Materials</u>	27
<u>Roof Structures and Attics</u>	30
<u>Walls (Interior and Exterior)</u>	31
<u>Ceilings and Floors</u>	37
<u>Doors (Interior and Exterior)</u>	40
<u>Windows</u>	43
<u>Fireplaces and Chimneys</u>	46
<u>Porches, Balconies, Decks, and Carports</u>	46
<u>Other</u>	51
<u>Electrical Systems</u>	55
<u>Service Entrance and Panels</u>	55
<u>Branch Circuits, Connected Devices, and Fixtures</u>	62
<u>Heating, Ventilation and Air Conditioning Systems</u>	67
<u>Heating Equipment</u>	67
<u>Cooling Equipment</u>	67
<u>Duct Systems, Chases, and Vents</u>	73
<u>Plumbing Systems</u>	76
<u>Plumbing Supply, Distribution Systems and Fixtures</u>	76

<u>Drains, Wastes, and Vents</u>	81
<u>Water Heating Equipment</u>	82
<u>Hydro-Massage Therapy Equipment</u>	85
<u>Gas Distribution Systems and Gas Appliances</u>	85
<u>Other</u>	87
<u>Appliances</u>	87
<u>Dishwashers</u>	87
<u>Food Waste Disposers</u>	88
<u>Range Hood and Exhaust Systems</u>	89
<u>Ranges, Cooktops, and Ovens</u>	89
<u>Microwave Ovens</u>	91
<u>Mechanical Exhaust Vents and Bathroom Heaters</u>	91
<u>Garage Door Operators</u>	92
<u>Dryer Exhaust Systems</u>	92
<u>Other</u>	92
<u>Optional Systems</u>	93
<u>Outbuildings</u>	93
<u>Private Sewage Disposal Systems</u>	96
<u>Summary pages</u>	108
<u>Summary</u>	108
<u>Inspection Limitations</u>	118
<u>Select Limitations Listing</u>	118
<u>Maintenance Advice</u>	120
<u>Periodic Maintenance Advice</u>	120
<u>Other Fields</u>	123
<u>EMF Report & Opinion on Subject Property</u>	123
<u>Introduction</u>	127
<u>Magnetic Spectrum</u>	128
<u>EMF Background Information</u>	129

<u>National Average Chart</u>	130
<u>Government Studies Milatonen</u>	131
<u>Prudence Avoidance</u>	132
<u>Lack of Regulatory Guidance</u>	133
<u>Power Frequency Fields</u>	134
<u>How Far is Safe</u>	135
<u>Case Studies & Chart</u>	136
<u>Due Diligence Resources</u>	138
<u>Photo Log</u>	138



PROPERTY INSPECTION REPORT FORM

Damon Miles <i>Name of Client</i>	09/07/2023 <i>Date of Inspection</i>
30611 Towering Oaks, Magnolia, TX 77355 <i>Address of Inspected Property</i>	
Genaro Lopez <i>Name of Inspector</i>	3078 <i>TREC License #</i>
 <i>Name of Sponsor (if applicable)</i>	 <i>TREC License #</i>

PURPOSE OF INSPECTION

A real estate inspection is a visual survey of a structure and a basic performance evaluation of the systems and components of a building. It provides information regarding the general condition of a residence at the time the inspection was conducted. *It is important* that you carefully read ALL of this information. Ask the inspector to clarify any items or comments that are unclear.

RESPONSIBILITY OF THE INSPECTOR

This inspection is governed by the Texas Real Estate Commission (TREC) Standards of Practice (SOPs), which dictates the minimum requirements for a real estate inspection.

The inspector IS required to:

- use this Property Inspection Report form for the inspection;
- inspect only those components and conditions that are present, visible, and accessible at the time of the inspection;
- indicate whether each item was inspected, not inspected, or not present;
- indicate an item as Deficient (D) if a condition exists that adversely and materially affects the performance of a system or component **OR** constitutes a hazard to life, limb or property as specified by the SOPs; and
- explain the inspector's findings in the corresponding section in the body of the report form.

The inspector IS NOT required to:

- identify all potential hazards;
- turn on decommissioned equipment, systems, utilities, or apply an open flame or light a pilot to operate any appliance;
- climb over obstacles, move furnishings or stored items;
- prioritize or emphasize the importance of one deficiency over another;
- provide follow-up services to verify that proper repairs have been made; or
- inspect system or component listed under the optional section of the SOPs (22 TAC 535.233).

RESPONSIBILITY OF THE CLIENT

While items identified as Deficient (D) in an inspection report DO NOT obligate any party to make repairs or take other actions, in the event that any further evaluations are needed, it is the responsibility of the client to obtain further evaluations and/or cost estimates from qualified service professionals regarding any items reported as Deficient (D). It is recommended that any further evaluations and/or cost estimates take place prior to the expiration of any contractual time limitations, such as option periods.

Please Note: Evaluations performed by service professionals in response to items reported as Deficient (D) on the report may lead to the discovery of additional deficiencies that were not present, visible, or accessible at the time of the inspection. Any repairs made after the date of the inspection may render information contained in this report obsolete or invalid.

REPORT LIMITATIONS

This report is provided for the benefit of the named client and is based on observations made by the named inspector on the date the inspection was performed (indicated above).

ONLY those items specifically noted as being inspected on the report were inspected.

This inspection IS NOT:

- a technically exhaustive inspection of the structure, its systems, or its components and may not reveal all deficiencies;
- an inspection to verify compliance with any building codes;
- an inspection to verify compliance with manufacturer's installation instructions for any system or component and DOES NOT imply insurability or warrantability of the structure or its components.

NOTICE CONCERNING HAZARDOUS CONDITIONS, DEFICIENCIES, AND CONTRACTUAL AGREEMENTS

Conditions may be present in your home that did not violate building codes or common practices in effect when the home was constructed but are considered hazardous by today’s standards. Such conditions that were part of the home prior to the adoption of any current codes prohibiting them may not be required to be updated to meet current code requirements. However, if it can be reasonably determined that they are present at the time of the inspection, the potential for injury or property loss from these conditions is significant enough to require inspectors to report them as Deficient (D). Examples of such hazardous conditions include:

- malfunctioning, improperly installed or missing ground fault circuit protection (GFCI) devices and arc-fault devices;
- ordinary glass in locations where modern construction techniques call for safety glass;
- malfunctioning or lack of fire safety features such as, smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
- malfunctioning carbon monoxide alarms;
- excessive spacing between balusters on stairways and porches;
- improperly installed appliances;
- improperly installed or defective safety devices;
- lack of electrical bonding and grounding; and
- lack of bonding on gas piping, including corrugated stainless steel tubing (CSST).

Please Note: items identified as Deficient (D) in an inspection report DO NOT obligate any party to make repairs or take other actions. The decision to correct a hazard or any deficiency identified in an inspection report is left up to the parties to the contract for the sale or purchase of the home.

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions.

INFORMATION INCLUDED UNDER “ADDITIONAL INFORMATION PROVIDED BY INSPECTOR”, OR PROVIDED AS AN ATTACHMENT WITH THE STANDARD FORM, IS NOT REQUIRED BY THE COMMISSION AND MAY CONTAIN CONTRACTUAL TERMS BETWEEN THE INSPECTOR AND YOU, AS THE CLIENT. THE COMMISSION DOES NOT REGULATE CONTRACTUAL TERMS BETWEEN PARTIES. IF YOU DO NOT UNDERSTAND THE EFFECT OF ANY CONTRACTUAL TERM CONTAINED IN THIS SECTION OR ANY ATTACHMENTS, CONSULT AN ATTORNEY.

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

Particulars

- Present at Inspection: Buyer Selling Agent Listing Agent Occupant Inspector
- Building Status: Vacant Owner Occupied Tenant Occupied Other
- Weather Conditions: Fair Cloudy Rain Temp: 102 °
- Utilities On: Yes No Water No Electricity No Gas All Electric

Special Notes: Home has a septic system included in this report under a separate category

Recommendations - Home Owners Warranty

HOME OWNERS WARRANTY RECOMMENDED: Inspector does not warranty any equipment or imply a type of guarantee or warranty, thus the buyer is encouraged and it is recommended to purchase a Home Owner's Warranty through his/her Realtor or from an insurer of his/her choice. Home warranty is an appliance service protection plan that covers the maintenance expenses associated with household items such as refrigerator, dishwasher, HVAC units, plumbing system, electrical wiring etc. Your home owner’s insurance will insure against natural disasters such as fire and flood but it will NOT cover the maintenance and repair charges of appliances.

Visit the following web site to assist you in choosing the company that best meets your expectations and budget:

<http://www.homewarrantyreviews.com/>

Buyer is directed to read the last pages and any addendum to this report which includes important recommendations, exclusions and disclaimers which constitute part of this report. Please note that the scope of this inspection is limited to the present condition of the Structural and Mechanical components of the subject property.

The report does not imply or include any other environmental type of inspection, investigation or condition present in the subject property such as MOLD, FUNGI, LEAD HAZARDS, ASBESTOS, EMF, WOOD DESTROYING INSECTS, RODENTS, VARMINTS, ANTS, or any other type of BIO HAZARD CONDITION.

Vacant home limitations: When houses are vacant / unoccupied or partially occupied (empty nester's) at the time of inspection they pose a unique challenge to an inspector. Components such as the piping and wiring systems which have not be subject to regular use prior to the inspection may malfunction once put into constant use by the occupant. While these systems can be tested during inspection, this one-time test is different than regular use and it is difficult to know how these systems will respond to regular use after the inspection.

For example, Plumbing traps may operate with no signs of leaks and then fail when being actively used and loads are placed on the sinks. Shower pans may only leak when someone is standing in the shower and taking a shower. Seals for plumbing fixtures can dry up and leak when not is use. If a home has a septic system, the septic system may initially function and then fail under regular daily use.

Owner's Disclosure Statement: It is important for the buyer to review the disclosure report that would have to show the above present known conditions and disclose it to the inspector at the beginning of the inspection. This statement suppose to show the known defects of the home and alert the inspector of what components are broken, defective or should not be activated.

Sewer lines with root damage may allow water flow, but then fail when waste and tissue are flushed. A back up condition can take a few days and thus not discoverable at the time of the inspection. This inspector during the inspection process will attempt to look for clues of past or existing problems and provide a professional opinion as to the reliability of these systems. The testing procedures are as comprehensive as possible but cannot predict the future performance of a fully occupied home. On an older home, specially if large trees with extensive root system is nearby, a camera sewer inspection is recommended that is performed by a qualified licensed plumber.

Limited/Individual Component Inspection: As agreed in the Pre-Inspection Agreement, this is a Limited/Individual Component Inspection only consisting of an inspection of the referenced area(s) and or component(s). Some comments may be made in relation to other systems or items of the home if they affect the listed individual component. Any comments made in regards to items not listed in this paragraph were done so a courtesy, and the referenced deficiencies should not be viewed as an all-inclusive listing of deficiencies with these items.

Older Homes : Older homes are defined as homes built prior to 2002. All components and items of a home have a finite life span this includes air conditioning system, roofs and appliances. Therefore repairs or replacement of items should be expected and anticipated in the future due to the age of the home alone. Many older homes were not constructed to today's standards, and the home's items and components will be inspected based on their functionality, not how they measure up to today's standards. Life expectancy for most appliances is between 5-10 years.

Concealed Issues: Older homes often have concerns that are not readily accessible and visible (concealed behind walls, ceilings, floors, covered with carpet, buried under insulation, etc.). When renovations and repairs are performed, these "hidden" concerns may become visible and require additional and unforeseen repair work. A best effort was made during this inspection to discover all concerns; however, it is impossible to discover every defect present, especially in older structures. Concerns that are not readily visible at the time of this inspection cannot be commented on and are specifically exempt from this inspection

Code Compliance: A home inspection does not address code compliance, and building codes changes from year to year and many times from municipality to municipality. Select code reference in this reports reflect modern day IRC code requirements as a reference that may not reflect the code that was active at the time the home was built or current code upgrades. However today's codes should be adhered to since they address safety and function issues that have been learned over the years. To learn more about how this home could be improved in regards to today's safety or construction standards, a general contractor, licensed electrician, and other licensed professionals should be consulted and do further evaluations.

Pre-Closing Walk Thru is recommended. Conditions may change between the days the inspection was performed and the day the closing is completed, thus it is recommended that the buyer with his or her agent make a walk thru the home with all of the utilities active to confirm that water pipes have not busted in recent freeze or that the condenser or appliances have been removed or exchanged for an older model by others.

Service Agreement Our insurance carrier requires that the buyer be presented with a service agreement to review and sign prior to commencing the inspection. If the buyer is not present the buyer releases the inspector to commence the inspection and may request a copy of the service agreement which states many of the rules and limitation found in this report.

Photo Log is part of the unwritten part of the report, most have comments to elaborate but all deficiencies that show up on the photos are part of the report.

Inspector is on the premises by invitation of the client. The client is responsible for anything that happens in the home during the inspection process as well as the persons who accompany the buyer and their actions with the exception of any gross negligence by the inspector.

Buyer's Notes: _____

**NOTICE: THIS REPORT IS PAID FOR BY AND PREPARED FOR THE CLIENT NAMED ABOVE.
THIS REPORT IS NOT VALID WITHOUT THE SIGNED SERVICE AGREEMENT AND IS NOT TRANSFERABLE.**

Manufactured Home Definition

Manufactured Home means:

- 1. a structure, transportable in one or more sections,**
- 2. which in the traveling mode,**
- 3. is eight body feet or more in width or thirty body feet or more in length, or, when erected on site, is three hundred twenty or more square feet,**
- 4. and which is built on a permanent chassis**
- 5. and designed to be used as a dwelling with or without a permanent foundation**
- 6. when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained therein.**
- 7. Calculations used to determine the number of square feet in a structure will be based on the structure's exterior dimensions measured at the largest horizontal projections when erected on site.**
- 8. These dimensions will include all expandable rooms, cabinets, and other projections containing interior space, but do not include bay windows.**
- 9. This term includes all structures which meet the above requirements except the size requirements and with respect to which the manufacturer voluntarily files a certification pursuant to §3282.13 and complies with the standards set forth in part 3280.**
- 10. Nothing in this subsection should be interpreted to mean that a manufactured home necessarily meets the requirements of HUD's Minimum Property Standards (HUD Handbook 4900.1) or that it is automatically eligible for financing under 12 U.S.C. 1709(b).**

Terms and Definitions

Anchoring equipment: Straps, cables, turnbuckles, and chains, including tensioning devices, which are used with ties to secure a manufactured home to ground anchors.

Anchoring system: means a combination of ties, anchoring equipment, and ground anchors that will, when properly designed and installed, resist overturning and lateral movement of the manufactured home from wind forces.

Diagonal tie: means a tie intended to primarily resist horizontal forces, but which may also be used to resist vertical forces.

Footing: That portion of the support system that transmits loads directly to the soil.

Ground anchor: means any device at the manufactured home stand designed to transfer manufactured home anchoring loads to the ground.

Loads: (1) Dead load: means the weight of all permanent construction including walls, floors, roof, partition, and fixed service equipment.

(2) Live load: means the weight superimposed by the use and occupancy of the manufactured home, including wind load and snow load, but not including dead load.

(3) Wind load: means the lateral or vertical pressure or uplift on the manufactured home due to wind blowing in any direction.

Main frame: means the structural component on which is mounted the body of the manufactured home.

Pier: means that portion of the support system between the footing and manufactured home exclusive of caps and shims.

Sheathing: means material which is applied on the exterior side of a building frame under the exterior weather resistant covering.

Stabilizing devices: means all components of the anchoring and support system such as piers, footings, ties, anchoring equipment, ground anchors, and any other equipment which supports the manufactured home and secures it to the ground.

Support system: means a combination of footings, piers, caps, and shims that will, when properly installed, support the manufactured home.

Tie: means straps, cable, or securing devices used to connect the manufactured home to ground anchors.

Vertical tie: means a tie intended to resist the uplifting or overturning forces.

MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

(Not part of a TREC inspection format - HUD guidelines for construction)

Provided as Additional Information for further due diligence by the buyer

Subpart A General

3280.1 Scope.

3280.2 Definitions.

3280.3 Manufactured home procedural and enforcement regulations and consumer manual requirements.

3280.4 Incorporation by reference.

3280.5 Data plate.

3280.6 Serial number.

3280.7 Excluded structures.

3280.8 Waivers.

3280.9 Interpretative bulletins.

3280.10 Use of alternative construction.

3280.11 Certification label.

Subpart B Planning Considerations

3280.101 Scope.

3280.102 Definitions.

3280.103 Light and ventilation.

3280.104 Ceiling heights.

3280.105 Exit facilities; exterior doors.

3280.106 Exit facilities; egress windows and devices.

3280.107 Interior privacy.

3280.108 Interior passage.

3280.109 Room requirements.

3280.110 Minimum room dimensions.

3280.111 Toilet compartments.

3280.112 Hallways.

3280.113 Glass and glazed openings.

Subpart C Fire Safety

3280.201 Scope.

3280.202 Definitions.

3280.203 Flame spread limitations and fire protective requirements.

3280.204 Kitchen cabinet protection.

3280.205 Carpeting.

3280.206 Firestopping.

3280.207 Requirements for foam plastic thermal insulating materials.

3280.208 Fire detection equipment.

3280.209 Fire testing.

Subpart D Body and Frame Construction Requirements

- 3280.301 Scope.
- 3280.302 Definitions.
- 3280.303 General requirements.
- 3280.304 Materials.
- 3280.305 Structural design requirements.
- 3280.306 Windstorm protection.
- 3280.307 Resistance to elements and use.
- 3280.308 Formaldehyde emission controls for certain wood products.
- 3280.309 Health Notice on formaldehyde emissions.

Subpart E Testing

- 3280.401 Structural load tests.
- 3280.402 Test procedures for roof trusses.
- 3280.403 Standard for windows and sliding glass doors used in manufactured homes.
- 3280.404 Standard for egress windows and devices for use in manufactured homes.
- 3280.405 Standard for swinging exterior passage doors for use in manufactured homes.
- 3280.406 Air chamber test method for certification and qualification of formaldehyde emission levels.

Subpart F Thermal Protection

- 3280.501 Scope.
- 3280.502 Definitions.
- 3280.503 Materials.
- 3280.504 Condensation control and installation of vapor retarders.
- 3280.505 Air infiltration.
- 3280.506 Heat loss/heat gain.
- 3280.507 Comfort heat gain.
- 3280.508 Heat loss, heat gain and cooling load calculations.
- 3280.509 Criteria in absence of specific data.
- 3280.510 Heat loss certificate.
- 3280.511 Comfort cooling certificate and information.

Subpart G Plumbing Systems

- 3280.601 Scope.
- 3280.602 Definitions.
- 3280.603 General requirements.
- 3280.604 Materials.
- 3280.605 Joints and connections.
- 3280.606 Traps and cleanouts.
- 3280.607 Plumbing fixtures.
- 3280.608 Hangers and supports.
- 3280.609 Water distribution systems.
- 3280.610 Drainage systems.
- 3280.611 Vents and venting.
- 3280.612 Tests and inspection.

Subpart H Heating, Cooling and Fuel Burning Systems

- 3280.701 Scope.
- 3280.702 Definitions.
- 3280.703 Minimum standards.
- 3280.704 Fuel supply systems.
- 3280.705 Gas piping systems.
- 3280.706 Oil piping systems.
- 3280.707 Heat producing appliances.
- 3280.708 Exhaust duct system and provisions for the future installation of a clothes dryer.
- 3280.709 Installation of appliances.
- 3280.710 Venting, ventilation and combustion air.
- 3280.711 Instructions.
- 3280.712 Marking.
- 3280.713 Accessibility.
- 3280.714 Appliances, cooling.
- 3280.715 Circulating air systems.

Subpart I Electrical Systems

- 3280.801 Scope.
- 3280.802 Definitions.
- 3280.803 Power supply.
- 3280.804 Disconnecting means and branch-circuit protective equipment.
- 3280.805 Branch circuits required.
- 3280.806 Receptacle outlets.
- 3280.807 Fixtures and appliances.
- 3280.808 Wiring methods and materials.
- 3280.809 Grounding.
- 3280.810 Electrical testing.
- 3280.811 Calculations.
- 3280.812 Wiring of expandable units and dual units.
- 3280.813 Outdoor outlets, fixtures, air conditioning equipment, etc.
- 3280.814 Painting of wiring.
- 3280.815 Polarization.
- 3280.816 Examination of equipment for safety.

Subpart J Transportation

- 3280.901 Scope.
- 3280.902 Definitions.
- 3280.903 General requirements for designing the structure to withstand transportation shock and vibration.
- 3280.904 Specific requirements for designing the transportation system.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

I. STRUCTURAL SYSTEMS

A. Foundations

Type of Foundation(s): Slab on Grade Pier and Beam Steel Frame

Comments:

1. Home is a mobile or double wide home.
2. The home is considered a manufactured home.

Type of Foundation:

3. The foundation is based on a steel frame and this inspection is limited to the functionality and performance of the foundation and not to specific steel specs and/or welding joints and such on the frame.

Another Home Shown Below:



4. When the home is delivered to the site the axles are removed and the mobile home is made to rest on concrete blocks.
5. There must be dual supports directly under the door frame plus others.

Another Home Shown Below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Access Point:

6. The home has proper skirting around the perimeter.



7. The skirting is well secured in most places with a few "dents" and penetrations.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

8. Missing an access panel or door where the underside of the home can be serviced and/or inspected.



9. The underside was viewed thru a separation on the top of the skirting next to the front porch as seen below, very limited viewing.



Anchorage:

10. The home must be secured to the ground with a strap anchoring system as dictated by the TDHMD guidelines.
11. The subject home has straps, the tension was not checked, not part of the scope of work on a TREC inspection.
12. This inspection does not cover the required windstorm requirements for the area, it is limited to structural and mechanical issues.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Another Home Shown Below:



Termite Caps:

- 13. Each of the piers should have a termite cap to keep termites from entering into the building envelope.
- 14. Missing termite caps above each pier as per code

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Signs of Structural Movement or Settling None

- Uneven floor decking Doors Jamming
- Floors not level Separations between trim and siding
- Cracks in interior wall(s) Cracks on ceilings Tape Separations

- 15. The floors by the kitchen and family room have "squeaks" on the wood flooring, reason not known.
- 16. There are some minor differences in elevation in various points of the flooring which is not uncommon on a mobile home.

Performance Opinion

- The foundation appears to be performing the function intended, the foundation is supporting the walls properly and serving as a base for the structure, no detrimental conditions noted at the time of the inspection.
- Structural movement and/or settling noted; however, the foundation is supporting the structure at this time and no immediate repairs recommended.
- Signs of structural movement noted; suggest that an expert in this field be consulted for further evaluation of the structure and to provide suggestions as to what, if any, corrective actions should be taken.
- Foundation is in need of immediate repairs and leveling.

Additional information:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

Note 1: *Weather conditions, drainage, leakage and other adverse factors are able to effect structures, and differential movements are likely to occur. The inspectors opinion is based on visual observations of accessible and unobstructed areas of the structure at the time of the inspection. Future performance of the structure cannot be predicted or warranted.*

Note 2: *It is important to note, this was not a structural engineering survey nor was any specialized testing done of any sub-slab plumbing systems during this limited visual inspection, as these are specialized processes requiring excavation. In the event that structural movement is noted, client is advised to consult with a Structural Engineer who can isolate and identify causes, and determine what corrective steps, if any, should be considered to either correct and/or stop structural movement.*

SUGGESTED FOUNDATION MAINTENANCE & CARE - *Proper drainage and moisture maintenance to all types of foundations due to the expansive nature of the area load bearing soils. Drainage must be directed away from all sides of the foundation with grade slopes. In most cases, floor coverings and/or stored articles prevent recognition of signs of settlement - cracking in all but the most severe cases.*

17. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

18. 3280.306(b)(1) **The manufacturer shall provide** printed instructions with each manufactured home specifying the location and required capacity of stabilizing devices on which the design is based. The manufacturer shall provide **drawings and specifications** certified by a registered professional engineer or architect indicating at least one acceptable system of anchoring, including the details of required straps or cables, their end connections, and all other devices needed to transfer the wind loads from the manufactured home to an anchoring or foundation system.

19. 3280.306(b)(2) **For anchoring systems**, the instructions shall indicate:

20. 3280.306(b)(2)(ii) **Anchors should be certified** by a professional engineer, architect, or a nationally recognized testing laboratory as to their resistance, based on the maximum angle of diagonal tie and/or vertical tie loading (see paragraph (c)(3) of this section) and angle of anchor installation, and type of soil in which the anchor is to be installed;

21. 3280.306(b)(2)(iii) **Ground anchors** should be embedded below the frost line and be at least 12 inches above the water table; and

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

- 22. 3280.306(b)(2)(iv) **Ground anchors** should be installed to their full depth, and stabilizer plates should be installed to provide added resistance to overturning or sliding forces.
- 23. 3280.306(b)(2)(v) **Anchoring equipment** should be certified by a registered professional engineer or architect to resist these specified forces in accordance with testing procedures in ASTM Standard Specification D3953-91, Standard Specification for Strapping, Flat Steel and Seals.
- 24. 3280.306(c) **Design criteria.** The provisions made for anchoring systems shall be based on the following design criteria for manufactured homes.
- 25. 3280.306(c)(1) The minimum number of ties provided per side of each home shall resist design wind loads required in §3280.305(c)(1).
- 26. 3280.306(c)(2) **Ties** shall be as evenly spaced as practicable along the length of the manufactured home, with not more than two (2) feet open-end spacing on each end.
- 27. 3280.306(c)(3) **Vertical ties or straps** shall be positioned at studs. Where a vertical tie and a diagonal tie are located at the same place, both ties may be connected to a single anchor, provided that the anchor used is capable of carrying both loadings, simultaneously.
- 28. **Requirements for ties.** Manufactured homes in Wind Zone I require only diagonal ties. These ties shall be placed along the main frame and below the outer side walls. All manufactured homes designed to be located in Wind Zones II and III shall have a vertical tie installed at each diagonal tie location.
- 29. 3280.306(e) **Protection requirements.** Protection shall be provided at sharp corners where the anchoring system requires the use of external straps or cables. Protection shall also be provided to minimize damage to siding by the cable or strap.
- 30. 3280.306(f) **Anchoring equipment--load resistance.** Anchoring equipment shall be capable of resisting an allowable working load equal to or exceeding 3,150 pounds and shall be capable of withstanding a 50 percent overload (4,725 pounds total) without failure of either the anchoring equipment or the attachment point on the manufactured home.
- 31. 3280.306(g) **Anchoring equipment--weatherization.** Anchoring equipment exposed to weathering shall have a resistance to weather deterioration at least equivalent to that provided by a coating of zinc on steel of not less than 0.30

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

ounces per square foot of surface coated, and in accordance with the following:

- 32. 3280.306(g)(1) Slit or cut edges of zinc-coated steel strapping do not need to be zinc coated.
- 33. 3280.306(g)(2) Type 1, Finish B, Grade 1 steel strapping, 1_1/4 inches wide and 0.035 inches in thickness, certified by a registered professional engineer or architect as conforming with ASTM Standard Specification D3953-91, Standard Specification for Strapping, Flat Steel, and Seals.

B. Grading and Drainage

Comments:

Storm Drain:

- 34. The front of the property has open storm drains.
- 35. The drains were clear and appear to flow properly, not confirmed, not known.



Pad:

- 36. A mobile home must have a pad under the unit to keep water away from the various support piers.
- 37. The finish product on a new mobile home pad should look like the photos below.

Another Pad Shown Below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



38. The types of pads that are used can be a compactable soil/clay or a concrete foundation.

39. The subject property had very limited viewing area of the underside as seen below, a traditional pad was not visible.



Poly Cover:

40. The pad needs to have a polyethylene cover over it and secure it with the pads.

41. There is no polyethylene cover over the pad under the unit.

Another Home Shown Below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



High Soil:

42. The perimeter of the home has skirting where the soil is in contact with the skirting that can cause a pathway for insects.



43. Note: Any area where the ground or grade does not slope away from the structure is to be considered an area of improper drainage. Six inches per 10 feet.

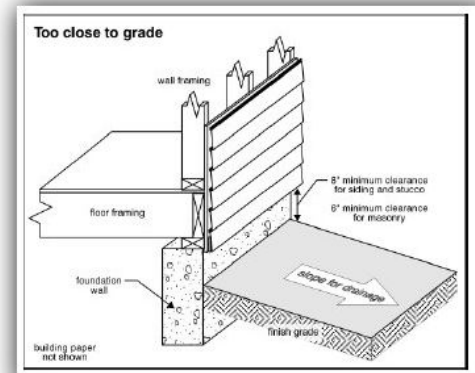
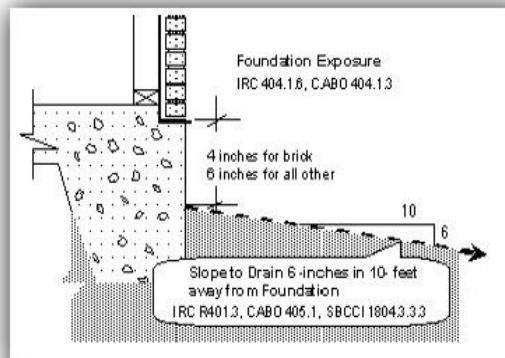
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Site Drainage:

44. R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).

45. Ponding noted at several points around the foundation or near the foundation all low spots should be filled, compacted and caused to drain away from the foundation to avoid future foundation settlement issues.

Recommendation:

46. Recommend swales on each side to draw the water away from the foundation and down to the street as required by code.

See Other homes shown below:

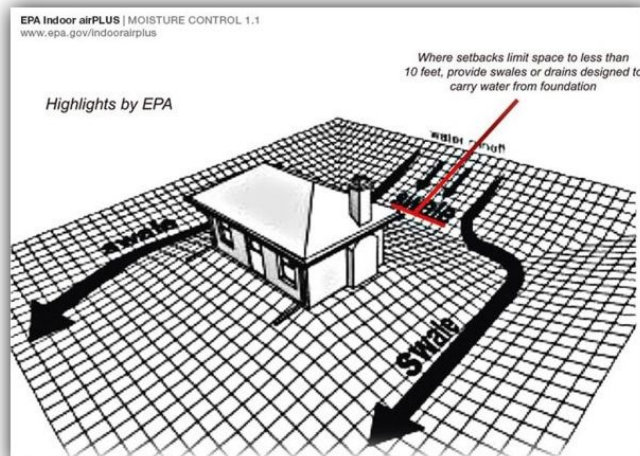
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



The Texas Administrative RULE §304.32

- **Performance Standards for Yard Grading**

(a) Yards shall have grades and swales that provide for proper drainage away from the home in accordance with the Code or other governmental regulations.

(b) If the grades or swales fail to meet the standard stated in this subsection, the owner shall take such action as is necessary to bring the variance within the standard.

(c) The homeowner shall maintain the drainage pattern and protect the grading contours from erosion, blockage, over-saturation or any other changes.

(d) Settling or sinking of soil shall not interfere with the drainage patterns of the lot or have a vertical depth of six inches or more if it does, the owner should make the proper repairs for proper drainage.

C. Roof Covering Materials

Type(s) of Roof Covering: Asphalt Shingles

Viewed From: Top of Ladder

Type of Roof:

2. The home has a laminated composition roof shingle covering over wood decking.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



3. Shingles were not raised to count the nail order, it damages the shingle glue tab adhesion which is designed for only one seal.



Tree Limbs:

4. There are various tree limbs that are in contact with the roof covering, all tree limbs must be at least six feet from the roof/shingles to avoid damage.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Venting & Gutters:

- 5. Venting is provided by fixed vents.
- 6. The home has no gutters.

Conclusion:

- 7. Overall the roof covering is in acceptable conditions at the time of the inspection.

HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

- 8. 3280.305(h)(1) Roofs shall be of sufficient strength to withstand the load requirements as defined in §3280.305 (b) and (c) without exceeding the deflections specified in §3280.305(d). The connections between roof framework members and bearing walls shall be fabricated in such a manner to provide for the transfer of design vertical and horizontal loads to the bearing walls and to resist uplift forces.
- 9. 3280.305(h)(2) Roofing membranes shall be of sufficient rigidity to prevent deflection which would permit ponding of water or separation of seams due to wind, snow, ice, erection or transportation forces.
- 10. 3280.305(h)(4) All roof penetrations for electrical, plumbing or mechanical systems shall be properly flashed and sealed. In addition, where a metal roof membrane is penetrated, a wood backer shall be installed. The backer plate shall be not less than 5/16 inch plywood, with exterior glues, secured to the roof framing system beneath the metal roof, and shall be of a size to assure that all screws securing the flashing are held by the backer plate.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

11. 3280.305(h)(4)(i) Frame construction. The frame shall be capable of transmitting all design loads to stabilizing devices without exceeding the allowable load and deflections of this section. The frame shall also be capable of withstanding the effects of transportation shock and vibration without degradation as required by subpart J.

D. Roof Structures and Attics

Viewed From: Not viewed

Approximate Average Depth of Insulation: No Known

Approximate Average Thickness of Vertical Insulation: n/a 4 inches 0-4 in

Comments:

Attic Area:

12. Home has no attic area.

13. The mobile homes have a low slope on the roof that do not allow for attic areas.

14. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

15. 3280.504(c) Attic or roof ventilation. 3280.504(c)(1)

16. Attic and roof cavities shall be vented in accordance with one of the following:

17. 3280.504(c)(1)(i)

18. A minimum free ventilation area of not less than 1/300 of the attic or roof cavity floor area. At least 50 percent of the required free ventilation area shall be provided by ventilators located in the upper portion of the space to be ventilated. At least 40 percent shall be provided by eave, soffit or low gable vents.

19. The location and spacing of the vent openings and ventilators shall provide cross-ventilation to the entire attic or roof cavity space. A clear air passage space having a minimum height of 1 inch shall be provided between the top of the insulation and the roof sheathing or roof covering. Baffles or other means shall be provided where needed to insure the 1 inch height of the clear air passage space is maintained.

20. 3280.504(c)(1)(ii)

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

21. A mechanical attic or roof ventilation system may be installed instead of providing the free ventilation area when the mechanical system provides a minimum air change rate of 0.02 cubic feet per minute (cfm) per sq. ft. of attic floor area. Intake and exhaust vents shall be located so as to provide air movement throughout space.

22. 3280.504(c)(2)

23. Single section manufactured homes constructed with metal roofs and having no sheathing or underlayment installed, are not required to be provided with attic or roof cavity ventilation provided that the air leakage paths from the living space to the roof cavity created by electrical outlets, electrical junctions, electrical cable penetrations, plumbing penetrations, flue pipe penetrations and exhaust vent penetrations are sealed.

24. 3280.504(c)(3)

25. Parallel membrane roof section of a closed cell type construction are not required to be ventilated.

26. 3280.504(c)(4)

27. The vents provided for ventilating attics and roof cavities shall be designed to resist entry of rain and insects.

E. Walls (Interior and Exterior)

Comments:

Manufactured Homes:

Structural design requirements.

3280.305(a) General. Each manufactured home shall be designed and constructed as a completely integrated structure capable of sustaining the design load requirements of this standard, and shall be capable of transmitting these loads to stabilizing devices without exceeding the allowable stresses or deflections.

Roof framing shall be securely fastened to wall framing, walls to floor structure, and floor structure to chassis to secure and maintain continuity between the floor and chassis, so as to resist wind overturning, uplift, and sliding as imposed by design loads in this part. Uncompressed finished flooring greater than 1/8 inch in thickness shall not extend beneath load-bearing walls that are fastened to the

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

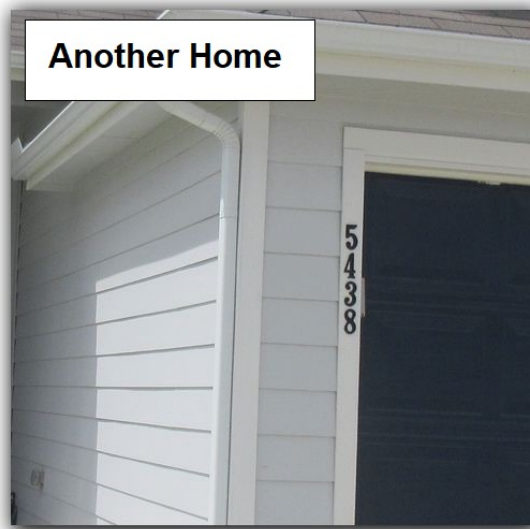
I	NI	NP	D
---	----	----	---

floor structure.

Exterior Walls:

28. The home is missing an address plate in front of the building as required by code.

29. The home address numbers must be legible from the street as per IRC code 321.1



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

30. The home had the exterior finishes as follows:

Siding Materials Brick Stone Wood Wood byproducts Stucco
 Vinyl Aluminum Asbestos Cement Board Other



31. The siding is in generally good condition.

Resistance to elements and use.

32. 3280.307(a) Exterior coverings shall be of moisture and weather resistive materials attached with corrosion resistant fasteners to resist wind, snow and rain. Metal coverings and exposed metal structural members shall be of corrosion resistant materials or shall be protected to resist corrosion. All joints between portions of

33. The exterior covering shall be designed, and assembled to protect against the infiltration of air and water, except for any designed ventilation of wall or roof cavity.

34. 3280.307(b) Joints between dissimilar materials and joints between exterior coverings and frames of openings shall be protected with a compatible sealant suitable to resist infiltration of air or water.

35. 3280.307(c) Where adjoining materials or assemblies of materials are of such nature that separation can occur due to expansion, contraction, wind loads or other loads induced by erection or transportation, sealants shall be of a type that maintains protection against infiltration or penetration by air, moisture or vermin.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

36.3280.307(d) Exterior surfaces shall be sealed to resist the entrance of rodents.

Interior Walls:

37. The interior walls have no significant deficiencies.



38. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

Formaldehyde emission controls for certain wood products.

39.3280.308(a) Formaldehyde emission levels. All plywood and particle board materials bonded with a resin system or coated with a surface finish containing formaldehyde shall not exceed the following formaldehyde emission levels when installed in manufactured homes:

40.3280.308(a)(1) Plywood materials shall not emit formaldehyde in excess of 0.2 parts per million (ppm) as measured by the air chamber test method specified in §3280.406.

41.3280.308(a)(2) Particle board materials shall not emit formaldehyde in excess of 0.3 ppm as measured by the air chamber test specified in §3280.406.

42.3280.308(b) Product certification and continuing qualification. All plywood and particle board materials to be installed in manufactured homes which are bonded with a resin system or coated with a surface finish containing formaldehyde, other than an exclusively phenol-formaldehyde resin system or finish, shall be certified by a nationally recognized testing laboratory as

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

complying with paragraph (a) of this section.

43. 3280.308(b)(1) Separate certification shall be done for each plant where the particle board is produced or where the plywood or particle board is surface-finished.

44. 3280.308(c) Panel identification. Each plywood and particle board panel to be installed in manufactured homes which is bonded or coated with a resin system containing formaldehyde, other than an exclusively phenol-formaldehyde resin system, shall be stamped or labeled so as to identify the product manufacturer, date of production and/or lot number, and the testing laboratory certifying compliance with this section.

45. 3280.308(d) Treatment after certification. If certified plywood or particle board subsequently is treated with paint, varnish, or any other substance containing formaldehyde, then the certification is no longer valid. In such a case, each stamp or label placed on the panels pursuant to paragraph (c) of this section must be obliterated. In addition, the treated panels may be recertified and reidentified in accordance with paragraphs (b) and (c) of this section.

Wind Loads:

46. As found on the HUD specifications for wind loads this inspector presents this additional information.

47. As previously stated this inspection does not take into consideration, check, or in any way measure any wind load issues.

48. 3280.305(c)(1)(i) Standard wind Loads (Zone I). When a manufactured home is not designed to resist the wind loads for high wind areas (Zone II or Zone III) specified in paragraph (c)(1)(ii) of this section, the manufactured home and each of its wind resisting parts and portions shall be designed for horizontal wind loads of not less than 15 psf and net uplift load of not less than 9 psf.

49. 3280.305(c)(1)(ii) Wind loads for high wind areas (Zone II and Zone III). When designed for high wind areas (Zone II and Zone III), the manufactured home, each of its wind resisting parts (including, but not limited to, shear walls, diaphragms, ridge beams, and their fastening and anchoring systems), and its components and cladding materials (including, but not limited to, roof trusses, wall studs, exterior sheathing, roofing and siding materials, exterior glazing, and their connections and fasteners) shall be designed by a

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

Professional Engineer or Architect to resist:

50. 3280.305(c)(1)(ii)(A) The design wind loads for Exposure C specified in ANSI/ASCE 7-88, "Minimum Design Loads for Buildings and Other Structures," for a fifty-year recurrence interval, and a design wind speed of 100 mph, as specified for Wind Zone II, or 110 mph, as specified for Wind Zone III (Basic Wind Zone Map)
51. 3280.305(c)(2) Wind loads--zone designations. The Wind Zone and specific wind design load requirements are determined by the fastest basic wind speed (mph) within each Zone and the intended location, based on the Basic Wind Zone Map, as follows:
52. 3280.305(c)(2)(i) Wind Zone I. Wind Zone I consists of those areas on the Basic Wind Zone Map that are not identified in paragraphs (c)(2)(ii) or (iii) of this section as being within Wind Zone II or III, respectively
53. Texas: Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kenedy, Kleberg, Matagorda, Nueces, Orange, Refugio, San Patricio, and Willacy are in wind zone III.
54. 3280.305(e)(1) Roof framing shall be securely fastened to wall framing, walls to floor structure, and floor structure to chassis to secure and maintain continuity between the floor and chassis, so as to resist wind overturning, uplift, and sliding as specified in this part.
55. 3280.305(e)(2) For Wind Zones II and III, roof trusses shall be secured to exterior wall framing members (studs), and exterior wall framing members (studs) shall be secured to floor framing members, with 26 gage minimum steel strapping or brackets or by a combination of 26 gage minimum steel strapping or brackets and structural rated wall sheathing that overlaps the roof and floor. Steel strapping or brackets shall be installed at a maximum spacing of 24" on center in Wind Zone II and at a maximum of 16" on center in Wind Zone III. The number and type of fasteners used to secure the steel straps or brackets or structural sheathing shall be capable of transferring all uplift forces between elements being joined.
56. 3280.305(f) Walls. The walls shall be of sufficient strength to withstand the load requirements as defined in §3280.305(c) of this part, without exceeding the deflections as specified in §3280.305(d). The connections between the bearing walls, floor, and roof framework members shall be fabricated in such a manner as to provide support for the material used to enclose the manufactured home and to provide for transfer of all lateral and vertical loads

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

to the floor and chassis.

57.3280.305(f)(2) Interior walls and partitions shall be constructed with structural capacity adequate for the intended purpose and shall be capable of resisting a horizontal load of not less than five pounds per square foot. An allowable stress increase of 1.33 times the permitted published design values may be used in the design of wood framed interior partitions. Finish of walls and partitions shall be securely fastened to wall framing.

Windstorm protection

58.3280.306(a) Provisions for support and anchoring systems. Each manufactured home shall have provisions for support/anchoring or foundation systems that, when properly designed and installed, will resist overturning and lateral movement (sliding) of the manufactured home as imposed by the respective design loads. For Wind Zone I, the design wind loads to be used for calculating resistance to overturning and lateral movement shall be the simultaneous application of the wind loads indicated in §3280.305(c)(1)(i), increased by a factor of 1.5. The 1.5 factor of safety for Wind Zone I is also to be applied simultaneously to both the vertical building projection, as horizontal wind load, and across the surface of the full roof structure, as uplift loading. For Wind Zones II and III, the resistance shall be determined by the simultaneous application of the horizontal drag and uplift wind loads, in accordance with §3280.305(c)(1)(ii). The basic allowable stresses of materials required to resist overturning and lateral movement shall not be increased in the design and proportioning of these members. No additional shape or location factors need to be applied in the design of the tie down system. The dead load of the structure may be used to resist these wind loading effects in all Wind Zones.

59.3280.306(a)(1) The provisions of this section shall be followed and the support and anchoring systems shall be designed by a Registered Professional Engineer or Architect.

60.3280.306(a)(2) The manufacturer of each manufactured home is required to make provision for the support and anchoring systems but is not required to provide the anchoring equipment or stabilizing devices. When the manufacturer's installation instructions provide for the main frame structure to be used as the points for connection of diagonal ties, no specific connecting devices need be provided on the main frame

F. Ceilings and Floors

Comments:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

Ceilings:

61. No significant issues viewed.

Floor Coverings:

62. Floor coverings are made up of carpet, a type of what appears to be wood flooring but it is vinyl flooring.

63. The flooring in the kitchen and family room are in good condition.



64. The flooring in the bedroom are also in fair condition as viewed at random.



65. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

66. 3280.506(b)

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

67. To assure uniform heat transmission in manufactured homes, cavities in exterior walls, floors, and ceilings shall be provided with thermal insulation.

68. 3280.305(g)(1) Floor assemblies shall be designed in accordance with accepted engineering practice standards to support a minimum uniform live load of 40 lb/ft² plus the dead load of the materials. In addition (but not simultaneously), floors shall be able to support a 200-pound concentrated load on a one-inch diameter disc at the most critical location with a maximum deflection not to exceed one-eighth inch relative to floor framing. Perimeter wood joists of more than six inches depth shall be stabilized against overturning from superimposed loads as follows: at ends by solid blocking not less than two-inch thickness by full depth of joist, or by connecting to a continuous header not less than two-inch thickness and not less than the depth of the joist with connecting devices; at eight-foot maximum intermediate spacing by solid blocking or by wood cross-bridging of not less than one inch by three inches, metal cross-bridging of equal strength, or by other approved methods.

69. 3280.305(g)(2) Wood, wood fiber or plywood floors or subfloors in kitchens, bathrooms (including toilet compartments), laundry areas, water heater compartments, and any other areas subject to excessive moisture shall be moisture resistant or shall be made moisture resistant by sealing or by an overlay of nonabsorbent material applied with water-resistant adhesive. Use of one of the following methods would meet this requirement:

70. 3280.305(g)(2)(i) Sealing the floor with a water-resistant sealer; or

71. 3280.305(g)(2)(ii) Installing an overlay of a non-absorbent floor covering material applied with water-resistant adhesive; or

72. 3280.305(g)(2)(iii) Direct application of a water-resistant sealer to the exposed wood floor area when covered with a non-absorbent overlay; or

73. 3280.305(g)(2)(iv) The use of a non-absorbent floor covering which may be installed without a continuous application of a water-resistant adhesive or sealant when the floor covering meets the following criteria:

74. 3280.305(g)(2)(iv)(A) The covering is a continuous membrane with any seams or patches seam bonded or welded to preserve the continuity of the floor covering; and

75. 3280.305(g)(2)(iv)(B) The floor is protected at all penetrations in these areas by sealing with a compatible water-resistant adhesive or sealant to prevent moisture from migrating under the nonabsorbent floor covering; and

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

76. 3280.305(g)(2)(iv)(C) The covering is fastened around the perimeter of the subfloor in accordance with the floor covering manufacturer's instructions; and,

77. 3280.305(g)(2)(iv)(D) The covering is designed to be installed to prevent moisture penetration without the use of a water-resistant adhesive or sealer except as required in this paragraph (g). The vertical edges of penetrations for plumbing shall be covered with a moisture-resistant adhesive or sealant. The vertical penetrations located under the bottom plates of perimeter walls of rooms, areas, or compartments are not required to be sealed; this does not include walls or partitions within the rooms or areas.

78. 3280.305(g)(3) **Carpet or carpet pads** shall not be installed under concealed spaces subject to excessive moisture, such as plumbing fixture spaces, floor areas under installed laundry equipment. Carpet may be installed in laundry space provided:

G. Doors (Interior and Exterior)

Comments:

Interior Doors:

79. All interior doors were tested and operated properly.

80. The exterior doors do not have a self closing mechanism on the hinges.

Required Support Piers:

81. As noted under the foundation section each door frame must have proper support as noted below and seen on the photos.

82. Due to the limited viewing area and lack of a proper access panel/door, the supports under the doors could not be confirmed.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Another Home Shown Below:



83. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

84. 3280.405 Standard for swinging exterior passage doors for use in manufactured homes. 3280.405(a)

85. Introduction. This standard applies to all exterior passage door units, excluding sliding doors and doors used for access to utilities and compartments. This standard applies only to the door frame consisting of jambs, head and sill and the attached door or doors.

86. 3280.405(b)

87. Performance requirements. The design and construction of exterior door units shall meet all requirements of AAMA 1702.21985, Swinging Exterior Passage

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

Doors Voluntary Standard for Utilization in Manufactured Housing.

88.3280.405(c)

89. *Materials and methods.* Any material or method of construction shall conform to the performance requirements as outlined in paragraph (b) of this section. Wood materials or wood based materials shall also conform to the following:

90.3280.405(c)(1)

91. *Wood.* Doors shall conform to the type 1 requirements of ANSI/NWWDA I.S.187, Wood Flush Doors.

92.3280.405(c)(2)

93. *Plywood.* Plywood shall be exterior type and preservative treated in accordance with NWWDA I.S.481, Water Repellent Preservative Non-Pressure Treatment for Millwork.

94.3280.405(d)

95. *Exterior doors.* All swinging exterior doors shall be installed in a manner which allows proper operation and provides protection against the elements (see §3280.307).

96.3280.405(e)

97. *Certification.* All swinging exterior doors to be installed in manufactured homes shall be certified as complying with AAMA Standard 1702.21985.

98.3280.405(e)(1)

99. All such doors shall show evidence of certification by affixing a quality certification label to the product in accordance with ANSI Z34.11982, "For Certification-Third-Party Certification Program."

1003280.405(e)(2)

101 In determining certifiability of the products, an independent quality assurance agency shall conduct preproduction specimen test in accordance with AAMA 1701.21985.

102 Further, such agency shall inspect the product manufacturer's facility at least

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

twice per year.

1033280.405(f)

104~~P~~*Protection of exterior doors in high wind areas.* For homes designed to be located in Wind Zones II and III, manufacturers shall design exterior walls surrounding the exterior door openings to allow for the installation of shutters or other protective covers, such as plywood, to cover these openings.

105.Although not required, the Department encourages manufacturers to provide the shutters or protective covers and to install receiving devices, sleeves, or anchors for fasteners to be used to secure the shutters or protective covers to the exterior walls. If the manufacturer does not provide shutters or other protective covers to cover these openings, the manufacturer must provide to the homeowner instructions for at least one method of protecting exterior door openings. This method must be capable of resisting the design wind pressures specified in §3280.305 without taking the home out of conformance with the standards in this part.

106These instructions must be included in the printed instructions that accompany each manufactured home. The instructions shall also indicate whether receiving devices, sleeves, or anchors, for fasteners to be used to secure the shutters or protective covers to the exterior walls, have been installed or provided by the manufacturer.

H. Windows

Comments:

Type of Windows:

107Home has windows with double pane.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

Window Screens:

108 Missing some window screens.



IRC Code of Rescue Openings:

109 R310.1 Emergency escape and rescue required. ... every sleeping room shall have at least one operable emergency escape and rescue window or exterior door opening for emergency escape and rescue.

110 R310.1.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

111 HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

112 3280.506(c)

113 Manufactured homes designed for Uo Value Zone 3 shall be factory equipped with storm windows or insulating glass

114 3280.404(c)(1) (Operation of Windows)

115 The installation of egress windows or devices shall be installed in a manner which allows for proper operation and provides protection against the elements. (See §3280.307.)

116 3280.404(c)(2)

117 An operational check of each installed egress window or device shall be

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

made at the manufactured home factory. All egress windows and devices shall be openable to the minimum required dimension without binding or requiring the use of tools. Any window or device failing this check shall be repaired or replaced.

118A repaired window shall conform to its certification. Any repaired or replaced window or device shall pass the operational check.

1193280.404(d)

120*Operating instructions.* Operating instructions shall be affixed to each egress window and device and carry the legend "Do Not Remove."

1213280.404(e)

122*Certification of egress windows and devices.* Egress windows and devices shall be listed in accordance with the procedures and requirements of AAMA Standard 17041985. As of January 17, 1995, this certification must be based on tests conducted at the design wind loads specified in 3280.305(c)(1).

3280.403(f) (Shutters)

123*Protection of primary window and sliding glass door openings in high wind areas.* For homes designed to be located in Wind Zones II and III,

124Manufacturers shall design exterior walls surrounding the primary window and sliding glass door openings to allow for the installation of shutters or other protective covers, such as plywood, to cover these openings. Although not required, the Department encourages manufacturers to provide the shutters or protective covers and to install receiving devices, sleeves, or anchors for fasteners to be used to secure the shutters or protective covers to the exterior walls.

125If the manufacturer does not provide shutters or other protective covers to cover these openings, the manufacturer must provide to the homeowner instructions for at least one method of protecting primary window and sliding glass door openings. This method must be capable of resisting the design wind pressures specified in §3280.305 without taking the home out of conformance with the standards in this part.

126These instructions must be included in the printed instructions that accompany each

127manufactured home. The instructions shall also indicate whether receiving

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

devices, sleeves, or anchors, for fasteners to be used to secure the shutters or protective covers to the exterior walls, have been installed or provided by the manufacturer.

I. Fireplaces and Chimneys

Comments:

Type of Fireplace: Factory Masonry Free Standing

Wood Burning Fireplace Not a wood burning fireplace

Chimney:

128Chimney viewed from the ground level, limited viewing.

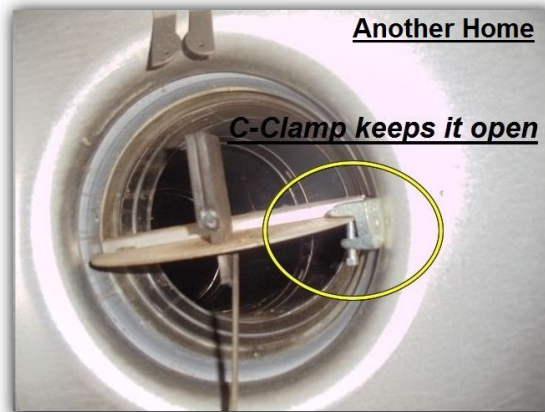
129Chimney has a proper chimney cap in place as seen from the ground

130Missing a chimney cap on the chimney to keep birds out and water out.

Fireplace:

131Fireplace and chimney must be serviced prior to use.

132Missing a c-clamp, c-clamp on the damper keeps it open for carbon monoxide venting, however when the fireplace is not in use such as in the summer, the vent should be closed.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

J. Porches, Balconies, Decks, and Carports

Comments:

Front Porch:

133The home has a front porch area.



134The rafters are not properly secured.



135The stairs are missing proper guards and handrails.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Rear Ramp:

136The home has a wheel chair ramp coming out of the utility room that has no safety barriers on either side, a hazard.



Rear Porch:

137Home has a large rear porch at the rear of the home.

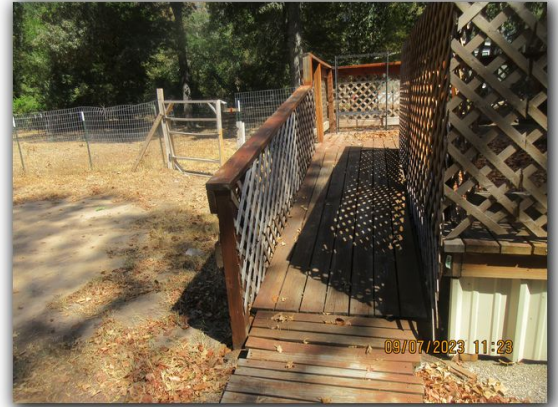
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



138The porch also has a handicap ramp.

139The handrails are missing proper guards as required by code.



Another Home:



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

140The porch area is covered.



141The joist hangers are not installed properly, some only have one nail when they are made for six nails.



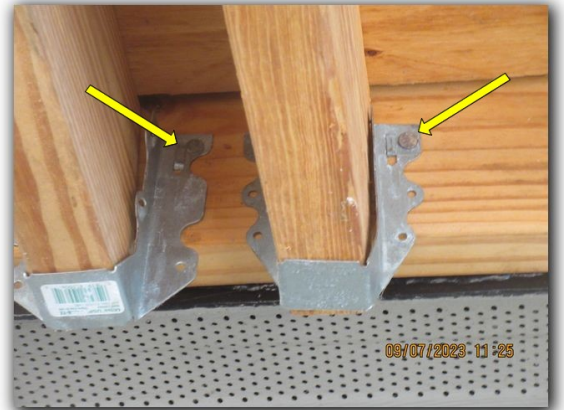
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

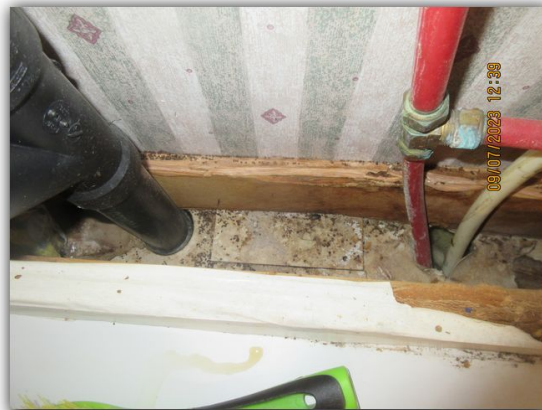
I NI NP D



K. Other

Comments:

142The cabinet under the kitchen sink is missing panels.



143The panels should be restored at the side and the back and the base.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

HUD Label Display: Mobile/Manufactured Home Labels

- a. Manufactured homes have an I.D. tag on the exterior side of the home.
- b. The tag identifies the unit and is also the recordation method with the Texas Department of Community Affairs Manufactured Housing Division in Austin Texas.
- c. Every mobile/manufactured home must receive a HUD label certifying that it was built in accordance with the Federal Manufactured Housing Construction and Safety Standards.
- d. Pursuant to 24 CFR, Section 3280.11, the label shall be approximately 2 inches by 4 inches in size and shall be permanently attached to the home by means of 4 blind rivets, drive screws, or other means that render it difficult to remove without defacing it.
- e. It shall be etched on 0.32 inches thick aluminum plate. The label number shall be etched or stamped with a 3 letter designation which identifies the Production Inspection and Primary Inspection Agency (IPIA) for the state in which the home is manufactured. Each label shall also be marked with a 6 digit number which the label supplier will furnish. The label shall be located at the tail-light end of each transportable section of the home approximately one foot up from the floor and one foot in from the road side.

Another Home Shown Below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Moving a Manufactured Home:

Only someone who has obtained a permit from the Texas Department of Transportation (TxDOT) can move a manufactured home. You may check on any mover's permit by calling TxDOT's Motor Carrier Division at 1-800-299-1700.

Manufactured Home Installer:

Only an installer who is licensed by our department may install a manufactured home in Texas. Installers must be bonded, and installations must be warranted.

Selling a Manufactured Home:

Anyone may sell ONE manufactured home in a twelve month period; but to sell more than one, you must be licensed and bonded.

New Manufactured Homes:

NEW manufactured homes must be warranted for at least one year to be free from defects in materials or workmanship. **USED** homes must come with a 60 day warranty that they are "habitable."

Title to Manufactured Home:

Effective September 1, 2003, the traditional manufactured housing title has been replaced with a *Statement of Ownership and Location (SOL)*. It identifies **WHO** owns the home, **WHAT** the home is being declared as (personal property or real property), **WHERE** the home is physically located, and of course, the home information like the serial number, make, model, size, etc.

Regulatory Agency:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

The Manufactured Housing Division of the Texas Department of Housing and Community Affairs in Austin Texas

What they do:

- License and regulate the people who manufacture, sell, broker, and install manufactured homes;
- Investigate and assist in resolving consumer complaints and problems with our licensees;
- Inspect manufactured homes to be sure they are built and installed properly; and
- Maintain the official state records (called Statements of Ownership and Location) regarding the ownership, location, lien status and status as real property or consumer goods/personal property. These records are handled exclusively by our Austin headquarters staff.

Selling a Mobile Home:

In the event that you sell or transfer ownership of the home, the SOL MUST be updated. It also must be updated if the home is moved, or the home remains subject to property taxes at the old location.

MOBILE/MANUFACTURED HOME CONSTRUCTION STANDARDS

The U.S. Department of Housing and Urban Development (HUD) began to regulate the construction of mobile/manufactured homes in 1976 pursuant to the provisions of the National Manufactured Housing Construction and Safety Standards Act of 1974.

In accordance with this law, HUD promulgated the Manufactured Housing Construction and Safety Standards in 1976; Title 24 Code of Federal Regulations (CFR), Part 3280. Section 320.823, Florida Statutes (F.S.), provides that any mobile/ manufactured home sold in Florida must conform to these standards. Copies of these standards may be ordered from:

Institute for Building Technology and Safety (IBTS) 505 Huntmar Park Drive, Suite 210 Herndon, Virginia 22070 Telephone: (703) 481-2000

Copies of the standards may also be obtained from the HUD's Manufactured Housing Program website on the Internet at the following address:

<http://www.hud.gov/offices/hsg/ramh/mhs/mhshome.cfm/>

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

In 1994, HUD amended the Manufactured Housing Construction and Safety Standards to provide for greater protection for mobile/manufactured homes from wind damage. During the severe hurricane seasons of 2004 and 2005, no mobile/manufactured home that was built after these new standards went into effect sustained any significant structural damage from the storms.

Regulation of Mobile/Manufactured Home Construction

HUD established a framework for regulating mobile/manufactured home construction in administrative rules they promulgated for this purpose. These regulations are contained in 24 CFR, Part 3282. These regulations established the responsibilities of mobile/manufactured home manufacturers, states and other organizations in ensuring that mobile/manufactured homes are built to be as safe as possible.

Requirement for a Design Approval Primary Inspection Agency (DAPIA)

In order to ensure that mobile/manufactured home manufacturers construct homes that are in compliance with HUD's Manufactured Housing Construction and Safety Standards, they must employ a Design Approval Primary Inspection Agency (DAPIA) pursuant to 24 CFR, Section 3282.203. These are essentially engineering firms that must certify that the designs of mobile/manufactured homes are consistent with the standards. There are five such firms and one state agency that perform this function.

Requirement for a Production Inspection and Primary Inspection Agency (IPIA)

In addition, manufacturers are held accountable for building homes that are compliant with HUD's standards by agents of HUD which are referred to as Production Inspection and Primary Inspection Agencies (IPIA) pursuant to 24 CFR, Section 3282.351. The Bureau of Mobile Home and Recreational Vehicle Construction (BMHRVC) is such an agent.

The IPIA is responsible for certifying manufacturing plants before they can begin operations and for routinely inspecting manufacturing in the plants to ensure that they are in compliance with the Manufactured Housing Construction and Safety Standards. There are 10 states in which a state agency acts as the IPIA. In the other states where mobile/manufactured home manufacturing occurs, the IPIA is a private company. There are five such companies.

II. ELECTRICAL SYSTEMS

A. Service Entrance and Panels

Comments:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

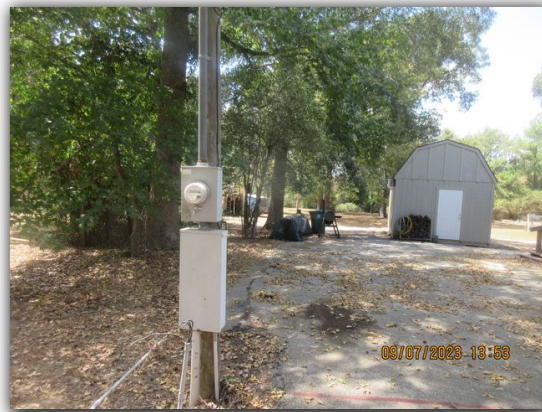
I	NI	NP	D
---	----	----	---

Service: Overhead Service Underground to Panel Meets code

Type of Wire Into Home: Copper Aluminum Mixed

Main Electrical Disconnect Panel:

- 5. Home is serviced by a smart meter.
- 6. The main disconnect panel is located on an independent electrical pole on the side of the driveway.



- 7. The service is over head that is missing proper drip loop as per code.



- 8. The main service is 200 amps which is more than adequate for the connected load.

I=Inspected

NI=Not Inspected

NP=Not Present

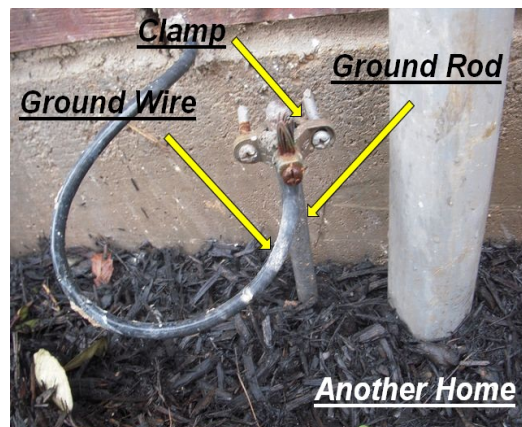
D=Deficient

I	NI	NP	D
---	----	----	---



Ground Rod:

9. Ground wire is properly secured to the ground rod clamp as per code.



10. The breaker box on the pole has a main disconnect.
11. The pole electrical panel does not have labeling and needs to be properly secured.
12. Missing various knock outs on the dead front cover.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



13. There are unfinished wiring by the pole that are meant to go to the rear shed that is under construction.



Main Electrical Breaker Panel:

14. The main electrical breaker panel or sub panel is located inside of the unit.

15. The main breaker panel is located inside of the unit in the utility room.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Labeling of Breakers:

16. Main breaker panel dead front cover is not labeled as per code.

Type of Wiring:

17. The main panel has copper wiring going into the home as per code.

Arc Fault Interrupters:

18. Missing arc fault interrupters as required by current code of 2008 and newer homes.

19. Code IRC 3802.11 requires arc fault interrupters in all circuits going into the living area.

20. Home has arc fault interrupters as required in the 2002 code which covers only the bedroom areas.

21. The existing arc fault interrupters were tested and they tripped properly.

22. Home is missing arc fault protection on the GFI's as required by current code.

23. It is recommended that the main panel be upgraded to have properly installed arc fault interrupters as per current code.

24. See another home below with proper dual purpose breaker (purple button).

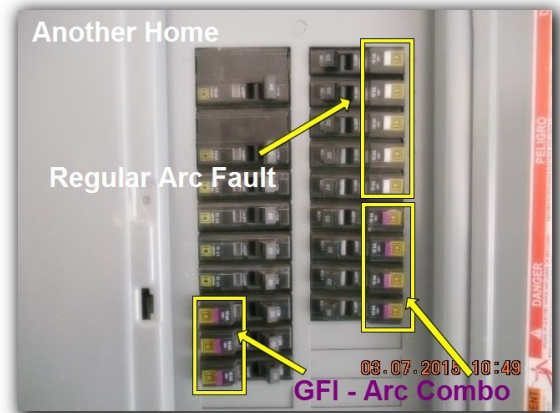
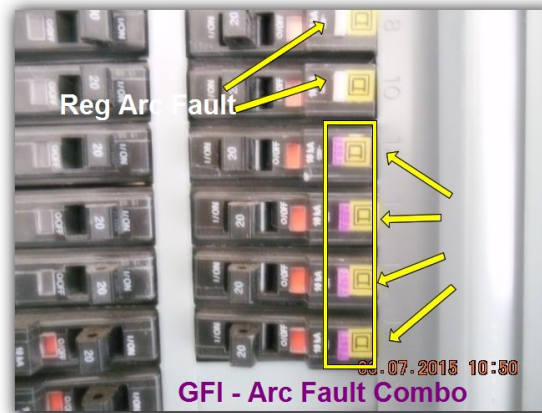
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



The Arc Fault Circuit Interrupter

The “AFCI” is an arc fault circuit interrupter. AFCIs are newly-developed electrical devices designed to protect against fires caused by arcing faults in the home electrical wiring.

THE FIRE PROBLEM

Annually, over 40,000 fires are attributed to home electrical wiring. These fires result in over 350 deaths and over 1,400 injuries each year. Arcing faults are one of the major causes of these fires. When unwanted arcing occurs, it generates high temperatures that can ignite nearby combustibles such as wood, paper, and carpets.

Arcing faults often occur in damaged or deteriorated wires and cords. Some causes of damaged and deteriorated wiring include puncturing of wire insulation from picture hanging or cable staples, poorly installed outlets or switches, cords caught in doors or under furniture, furniture pushed against plugs in an outlet, natural aging, and cord exposure to heat vents and sunlight.

HOW THE AFCI WORKS

Conventional circuit breakers only respond to overloads and short circuits; so they do not protect against arcing conditions that produce erratic current flow. An AFCI is selective so that normal arcs do not cause it to trip. The AFCI circuitry continuously monitors current flow through the AFCI. AFCIs use unique current sensing circuitry to discriminate between normal and unwanted arcing conditions. Once an unwanted arcing condition is detected, the control circuitry in the AFCI trips the internal contacts, thus de-energizing the circuit and reducing the potential for a fire to occur.

An AFCI should not trip during normal arcing conditions, which can occur when a switch

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
----------	-----------	-----------	----------

is opened or a plug is pulled from a receptacle. Presently, AFCIs are designed into conventional circuit breakers combining traditional overload and short-circuit protection with arc fault protection. AFCI circuit breakers (AFCIs) have a test button and look similar to ground fault circuit interrupter (GFCI) circuit breakers. Some designs combine GFCI and AFCI protection.

Additional AFCI design configurations are anticipated in the near future. It is important to note that AFCIs are designed to mitigate the effects of arcing faults but cannot eliminate them completely. In some cases, the initial arc may cause ignition prior to detection and circuit interruption by the AFCI.

The AFCI circuit breaker serves a dual purpose – not only will it shut off electricity in the event of an “arcing fault”, but it will also trip when a short circuit or an overload occurs. The AFCI circuit breaker provides protection for the branch circuit wiring and limited protection for power cords and extension cords. Single-pole, 15- and 20- ampere AFCI circuit breakers are presently available.

WHERE AFCIs SHOULD BE USED

The 1999 edition of the National Electrical Code, the model code for electrical wiring adopted by many local jurisdictions, requires AFCIs for receptacle outlets in bedrooms, effective January 1, 2002. Although the requirement is limited to only certain circuits in new residential construction, AFCIs should be considered for added protection in other circuits and for existing homes as well.

Older homes with aging and deteriorating wiring systems can especially benefit from the added protection of AFCIs. AFCIs should also be considered whenever adding or upgrading a panel box while using existing branch circuit conductors.

INSTALLING AFCIs

AFCI circuit breakers should be installed by a qualified electrician. The installer should follow the instructions accompanying the device and the panel box. In homes equipped with conventional circuit breakers rather than fuses, an AFCI circuit breaker may be installed in the panel box in place of the conventional circuit breaker to add arc protection to a branch circuit. Homes with fuses are limited to receptacle or portable-type AFCIs, which are expected to be available in the near future, or AFCI circuit breakers can be added in separate panel boxes next to the fuse panel box.

TESTING AN AFCI

AFCIs should be tested after installation to make sure they are working properly and

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

protecting the circuit. Subsequently, AFCIs should be tested once a month to make sure they are working properly and providing protection from fires initiated by arcing faults.

A test button is located on the front of the device. The user should follow the instructions accompanying the device. If the device does not trip when tested, the AFCI is defective and should be replaced.

AFCIs vs. GFCIs

The AFCI should not be confused with the GFCI or ground fault circuit interrupter. The GFCI is designed to protect people from severe or fatal electric shocks while the AFCI protects against fires caused by arcing faults. The GFCI also can protect against some electrical fires by detecting arcing and other faults to ground but cannot detect hazardous across-the-line arcing faults that can cause fires.

A ground fault is an unintentional electric path diverting current to ground. Ground faults occur when current leaks from a circuit. How the current leaks is very important. If a person’s body provides a path to ground for this leakage, the person could be injured, burned, severely shocked, or electrocuted.

The National Electrical Code requires GFCI protection for receptacles located outdoors; in bathrooms, garages, kitchens, crawl spaces and unfinished basements; and at certain locations such as near swimming pools. A combination AFCI and GFCI can be used to satisfy the NEC requirement for GFCI protection only if specifically marked as a combination device.

Ault, Singh, and Smith, “1996 Residential Fire Loss Estimates”, October 1998, U.S. Consumer Product Safety Commission, Directorate for Epidemiology and Health Sciences

B. Branch Circuits, Connected Devices, and Fixtures

Type of Wiring: Copper Aluminum Mix

Comments:

Ground Fault Circuit Interrupt Safety Protection

25. Home is missing GFI protection in all wet areas as detailed below.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Kitchen:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Partial	<input type="checkbox"/> Defective	
Entry Bath:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Partial	<input type="checkbox"/> Defective	<input checked="" type="checkbox"/> N/a
Master Bath:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Partial	<input type="checkbox"/> Defective	
Hall Baths:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Partial	<input checked="" type="checkbox"/> Defective	<input type="checkbox"/> N/a
Garage:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Partial	<input type="checkbox"/> Defective	<input checked="" type="checkbox"/> N/a
Utility Room 220 v:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Partial	<input type="checkbox"/> Defective	
Utility Room 110 v:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Partial	<input type="checkbox"/> Defective	



26. The receptacle on the lower left has open ground.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



Exterior: Yes No Partial Defective

Bar: Yes No Partial Defective



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

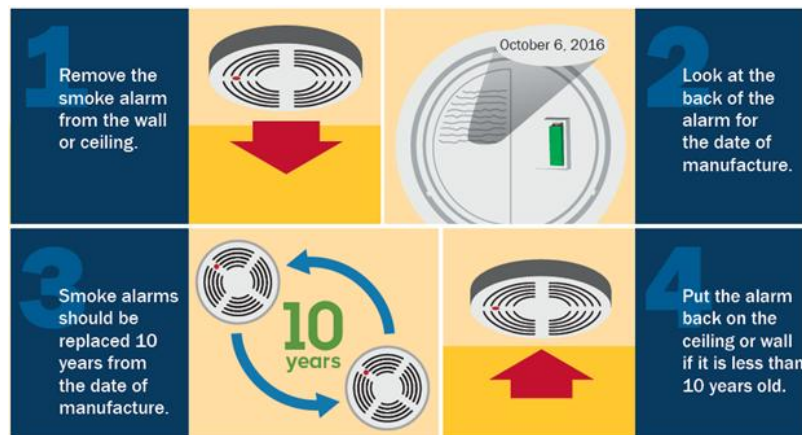


Smoke and Fire Alarms

27. Replace all batteries of existing smoke detectors

28. According to Consumer Reports and National Fire Protection Association recommends that the smoke alarms should be **replaced every ten years** from the date of manufacture.

29. Combo smoke/CO alarms should be replaced after 5-7 years (depending on the model). Buyer should confirm the age of the smoke alarms and if the home is over 7 years old they should be replaced.



30. If your smoke alarms are powered by a nine-volt battery, the battery should be replaced **every 6 months**, while the alarm itself should be replaced once every 10 years. For 10-year lithium-powered fire detectors, you won't need to replace the battery.

31. Is it OK to replace hardwired smoke detector with battery? **It is not acceptable to replace a hard wired alarm with one that is battery operated.** A home

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

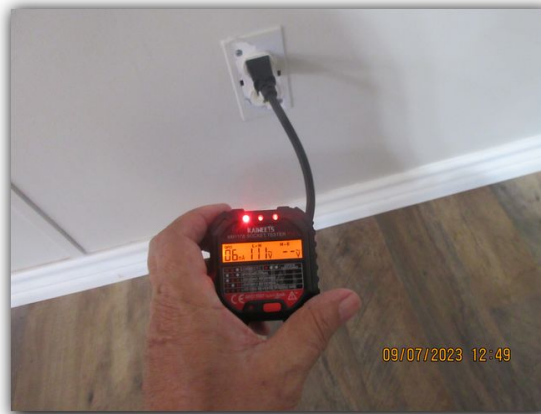
must maintain at least the same level of protection as originally required. It is the law.

32. See video for replacement of battery or smoke detector, [press here](#):

Receptacles:

33. The utility room has a proper four prong receptacle as per code.

34. Various receptacles have open ground.



35. Tested receptacles for voltage and the voltage was acceptable.



36. The receptacles are not tempering resistant.

Other homes shown below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

A. Heating Equipment

Type of System: Central

Energy Source: Electric

Comments:

Location of Furnace:

37. Home has a single electric furnace located in exterior package unit.

38. The furnace could not active at the time of the inspection, too hot inside of the home.

39. ELECTRIC FURNACE: The furnace needs to be serviced prior to closing in order to validate most home owner's warranty requirements, the a/c technician must issue a certification that the system is heating properly and that the heat strips are working properly.

B. Cooling Equipment

Type of System: Central - Air Conditioner

Comments:

Window Unit:

40. Home has a window a/c unit that cools only the master bedroom.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



41. The unit was operative at the time of the inspection but it appears that the unit is nearing the end of its useful lifespan.



Whole House Central Unit:

42. Home has a central a/c system that originally had a split system the traditional and it was replaced with a commercial "package" unit that is usually found on the roofs of commercial buildings.

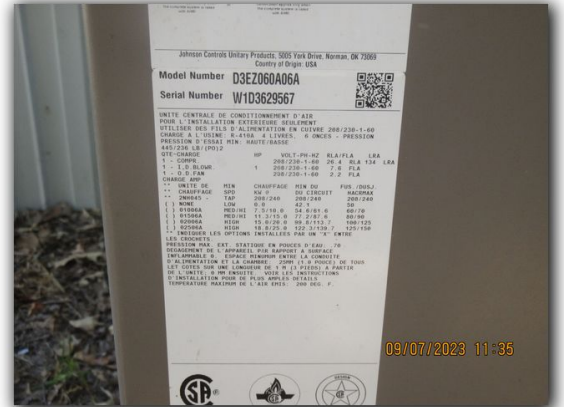
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



- 43. A "package" system contains both the a/c portion and the heating system, they are normally a heat pump.
- 44. The cooling part is a 5-1/2 ton unit with a SEER rating of 13.
- 45. Today the minimum for residential split systems is 16 SEER.
- 46. The system was active at the time of the inspection.

Number of Units: One System



Performance of System:

- 47. The system was not cooling at the time of the inspection.

Performance Detail:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

Unit No. 1	Supply Temp	80°	Return Temp	83	Differential	3°
------------	-------------	-----	-------------	----	--------------	----

Exterior Package Unit:

- 48. The unit has a disconnect as per code.
- 49. The unit has a supply and return metal duct that is exposed to weather on the exterior.
- 50. The unit is blowing air down to the coils rather than the traditional blowing air up from the coils.



Primary Drain Line:

- 51. The primary drain line was not located.
- 52. The drain line must terminate to the plumbing drain system to avoid foundation settlement and attracting termites when dripping next to the foundation.
- 53. The primary drain line must be cleared.
- 54. The spec sheet below is of a typical package unit.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

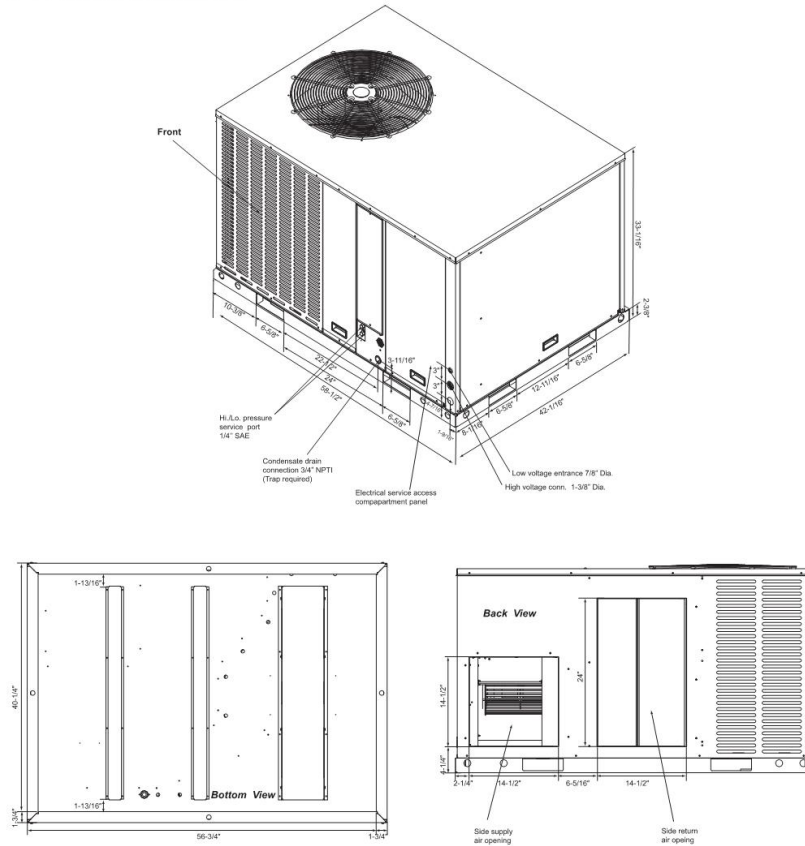


J4PH4060A1000AA

TAG: _____

SUBMITTAL

5.0 Ton
Heat Pump Package Units
J4PH4060A1000AA



Service System:

55. The a/c system must be serviced prior to closing in order to validate most home owner's warranty requirements, the a/c technician must issue a certification that the condenser and evaporator is operating properly and is not defective and is cooling properly.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

56. Buyer should receive a copy of the documentation for the service of the a/c system in order to validate the home owner's warranty requirements.

57. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

58. §3280.505 Air infiltration. 3280.505(a)

59. *Envelope air infiltration.* The opaque envelope shall be designed and constructed to limit air infiltration to the living area of the home.

60. Any design, material, method or combination thereof which accomplishes this goal may be used. The goal of the infiltration control criteria is to reduce heat loss/heat gain due to infiltration as much as possible without impinging on health and comfort and within the limits of reasonable economics.

61. 3280.505(a)(1)

62. *Envelope penetrations.* Plumbing, mechanical and electrical penetrations of the pressure envelope not exempted by this part, and installations of window and door frames shall be constructed or treated to limit air infiltration.

63. Penetrations of the pressure envelope made by electrical equipment, other than distribution panel boards and cable and conduit penetrations, are exempt from this requirement.

64. Cable penetrations through outlet boxes are considered exempt.

65. 3280.505(a)(2)

66. *Joints between major envelope elements.* Joints not designed to limit air infiltration between wall-to-wall, wall-to-ceiling and wall-to-floor connections shall be caulked or otherwise sealed. When walls are constructed to form a pressure envelope on the outside of the wall cavity, they are deemed to meet this requirement.

67. §3280.506 Heat loss/heat gain.

68. The manufactured home heat loss/heat gain shall be determined by methods outlined in §§3280.508 and 3280.509. The Uo (Coefficient of heat transmission) value zone for which the manufactured home is acceptable and the lowest outdoor temperature to which the installed heating equipment will maintain a temperature of 70 F shall be certified as specified in §3280.510 of

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

this subpart.

69.3280.506(b)

70. To assure uniform heat transmission in manufactured homes, cavities in exterior walls, floors, and ceilings shall be provided with thermal insulation.

71.3280.506(c)

72. Manufactured homes designed for Uo Value Zone 3 shall be factory equipped with storm windows or insulating glass

C. Duct Systems, Chases, and Vents

Comments:

Type of Ducting: Flex Ducting Duct Board Under Unit

73. Ducts are concealed under the floors.

74. The sub floor has a membrane covering over the ductwork, thus not viewable.



75. The system has floor mounted registers that need to be cleaned out from time to time at the registers.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



76. The ducts must be elevated and supported from the rafters.

77. Return air filter needs replacement

78. Improperly installed air return register.

79. It is now installed inside of the master bedroom, it should be located in a more centrally located spot to properly circulate air.



Under Unit Insulation:

80. The manufactured home has to have insulation under the unit between the joists.

81. After the insulation a membrane is installed and secured to keep moisture out.

Another Home Shown Below:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



82. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

§3280.309 Health Notice on formaldehyde emissions. 3280.309(a)

83. Each manufactured home shall have a Health Notice on formaldehyde emissions prominently displayed in a temporary manner in the kitchen (i.e., countertop or exposed cabinet face). The Notice shall read as follows:

IMPORTANT HEALTH NOTICE

84. Some of the building materials used in this home emit formaldehyde. Eye, nose, and throat irritation, headache, nausea, and a variety of asthma-like symptoms, including shortness of breath, have been reported as a result of formaldehyde exposure.

85. Elderly persons and young children, as well as anyone with a history of asthma, allergies, or lung problems, may be at greater risk. Research is continuing on the possible long-term effects of exposure to formaldehyde.

86. Reduced ventilation resulting from energy efficiency standards may allow formaldehyde and other contaminants to accumulate in the indoor air. Additional ventilation to dilute the indoor air may be obtained from a passive or mechanical ventilation system offered by the manufacturer. Consult your dealer for information about the ventilation options offered with this home.

87. High indoor temperatures and humidity raise formaldehyde levels. When a home is to be located in areas subject to extreme summer temperatures, an air-conditioning system can be used to control indoor temperature levels. Check the comfort cooling certificate to determine if this home has been equipped or

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

designed for the installation of an air-conditioning system. If you have any questions regarding the health effects of formaldehyde, consult your doctor or local health department.

88. 3280.309(b)

89. The Notice shall be legible and typed using letters at least ¼ inch in size.

90. 3280.309(c)

91. The Notice shall not be removed by any party until the entire sales transaction has been completed (refer to part 3282 Manufactured Home Procedural and Enforcement Regulations for provisions regarding a sales transaction).

92. 3280.309(d)

93. A copy of the Notice shall be included in the Consumer Manual (refer to part 3283 Manufactured Home Consumer Manual Requirements)..

IV. PLUMBING SYSTEMS

A. Plumbing Supply, Distribution Systems and Fixtures

Location of water meter: Front of Home

Location of main water supply valve: Front of Home

Static water pressure reading: 35 psi below 40 psi above 80 psi



94. The water pressure is lower than required, it has 35 psi minimum is 45 psi, reason not known.

Type of water supply piping material: Galvanized Copper CPVC PEX PB

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

The above statement is based on the majority of the piping that could be seen at the time of the inspection. Other types of piping may be present but were not detected such as under the attic insulation and behind the walls, the owner should disclose any changes known or made to the plumbing water supply line system or other.

Winterization:

Home was winterized Home needs to be winterized n/a

Comments:

Water Source: Public Private **Sewer Type:** Public Private

Exterior Plumbing

- 95. Some exterior hose bibs do not have back-flow prevention.
- 96. Missing insulation on exposed hose bibs and/or other plumbing supply lines.
- 97. The rear hose bib seen below is dripping and needs service.



Interior Plumbing:

- 98. All fixtures operated properly.
- 99. All commodes flushed properly.
- 100. All commodes are properly anchored.

Washing Machine Connections

I=Inspected

NI=Not Inspected

NP=Not Present

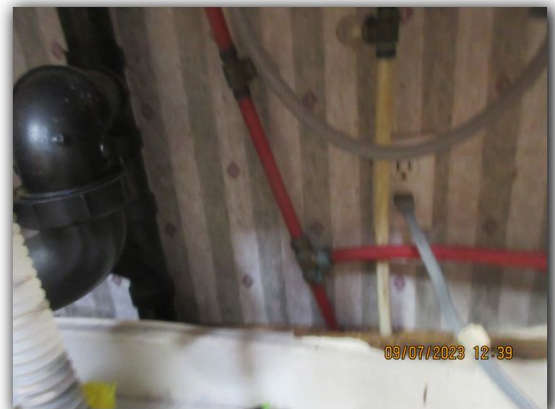
D=Deficient

I	NI	NP	D
---	----	----	---

101Washing machine connections not tested - faucets, drains not tested

Type of Pipes:

102Home has PEX water lines.



103PEX (or *cross linked polyethylene*) is part of a water supply piping system that has several advantages over metal pipe (copper, iron, lead) or rigid plastic pipe (PVC, CPVC, ABS) systems. It is flexible, resistant to scale and chlorine, doesn't corrode or develop pinholes, is faster to install than metal or rigid plastic, and has fewer connections and fittings.

104**Cross linking** is a chemical reaction that occurs between polyethylene polymer chains. Cross linking causes the HDPE to become stronger and resistant to cold temperature cracking or brittleness on impact while retaining its flexibility. The three methods of cross linking HDPE are the Engels method (PEX-a), the Silane Method (PEX-b), and the Radiation method (PEX-c). Several industry participants claim that the PEX-a method yield more flexible tubing than the other methods. All three types of PEX tubing meet the ASTM, NSF and CSA standards)

105PEX tubing is made from cross linked HDPE (high density polyethylene) polymer. The HDPE is melted and continuously extruded into tube. The cross linking of the HDPE is accomplished in one of three different methods.

106PEX plumbing has been in use in Europe since about 1970, and was introduced in the U.S. around 1980. The use of PEX has been increasing ever since, replacing copper pipe in many applications, especially radiant heating systems installed in the slab under floors or walkways. Interest in PEX for hot and cold water plumbing has increased recently in the United

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

States

Advantages of PEX Plumbing

- I. Flexible PEX tube is manufactured by extrusion, and shipped and stored on spools, where rigid plastic or metal piping must be cut to some practical length for shipping and storage. This leads to several advantages, including lower shipping and handling costs due to decreased weight and improved storage options.
 - II. PEX plumbing installations require fewer fittings than rigid piping. The flexible tubing can turn 90 degree corners without the need for elbow fittings, and PEX tubing unrolled from spools can be installed in long runs without the need for coupling fittings.
 - III. Attaching PEX tube to fittings does not require soldering, and so eliminates the health hazards involved with lead-based solder and acid fluxes; PEX is also safer to install since a torch is not needed to make connections..
 - IV. PEX resists the scale build-up common with copper pipe, and does not pit or corrode when exposed to acidic water.
 - V. PEX is much more resistant to freeze-breakage than copper or rigid plastic pipe.
 - VI. PEX tubing does not transfer heat as readily as copper, and so conserves energy.
 - VII. Water flows more quietly through PEX tube, and the characteristic "water hammer" noise of copper pipe systems is virtually eliminated.
1. **HUD REQUIREMENTS:** (Provided solely as additional information not part of the scope of work in a TREC based inspection)
 2. **3280.609(a)**
 3. *Water supply*
 4. **3280.609(a)(1)**
 5. *Supply piping.* Piping systems shall be sized to provide an adequate quantity of water to each plumbing fixture at a flow rate sufficient to keep the fixture in

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

a clean and sanitary condition without any danger of backflow or siphonage. (See table in §3280.609(f)(1)).

6. The manufacturer shall include in his written installation instructions that the manufactured home has been designed for an inlet water pressure of 80 psi, and a statement that when the manufactured home is to be installed in areas where the water pressure exceeds 80 psi, a pressure reducing valve should be installed.

7. 3280.609(a)(2)

8. *Hot water supply.* Each manufactured home equipped with a kitchen sink, and bathtub and/or shower shall be provided with a hot water supply system including a listed water heater.

9. *Water connection.* Each manufactured home with a water distribution system shall be equipped with a ¾ inch threaded inlet connection. This connection shall be tagged or marked “Fresh Water Connection” Fill”). A matching cap or plug shall be provided to seal the water inlet when it is not in use, and shall be permanently attached to the manufactured home or water supply piping.

10. When a master cold water shutoff full flow valve is not installed on the main feeder line in an accessible location, the manufacturer's installation instructions shall indicate that such a valve is to be installed in the water supply line adjacent to the home. When a manufactured home includes expandable rooms or is composed of two or more units, fittings or connectors designed for such purpose shall be provided to connect any water piping. When not connected, the water piping shall be protected by means of matching threaded caps or plugs.

11. 3280.609(b)(5)

12. *Flushometer valves or manually operated flush valves.* An approved or listed vacuum breaker shall be installed and maintained in the water supply line on the discharge side of a water closet flushometer valve or manually operated flush valve.

13. Vacuum breakers shall have a minimum clearance of 6 inches above the flood level of the fixture to the critical level mark unless otherwise permitted in their approval.

14. 3280.609(b)(6)

15. *Flush tanks.* Water closet flush tanks shall be equipped with an approved or

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

listed anti-siphon ball cock which shall be installed and maintained with its outlet or critical level mark not less than 1 inch above the full opening of the overflow pipe.

16. *Hose bibs.* When provided, all exterior hose bibs and laundry sink hose connections shall be protected by a listed non-removable backflow prevention device. This is not applicable to hose connections provided for automatic washing machines with built-in backflow prevention.

B. Drains, Wastes, and Vents

Comments:

17. The inspector operated at least three fixtures to test for proper water flow in the drain system.

18. No obstructions were viewed at the time of the inspection.

19. Missing tub access panel at sheet rock wall as required by IRC code P-2704.1.



20. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

21. 3280.607(b)(5)(ii)

22. Standpipes shall be 1½ inches minimum nominal iron pipe size, 1½ inches diameter nominal brass tubing not less than No. 20 Brown and Sharpe gage, or 1½ inches approved plastic materials.

23. Receptors shall discharge into a vented trap or shall be connected to a laundry tub tailpiece by means of an approved or listed directional fitting. Each standpipe

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

shall extend not less than 18 inches or more than 30 inches

24. above its trap and shall terminate in an accessible location no lower than the top of clothes washing machine.

25. A removable tightfitting cap or plug shall be installed on the standpipe when clothes washer is not provided.

26. 3280.607(b)(5)(iii)

27. Clothes washing machine drain shall not be connected to the tailpiece, continuous waste, or trap of any sink or dishwashing machine

C. Water Heating Equipment

Energy Source: Electric

Comments:

Location of Water Heater:

28. The water heater is located in the interior specialty closet area.

29. The water heater is located in the mechanical closet that is accessible from the exterior.

30. The water heater is electric and was active at the time of the inspection.

31. Missing insulation on the exposed water lines.



Electrical Disconnect:

I=Inspected

NI=Not Inspected

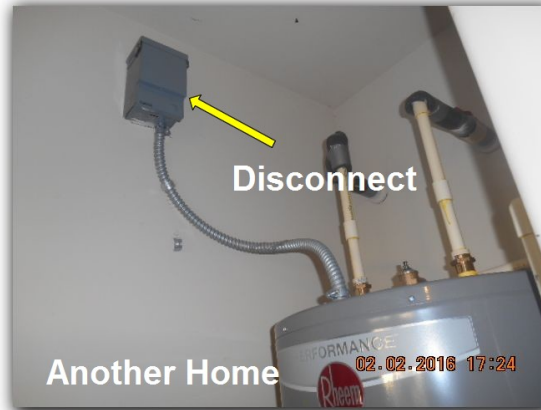
NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

32. The water heater must have an electrical cut off as per code.

33. Missing the electrical disconnect.



Drain Pan:

34. Missing a drain pan under the water tank as per code.

35. Missing a drain line at the drain pan, drain line must terminate to the exterior as per code.



Bonding to System:

36. The hot and cold water lines were not bonded to the gas line as per code

37. **E3509.6 Metal water piping bonding.** The interior metal water piping system shall be bonded to the service equipment enclosure, the grounded conductor at the service, the

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

grounding electrode conductor where of sufficient size, or to the one or more rounding electrodes used. The bonding jumper shall be sized in accordance with Table E3503.1. The points of attachment of the bonding jumper(s) shall be accessible.



T&P Valve:

38. T&P valve needs to be replaced

39. Missing the drain line for the T&P valve.



40. HUD REQUIREMENTS: (Provided solely as additional information not part of the scope of work in a TREC based inspection)

41. 3280.609(d)(3)

42. Prohibited material. Used piping materials shall not be permitted. Those pipe dopes, solder, fluxes, oils, solvents, chemicals, or other substances that are

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

toxic, corrosive, or otherwise detrimental to the water system shall not be used. In addition, for those manufactured homes to be connected to a public water system, all water piping shall be lead-free (as defined in section 109(c)(2) of the Safe Drinking Water Act Amendments of 1986) with solders and flux containing not more than 0.2 percent lead and pipes and pipe fittings containing not more than 8.0 percent lead.

D. Hydro-Massage Therapy Equipment

E. Gas Distribution Systems and Gas Appliances

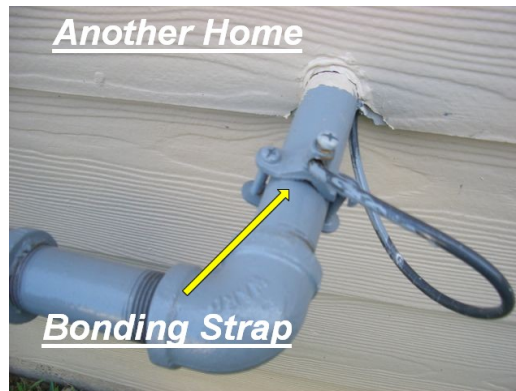
Location of gas meter Front of Home Rear of Home Side of Home Common n/a

Type of gas distribution piping material: Galvanized Copper Black Pipe n/a

Gas Meter:

43. n.

44.



45.

Additional Information:

46. Drip legs are needed in natural gas line installations to trap condensate, oil, metal shavings and other debris and impurities, which might otherwise clog the burner orifice or lodge in the gas valve.

47. Proper installation of the needed drip leg will help maintain the proper functioning of the gas furnace and water heater units but also help prevent a safety hazard. The sediment trap should be installed as close to the water heater or furnace inlet as possible.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

48. The Drip Leg / Sediment Trap (called by either name) is a gas line safety device required by The National Fuel Gas Code, ANSI Z223.1 / NFPA 54 and by the IRC (International Residential Code), the UPC (Uniform Plumbing Code) and the NFPA (National Fire Protection Agency) along with most if not all manufacturers of large gas appliances including water heaters and furnaces, boilers and gas pool heaters and is listed in the installation procedures of the appliance manual/ installation instructions.

49. Not installing the appliances per manufacturers installation requirements may void the warranty on water heaters and furnaces

Additional Information CCST gas flex lines:

50. CSST was developed in Japan in the 1980s. It was developed as a safety improvement over rigid black iron gas pipes that often failed and started fires during earthquakes. The flexible nature of the CSST system allows it to handle seismic activity without leaking gas.

In the early 1980s, the Gas Research Institute initiated research into the use of CSST systems in the U.S.; listing processes, and code approvals needed to be developed and accepted by regulatory bodies. The American National Standards Institute performance specification, AGA LC-1 1987 "Proposed Standard for Interior Fuel Gas Piping Utilizing CSST" was released in 1989.

Sales of CSST in the U.S. began in 1990 with approximately 100,000 ft. sold. Use of CSST grew in the U.S. as contractors quickly discovered it could be installed in 1/3 the time of rigid black iron pipe systems. Beyond the time saved on installations, contractors and code officials appreciated the reduction of fitting joints in a flexible gas piping system. Joints are areas for concern in gas piping systems as they represent potential leak paths. Flexible CSST systems have approximately 75% fewer fitting joints than rigid black iron pipe systems.

All CSST manufacturers expressly added the bonding and grounding procedure to their installation requirements in August 2006. This improved safety installation requirement reduces the likelihood of an electrical surge that can potentially cause a fire. More than 800 million feet of CSST gas piping in approximately six million homes has been installed in the U.S. since 1990.

51. If you find CSST it is strongly recommended that you determine if the CSST system is properly bonded and grounded. A bonding device should be installed on your natural gas system in order to reduce the chances of a natural gas leak or fire. Bonding is provided primarily to prevent a possible electric shock to people who come in contact with the gas piping and other metal objects connected to the grounding system. Nearby lightning

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

strikes can also result in an electrical surge and can potentially puncture a hole in the CSST. Proper bonding and grounding will reduce the risk of damage and fire from a lightning strike.

F. Other

Comments:

V. APPLIANCES

A. Dishwashers

Comments:

52. The dishwasher was present and working properly at the time of the inspection.



Drain Line:

53. The drain line was not raised above the drain and looped as per code.

54. Missing an air gap valve on top of the sink as per code.

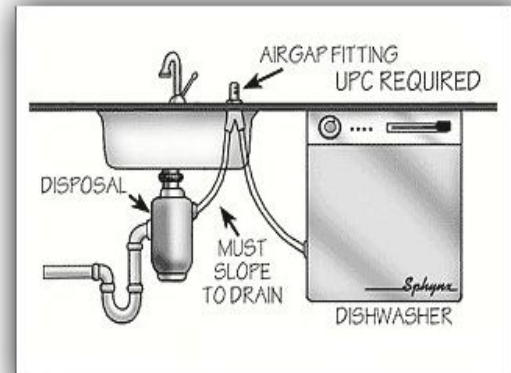
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



55. 3280.607(b)(4)

56. Dishwashing machines.

57. 3280.607(b)(4)(i)

58. A dishwashing machine shall not be directly connected to any waste piping, but shall discharge its waste through a fixed air gap installed above the machine, or through a high loop as specified by the dishwashing machine manufacturer, or into an open standpipe-receptor with a height greater than the washing compartment of the machine.

59. When a standpipe is used, it shall be at least 18 inches but not more than 30 inches above the trap weir. The drain connections from the air gap or high loop may connect to an individual trap, to a directional fitting installed in the sink tailpiece or to an opening provided on the inlet side of a food waste disposal unit.

60. 3280.607(b)(4)(ii)

61. Drain from a dishwashing machine shall not be connected to a sink tailpiece, continuous waste line, or trap on the discharge side of a food waste disposal unit.

B. Food Waste Disposers

Comments:

62. Homes with a septic system cannot have disposers.

63. A disposer can clog the septic system so remove it.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D



C. Range Hood and Exhaust Systems

Comments:

- 64. The vent hood was present and working properly at the time of the inspection.
- 65. The vent hood is a re-circulating vent hood that does not terminate to the exterior.



D. Ranges, Cooktops, and Ovens

Comments:

Range Type: Electric Gas Not in place at the time of the inspection
 Stand Alone Stove top

- 66. The home has a working electric stove.

I=Inspected

NI=Not Inspected

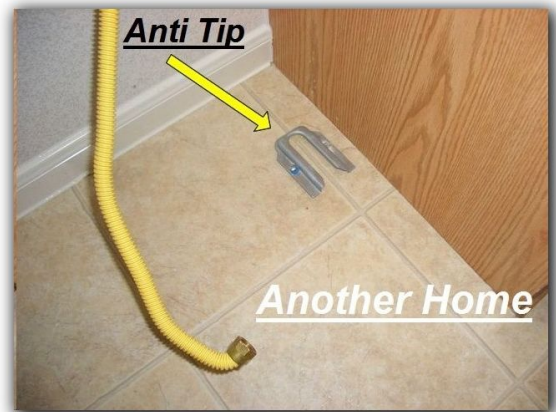
NP=Not Present

D=Deficient

I NI NP D



67. Stove is has an anti tip device as required by code.



68. Anti tip devices are an important safety item for all homes with free standing or slide in ovens/ranges. Anti tip brackets are metal devices designed to prevent oven/ranges from tipping over. Anti Tip Devices/Brackets are also referred to as a Tilt Guard or a Range Stability Device.

69. The bracket is usually attached to a rear leg of the range and anchored into the floor or the wall behind it. Brackets mounted to the floor allow the leg of the range to slide back into place, preventing it from falling forward. Some wall mounted brackets are installed into an opening in the back of the oven in lieu of on the bottom of the leg. The brackets are included with all appliance installation packages.

70. A range that does not have an anti tip bracket installed may tip over if enough weight or pressure is applied to the open oven door, such as that from a large Thanksgiving day turkey, or even a small child using the door as a step. A falling range can crush, scald, or burn someone close by. Newer ranges are light enough that it doesn't take much weight to cause them to tip over, but they're heavy enough to injure or kill small children trapped

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

beneath. Anti-tip brackets can prevent this from happening and they are required by current standards but they aren't installed in a huge portion of ranges.

E. Microwave Ovens

Comments:

71.

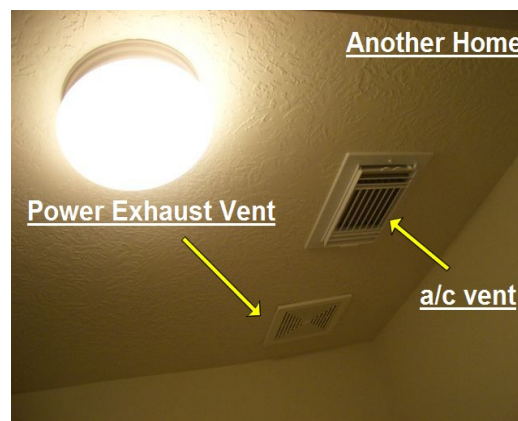
F. Mechanical Exhaust Vents and Bathroom Heaters

Comments

72. Power exhaust vents were working properly at the time of the inspection.



73. The utility room has a 50 cfm power exhaust vent at the wall of the utility room that has no windows as per code R-303.3x;



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

74. R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.279 m²), one-half of which must be openable.

75. Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

G. Garage Door Operators

H. Dryer Exhaust Systems

Comments:

76. The dryer vent must be cleared prior to use.

77. The dryer vent has a proper back draft damper.

78. Dryer Vent - **G2437.3 (613.4) Exhaust material.** Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building and **shall be equipped with a back draft damper.**



I. Other

Comments:

Security Cameras:

79. Home has some security cameras in place, no opinion, out of the scope of the inspection.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



80. There is a wireless screen inside of the master bedroom desk.



VI. OPTIONAL SYSTEMS

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

A. Outbuildings

Comments:

81. A storage building is located in the rear yard.



82. The building is under construction and not completed.

83. The unit has a window ac unit not active at the time of the inspection.



84. Electrical is being supplied by an extension cord at the time of the inspection.

85. Wires to connect to the main panel at the pole exist but have not been connected.

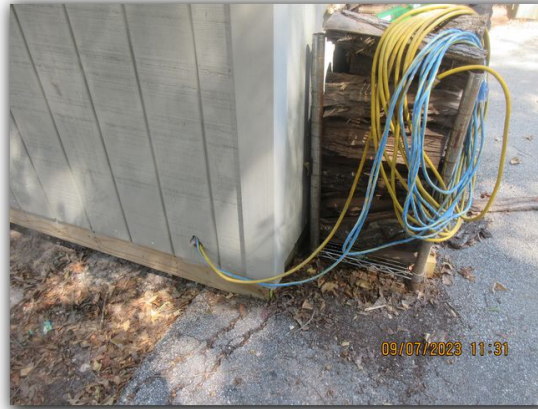
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



86. The unit has ceiling LED light fixtures but no receptacles.



87. The building has some insulation and some sheetrock completed.

88. The roof is missing proper shingles, has some exposed plywood, needs new roof covering.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

B. Private Sewage Disposal Systems

Type of System: Septic Systems

Comments:

Type of Inspection:

89.The Septic system was inspected as per State of Texas (TREC) requirements that lenders generally use as a guideline.

Location:

90.Home has a septic or private water treatment system located behind the home near the kitchen area.



91.The system has proper tanks, compressors, floats and control head.

Documentation Provided:

92.The seller did not provide a copy of the documentation showing where the drain spray fields are located.

93.No documentation on the last time the tanks were pumped and cleared.

General Septic Guidelines: (Typical Absorption type)

94.The septic system should be composed of one or more 500-gallon tank(s) with a grease trap near the kitchen plumbing drain area.

I=Inspected

NI=Not Inspected

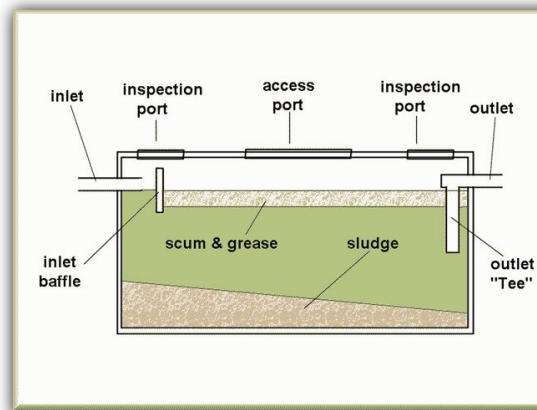
NP=Not Present

D=Deficient

I NI NP D



95. In addition if the septic system has common drain lines they must be at least fifty (50) feet from the water well or one hundred feet (100') if it has approved seepage pits.



96. The drain lines must be at least eight feet from the edge of the home and in good operating order.

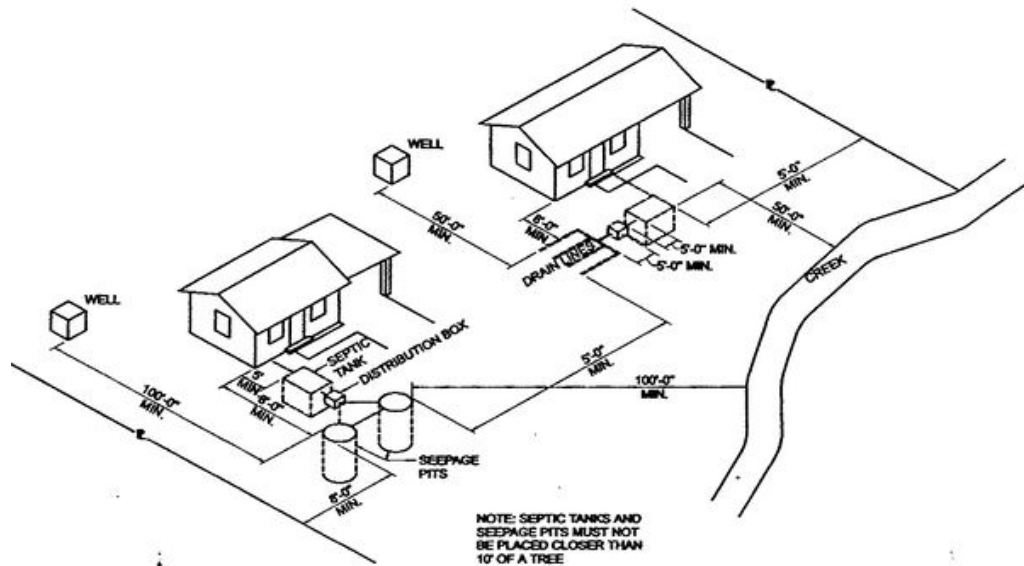
I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

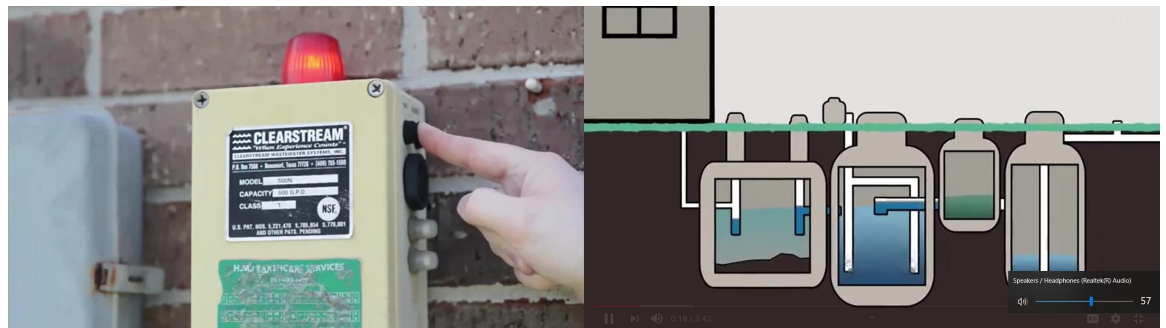


Subject Property:

97. The subject property has an **aerobic system** that is like a **small water treatment plant** with many moving parts, not just simple absorption to the ground as in a traditional septic system.

System Components:

98. The system consists of a septic tanks, compressors, pumps, chlorination system, controls and alarms.



99. The system also has clean out caps, protection for the pump called a "dog house" usually concrete and pop up spray heads in the field.

How It Works:

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

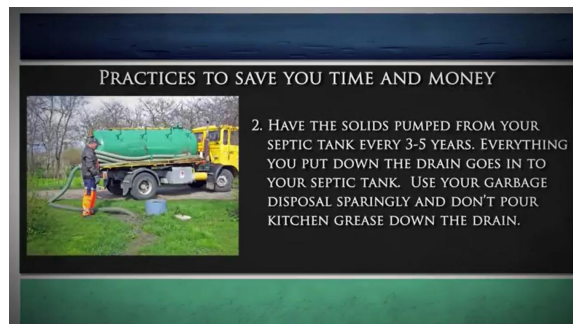
100The effluent or water coming out of the home **first goes to the "trash tank"**, then to the **aeration chamber** where the **air compressor pumps air** into the mix then the **water gets treated with chlorine** tables or liquid to the overflow tank or **pump tank that has floats** in it that will **toggle the spray** of the treated liquid onto the designated area of the yard via **sprinklers** after it goes thru a **filtering system**.

101In the event of **high water** in the pump tank the alarm is triggered by the second float and the **red light and sound comes on**.

102There are various types of pumps but the **most common** is a **mid feed pump** which means it gets its water from the middle of the tank, not the bottom.

Time to Pump Out Tank?

103**The bottom of the tank** can develop **sediment** that is identified by a sludge test (a plastic see thru rod inserted into the tank to see how high the stain comes to). The sludge level is then identified and it is then **determine if the tank is in need of pumping**.



Odors:

104**If there is an odor** around the tanks it means that the tanks are **overflowing** or that the **air compressor is not pumping** sufficient air into the mix.

Spray Fields:

105**The system sprays** the treated effluent **over a designated area** in a circle or semi circle type of pattern but never to a neighbor's yard.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



Field Lines:

106The inspector walked the estimated spray filed lines to check for any effluent on the surface and or foul smells.

Surrounding Area:

107The inspector looked for any evidence of any sharp slopes or breaks, proximity to easement lines or swimming pools.

108The inspector checked for the proximity of known water wells or under ground cisterns, water supply lines of bodies of water.

Tank Top Visual Inspection:

109The inspector attempted to locate the top of the tanks and check for any effluent leaks around the covers and/or foul smell.

Wet Tests:

110The inspector operated at least three fixtures for at least 30 minutes.

Inspection Summary:

111The system had a proper well house as required.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



112The inspector found that the first tank overflowed into the ground.



113The second tank had operational equipment going on but did not activate the spray heads.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

114 There was a foul smell around the first tank due to the overflow of water from the "trash tank".



115 Site drainage was adequate and no swimming pools, ponds, lakes or creeks were nearby

116 No water wells, storage basins or underground cisterns were present on the site

117 No sharp slopes or breaks were present on the sites

118 No yard sprinkler system was present on the site.

119 There were no back ups or unusual hesitation in the drains during the inspection time process.

120 The yard had three sprinkler heads two protected by concrete barrier.



I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---



121The system has an exterior test toggle that worked when activated.

122When the tanks overflowed, the red light came on but no alarm.



Another Home Shown Below:



123The system did not activate at the time of the inspection, tanks were probably

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

not at a level to trigger the floats, but they did trigger the spray heads when tested manually.



124The spray heads operated normally when manually activated.



Conclusion:

125It is recommended that a National Association of Wastewater Transporters (NAWT) or other qualified technician be contracted pump out the septic tank and service the system.

126The system should be certified after the tanks are checked for cracks or other defects by a qualified sanitarian.

127The sanitarian must provide a copy of the documents on file in the court as to how the system was permitted.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

128The spray fields must be identified and the spray heads checked for defects and/or proper spray patterns.

129The sanitarian must confirm that the equipment in place is sufficient to carry out the connected load and meet local code standards.

130The sanitarian must confirm that the bacteria content in the tanks is sufficient for proper operation.

General Information about aerobic systems:

131Aerobic septic systems are used in situations where standard septic systems are not a viable option. In many cases, they are used to replace failing septic systems. Aerobic systems are similar to septic systems in that they both use natural processes to treat wastewater.

132But unlike septic (anaerobic) treatment, the aerobic treatment process requires oxygen. There are two types of bacteria, anaerobic and aerobic. Aerobic bacteria work much faster than anaerobic bacteria, which means they process septic tank waste more quickly.

133Aerobic treatment units use a mechanism to inject and circulate air inside the treatment tank, which accelerates or speeds up the treatment process. This mechanism requires electricity to operate. For this reason, aerobic systems cost more to operate and need more routine maintenance than most septic systems.

134However, when properly operated and maintained, aerobic systems can provide a high quality wastewater treatment alternative to septic systems. They can also be used in some cases by owners of wooded lots, who don't want to clear enough land to install a traditional septic tank and drainfield.

135Aerobic units can be installed above or below ground. They may require electrical connections, additional excavation, installation of pretreatment or final treatment components, and access for maintenance.

136Aerobic systems can cost two to three times that of a standard septic tank, although this varies based on design, location, size, and installation and maintenance requirements. The aeration mechanism requires electricity and routine maintenance.

137Savings can be realized if the drain field can be reduced or if its life can be prolonged. There is the potential for space-saving and less groundwater

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I	NI	NP	D
---	----	----	---

pollution than ordinary septic systems. Aerobic systems may allow a site to be developed that could not otherwise support a conventional septic system.

138All septic systems need a [washing machine filter](#) (to protect the system from lint, one of the leading causes of septic system failure). However, they are even more important to use with aerobic septic systems, because they usually use some types of media or filters in them which can easily get clogged with lint. Many manufacturers will claim their systems don't need a lint filter, because they are afraid their systems will appear inferior next to their competitor's system. In fact the head of one of the best manufacturers has stated that lint was a major problem in their systems.

139.In addition to regulatory restrictions, aerobic systems have both a higher first cost and other maintenance demands than septic systems. Treatment diminishes if these systems are neglected or turned off, if harmful chemicals are poured down the drain, or if the ambient temperature is too low. The aerobic process reduces the effluent's ammonia content, but may increase its nitrate content. However, re-circulation back to an anaerobic environment (septic tank) can reduce total nitrogen output.

140Aerobic systems are not accepted in all areas; check with the local health department. Some jurisdictions do not allow for a reduction in drain field area for aerobic systems, but some jurisdictions do allow for a reduction or elimination of a reserve area, with pretreatment. In other areas, aerobic systems are being allowed on an experimental or trial basis, or to repair failed systems. Approval usually comes from the state or local health department. NSF/ANSI 40 - 2000 Standard for Residential Wastewater Treatment Systems details requirements for approval of the system. Aerobic units are required to include two years of manufacturer maintenance service and renewal options, and to have alarms to alert the homeowner of malfunctions.

141Aerobic treatment systems use a mechanism to inject air into a tank, encouraging decomposition that produces a higher quality effluent. In some cases, the size of the drain field can be reduced to allow development of a site that otherwise could not support a conventional septic system.

142The main application for an aerobic treatment system is to retrofit a failed septic system. Other applications include poor soil, high groundwater/bedrock, little available land for a drain field, high proportion of organic matter or the need for high-quality effluent for environmentally sensitive sites.

143There are a variety of designs for aerobic systems, but they do have some common features. These include pretreatment to reduce the amount of

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

clogging solids, an aeration process, settling for suspended growth systems, and final treatment/disinfection. The most common kind of aerobic system is "suspended growth." Air is forced into an aeration compartment in which sewage-digesting bacteria are freely suspended in the liquid/air mixture. The other method is "attached growth," in which a surface is provided for bacteria to attach themselves. The surface is alternately exposed to the liquid and air. Because of the possibility of disruption under a sudden heavy waste load, some systems do not allow continuous flow, but restrict it through various devices such as pretreatment tanks, surge chambers, and baffles.

List of Deficiencies - Summary Report

FOUNDATIONS

1. ⌘ Missing an access panel or door where the underside of the home can be serviced and/or inspected
2. ⌘ The underside was viewed thru a separation on the top of the skirting next to the front porch as seen below, very limited viewing
3. ⌘ Missing termite caps above each pier as per code
4. ⌘ The floors by the kitchen and family room have "squeaks" on the wood flooring, reason not known
5. ⌘ There are some minor differences in elevation in various points of the flooring which is not uncommon on a mobile home

GRADING AND DRAINAGE

⌘ Pad:

6. ⌘ The subject property had very limited viewing area of the underside as seen below, a traditional pad was not visible

⌘ Poly Cover:

7. ⌘ There is no polyethylene cover over the pad under the unit

⌘ High Soil:

8. ⌘ The perimeter of the home has skirting where the soil is in contact with the skirting that can cause a pathway for insects
9. ⌘ Note: Any area where the ground or grade does not slope away from the structure is to be considered an area of improper drainage. Six inches per 10 feet

⌘ Site Drainage:

10. ⌘ Ponding noted at several points around the foundation or near the foundation all low spots

should be filled, compacted and caused to drain away from the foundation to avoid future foundation settlement issues

℞ **Recommendation:**

11. ℞ Recommend swales on each side to draw the water away from the foundation and down to the street as required by code

ROOF COVERING MATERIALS

℞ **Tree Limbs:**

12. There are various tree limbs that are in contact with the roof covering, all tree limbs must be at least six feet from the roof/shingles to avoid damage

WALLS (INTERIOR AND EXTERIOR)

13. ℞ The home is missing an address plate in front of the building as required by code

14. ℞ The home address numbers must be legible from the street as per IRC code 321.1

DOORS (INTERIOR AND EXTERIOR)

15. ℞ The exterior doors do not have a self closing mechanism on the hinges

WINDOWS

16. ℞ Missing some window screens

PORCHES, BALCONIES, DECKS, AND CARPORTS

℞ Front Porch:

- 17. ℞ The rafters are not properly secured
- 18. ℞ The stairs are missing proper guards and handrails

℞ Rear Ramp:

- 19. ℞ The home has a wheel chair ramp coming out of the utility room that has no safety barriers on either side, a hazard

℞ Rear Porch:

- 20. ℞ The handrails are missing proper guards as required by code
- 21. ℞ The joist hangers are not installed properly, some only have one nail when they are made for six nails

OTHER

- 22. ℞ The cabinet under the kitchen sink is missing panels
- 23. ℞ The panels should be restored at the side and the back and the base

SERVICE ENTRANCE AND PANELS

℞ Main Electrical Disconnect Panel

- 24. ℞ The service is over head that is missing proper drip loop as per code

- 25. ⌘ The pole electrical panel does not have labeling and needs to be properly secured
- 26. ⌘ Missing various knock outs on the dead front cover
- 27. ⌘ There are unfinished wiring by the pole that are meant to go to the rear shed that is under construction
- ⌘ **Main Electrical Breaker Panel:**
- 28. ⌘ Main breaker panel dead front cover is not labeled as per code
- ⌘ **Arc Fault Interrupters:**
- 29. ⌘ Missing arc fault interrupters as required by current code of 2008 and newer homes.
- 30. Code IRC 3802.11 requires arc fault interrupters in all circuits going into the living area
- 31. ⌘ Home is missing arc fault protection on the GFI's as required by current code

BRANCH CIRCUITS, CONNECTED DEVICES, AND FIXTURES

⌘ **Ground Fault Circuit Interrupt Safety Protection**

- 32. ⌘ Home is missing GFI protection in all wet areas
- 33. ⌘ The receptacle on the lower left has open ground

⌘ **Smoke and Fire Alarms**

- 34. ⌘ Replace all batteries of existing smoke detectors
- 35. ⌘ If your smoke alarms are powered by a nine-volt battery, the battery should be replaced **every 6 months**, while the alarm itself should be replaced once every 10 years. For 10-year lithium-powered fire detectors, you won't need to replace the battery

⌘ **Receptacles:**

- 36. ⌘ Various receptacles have open ground
- 37. ⌘ The receptacles are not tempering resistant

HEATING EQUIPMENT

38. ⌘ The furnace could not active at the time of the inspection, too hot inside of the home
39. ⌘ **ELECTRIC FURNACE:** The furnace needs to be serviced prior to closing in order to validate most home owner's warranty requirements, the a/c technician must issue a certification that the system is heating properly and that the heat strips are working properly.

COOLING EQUIPMENT

⌘ **Window Unit:**

40. ⌘ The unit was operative at the time of the inspection but it appears that the unit is nearing the end of it's useful lifespan

⌘ **Whole House Central Unit:**

41. Home has a central a/c system that originally had a split system the traditional and it was replaced with a commercial "package" unit that is usually found on the roofs of commercial buildings
42. ⌘ A "package" system contains both the a/c portion and the heating system, they are normally a heat pump

⌘ **Performance of System:**

43. ⌘ The system was not cooling at the time of the inspection
44. ⌘ The unit has a supply and return metal duct that is exposed to weather on the exterior
45. ⌘ The unit is blowing air down to the coils rather than the traditional blowing air up from the coils

⌘ **Primary Drain Line:**

- 46. ⌘ The primary drain line was not located
- 47. ⌘ The drain line must terminate to the plumbing drain system to avoid foundation settlement and attracting termites when dripping next to the foundation
- 48. ⌘ The primary drain line must be cleared
- ⌘ **Service System:**
- 49. ⌘ The a/c system must be serviced prior to closing in order to validate most home owner's warranty requirements, the a/c technician must issue a certification that the condenser and evaporator is operating properly and is not defective and is cooling properly

DUCT SYSTEMS, CHASES, AND VENTS

- 50. ⌘ The ducts must be elevated and supported from the rafters
- 51. ⌘ Return air filter needs replacement
- 52. ⌘ Improperly installed air return register.
- 53. It is now installed inside of the master bedroom, it should be located in a more centrally located spot to properly circulate air

PLUMBING SUPPLY, DISTRIBUTION SYSTEMS AND FIXTURES

- 54. ⌘ The water pressure is lower than required, it has 35 psi minimum is 45 psi, reason not known
- ⌘ **Exterior Plumbing**
- 55. ⌘ Some exterior hose bibs do not have back-flow prevention
- 56. ⌘ Missing insulation on exposed hose bibs and/or other plumbing supply lines
- 57. ⌘ The rear hose bib seen below is dripping and needs service

⌘ **Washing Machine Connections**

58. ⌘ Washing machine connections not tested - faucets, drains not tested

DRAINS, WASTES, AND VENTS

59. ⌘ Missing tub access panel at sheet rock wall as required by IRC code P-2704.1.

WATER HEATING EQUIPMENT

60. ⌘ Missing insulation on the exposed water lines

⌘ **Electrical Disconnect:**

61. The water heater must have an electrical cut off as per code.

62. Missing the electrical disconnect

⌘ **Drain Pan:**

63. ⌘ Missing a drain pan under the water tank as per code.

64. ⌘ Missing a drain line at the drain pan, drain line must terminate to the exterior as per code

⌘ **Bonding to System:**

65. ⌘ The hot and cold water lines were not bonded to the gas line as per code

- 66. E3509.6 Metal water piping bonding.** The interior metal water piping system shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. The bonding jumper shall be sized in accordance with Table E3503.1. The points of attachment of the bonding jumper(s) shall be accessible.

⌘ **T&P Valve:**

- 67. ⌘ T&P valve needs to be replaced
- 68. ⌘ Missing the drain line for the T&P valve

DISHWASHERS

- 69. ⌘ The drain line was not raised above the drain and looped as per code
- 70. ⌘ Missing an air gap valve on top of the sink as per code

FOOD WASTE DISPOSERS

- 71. ⌘ Homes with a septic system cannot have disposers
- 72. ⌘ A disposer can clog the septic system so remove it

DRYER EXHAUST SYSTEMS

- 73. ⌘ The dryer vent must be cleared prior to use.
- 74. ⌘ Dryer Vent - **G2437.3 (613.4) Exhaust material.** Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building and **shall be equipped with a back draft damper.**

OUTBUILDINGS

- 75. ⌘ A storage building is located in the rear yard

- 76. ⌘ The building is under construction and not completed
- 77. ⌘ The unit has a window ac unit not active at the time of the inspection
- 78. ⌘ Electrical is being supplied by an extension cord at the time of the inspection
- 79. ⌘ Wires to connect to the main panel at the pole exist but have not been connected
- 80. ⌘ The unit has ceiling LED light fixtures but no receptacles
- 81. ⌘ The building has some insulation and some sheetrock completed
- 82. ⌘ The roof is missing proper shingles, has some exposed plywood, needs new roof covering

PRIVATE SEWAGE DISPOSAL SYSTEMS

- 83. ⌘ No documentation on the last time the tanks were pumped and cleared
 - 84. ⌘ The subject property has an **aerobic system** that is like a **small water treatment plant** with many moving parts, not just simple absorption to the ground as in a traditional septic system
 - 85. ⌘ The inspector found that the first tank overflowed into the ground
 - 86. ⌘ The second tank had operational equipment going on but did not activate the spray heads
 - 87. ⌘ There was a foul smell around the first tank due to the overflow of water from the "trash tank"
 - 88. ⌘ When the tanks overflowed, the red light came on but no alarm
- ⌘ **Conclusion:**
- 89. ⌘ It is recommended that a National Association of Wastewater Transporters (NAWT) or other qualified technician be contracted pump out the septic tank and service the system.
 - 90. The system should be certified after the tanks are checked for cracks or other defects by a qualified sanitarian

91. ¶ The sanitarian must provide a copy of the documents on file in the court as to how the system was permitted.
92. The spray fields must be identified and the spray heads checked for defects and/or proper spray patterns.
93. The sanitarian must confirm that the equipment in place is sufficient to carry out the connected load and meet local code standards
94. ¶ The sanitarian must confirm that the bacteria content in the tanks is sufficient for proper operation

DISCLAIMERS: As per TREC guidelines, the inspector does not;

1. Provide the life expectancy of the roof covering or any component
2. Determine the warrant ability or insurability of any component
3. Call out specific hazardous conditions 535.227b
4. Perform testing that requires specific licensing
5. Enter crawl spaces where headroom is less than 18" or deemed hazardous.
6. Determine the accuracy of the main panel breaker labeling
7. Certify any flatwork or local City Ordinance violations such as required in Missouri City
8. Confirm draw or flow on chimneys or other vents such as vent hoods
9. Confirm blockage or flow of dryer vents
10. Perform repairs or recommend contractors
11. Call out wood destroying insects
12. Provide the value of the property or investment projections
13. Review building plans and compare to the as built
14. Call out environmental hazardous conditions if any exist
15. Look for or call out suspect asbestos conditions
16. Does not perform a code inspection confirmed by on site plans
17. Check washer, dryer and refrigerator appliances
18. Check water purification devices
19. Light fire places or check for drafting
20. Does not locate or look for leaking pipes under the foundation
21. Does not remove attic insulation to view condition of pipes under the insulation
22. Check or confirm that drain pans located in the attic for the air conditioning or water heater systems lines leak, have a breach or terminate to the appropriate location
23. Guarantee the work or repairs performed by others
24. Fireplace not checked for grounding
25. Firewall not checked for assembly integrity as required by code
26. The inspection is performed for the party noted on page one of the report and is not transferable. If a party instigates legal action against the inspector and fails to prevail on every count such party will be responsible for the payment of the inspector's legal fees.
27. The inspector issues an opinion on the present condition of the component that is inspected
28. If the client finds a perceived fault in the inspection the client must contact the inspector in writing within the five days of the discovery in order that the inspector has an opportunity to review the alleged faulty issue.
29. Inspector does not check for issues with defective toxic sheetrock, such as Chinese Sheetrock that exists on some homes since 2001 see www.wikipedia.org/wiki/Chinese_drywall.
30. Inspector does not check for issues with granite tops such as radioactivity such as radon.
31. Other limitations for each category as found on the TREC web site

MANDATORY DISCLOSURE REQUIRED ON REPORT

The TREC Standards of Practice (Sections 535.227-535.233 of the Rules) are the minimum standards for inspections by TREC-licensed inspectors. **An inspection addresses only those components and conditions that are present, visible, and accessible at the time of the inspection. While there may be other parts, components or systems present, only those items specifically noted as being inspected were inspected.** The inspector is NOT required to turn on decommissioned equipment, systems, utility services or apply an open flame or light a pilot to operate any appliance. **The inspector is NOT required to climb over obstacles, move furnishings or stored items.** The inspection report may address issues that are code-based or may refer to a particular code; however, this is NOT a code compliance inspection and does NOT verify compliance with manufacturer's installation instructions. **The inspection does NOT imply insurability or warrantability of the structure or its components. Although some safety issues may be addressed in this report, this inspection is NOT a safety/code inspection, and the inspector is NOT required to identify all potential hazards....**

...THIS PROPERTY INSPECTION IS NOT A TECHNICALLY EXHAUSTIVE INSPECTION OF THE STRUCTURE, SYSTEMS OR COMPONENTS. **The inspection may not reveal all deficiencies.** A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. It is recommended that you obtain as much information as is available about this property, including any seller's disclosures, previous inspection reports, engineering reports, building/remodeling permits, and reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

ITEMS IDENTIFIED IN THE REPORT DO NOT OBLIGATE ANY PARTY TO MAKE REPAIRS OR TAKE OTHER ACTIONS, NOR IS THE PURCHASER REQUIRED TO REQUEST THAT THE SELLER TAKE ANY ACTION. **When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods. Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made.**

Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. **This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector yourself, reliance on this report may provide incomplete or outdated information...it is recommended that you hire your own licensed inspector to perform an inspection to meet your specific needs...**

ADDENDUM: MAINTENANCE ADVICE

Upon Taking Ownership

- After taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. The following checklist should help you undertake some of these improvements and maintenance issues:
- Change the locks on all exterior entrances, for improved security. If burglar bars are present make them detachable as per City of Houston ordinance (able to be opened without a key).
- Check that all windows and doors are secure. Improve or replace window hardware as necessary. Security rods can be added to sliding windows and doors. This inspector recommends a monitored security alarm system with smoke and fire detection hardware.
- Install smoke detectors on each level of the home, in each bedroom, in the hallway immediately outside the bedrooms and the game room, but not in the kitchen.
- Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in one year, usually when the Daylight Savings time changes.
- Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. Consult with your local fire department regarding fire safety issues and what to do in the event of a fire.
- Examine driveways and walkway for trip hazards. Undertake repairs where necessary.
- Examine the interior of the home for trip hazards such as faulty vinyl or ceramic flooring, loose or torn carpet, and make the appropriate repairs.
- Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- Review your home inspection report for any items that require immediate repairs or improvement or further investigation. Address these areas as required and make the appropriate repairs.
- Install rain caps and vermin screens on all chimney flues, soffit vents, etc. as necessary.
- Investigate the location of the main shut-offs for the plumbing, heating and electrical systems.
- Seal all cracks or separations at brick veneer at exterior window sills and frames.
- Install stainless steel reinforced water supply lines to your washing machine to avoid accidents.
- If a condominium, buyer should carefully review the condominium declaration and from time to time also inspect the integrity of the fire walls in the attic.
- Buyer should check for any community restrictions and limitations.
- Make a note of the telephone numbers for local police, fire and ambulances services.
- Locate and confirm the termination of the dryer vent and clear of lint; The vent must not terminate to the attic, interior wall and must have a back draft damper, but no screen.
- Locate, confirm the termination of the vent hood vent and clear it, must not terminate into the attic.
- Fireplace/Chimney must be serviced prior to use,
- Clear any bird's nest/obstructions & service damper.
- Install protective covers (globe) over exposed incandescent light bulbs in the closets

Regular Maintenance

- **Examine heating/cooling air filters and replace or clean as necessary**
- **Check that fire extinguisher(s) are fully charged, re-charge if necessary or purchase & install one**
- **Inspect and clean electronic air filters**
- **Clean gutters and down spouts. Ensure that down spouts are secure, and that the discharge of the down spout is appropriate (open end away from slab);**
- **Remove debris from exterior window wells**
- **Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Check below all plumbing fixtures for evidence of leakage.**
- **Repair or replace leaking faucets or shower heads.**
- **Secure loose toilets, or repair flush mechanisms that become troublesome**
- **If mold appears, locate the source and promptly fix it and remediate the affected area**

Buyer Notes:

SPRING AND FALL

- **Examine the roof for evidence of damage to roof covering, flashing and chimneys.**
- **Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.**
- **Trim back tree branches and shrubs to ensure that they are not in contact with the house**
- **Inspect the exterior walls and foundation for evidence of damage, cracking or movement.**
- **Watch for bird nests or other vermin or insect activity**
- **Survey crawl space walls for evidence for moisture seepage.**
- **Look at overhead wires coming to the house. They should be secure and clear of trees or other obstruction.**
- **Ensure that the grade of the land around the house encourages water to flow away from the foundation.**
- **Inspect all driveways, walk ways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.**
- **Clean windows and test their operation. Improve caulking and weather stripping as necessary.**
- **Watch for evidence of wood rot around window frames and window sills.**
- **Paint and repair window sills and frames as necessary.**
- **Test all ground fault interrupters (GCFI) devices, as identified in the inspection report.**
- **Shut off isolating valves for exterior hose bibs in the fall or properly insulate.**
- **Test the Temperature and pressure valve (TPR) on water heater and replace if necessary.**
- **Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.**
- **Test the overhead garage door opener, to ensure that the auto reverse mechanism is responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.**
- **Replace and clean exhaust hood filters.**
- **Clean, inspect and or service all appliances as per the manufacturer's recommendations.**

Buyer Notes:

ENVIRONMENTAL INSPECTION

EMF SURVEY

The buyer requested an EMF survey due to the fact that the home has power lines adjacent to the property. The inspector used a tri-axial electromagnetic testing meter produced by Teslatronics; The meter measures the amount of low level 60 hz radiation given off by the adjacent power supply lines; The measurement is in Mg units; The temperature was 62 degrees which indicates that full power consumption was not active at the time of the inspection;

Subject Property



The inspection testing results are as follows;

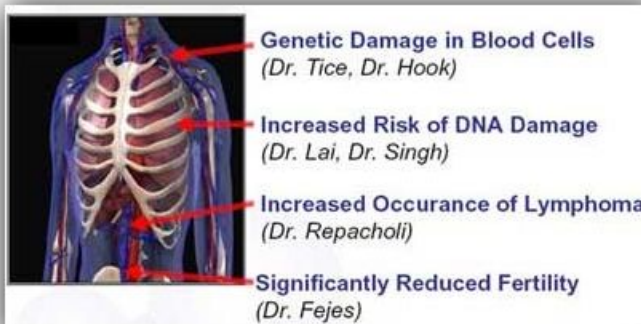
Exterior Distance from Rear										
All Readings in Milligauss ...										
Exterior Corner Reading	R-Front	L-Front	R-Rear	L-Rear						
In Milligauss	0.3	0.3	0.4	0.4						
Bedrooms at Center of Room										
Family Room	0.6									
Kitchen	0.6									
Master Bedroom	0.5									
2nd Bdrm	0.3									
3rd Bdrm	0.3									

Spot Testing:

The testing is known as "spot testing" which means that the amount of electricity that flows through the line depends on the area load demand. The current load or percent of the designed load is not known and the utility company will not release the load history. The loads are higher on hot days at 6:00 pm while lower in colder days and in the night time.

The property was tested during a cool day on a Saturday where the load on the line is expected to be at its lowest point. However the type of lines located at the rear of the home are designed to carry a high load when fully loaded.

Medical Issues: (Brief Summary)



Example:

To better understand the results and the opinion of this inspector the testing on a cool day in the morning part of the day can be compared to a man standing on the side of a 14 lane freeway at 4:00 am and noting that traffic is very low. However it is clear that the design of the construction is made for heavy use at an appropriate time and thus the observer can safely conclude that the readings at the time of observance the traffic was low but there is no doubt that at the appropriate time the traffic will be extremely heavy, noisy and have pollution issues involved.

Conclusion:

It is the opinion of this inspector that the property is not exposed at above normal EMF exposure at the back yard or the inside of the home at the time of the inspection as shown on the data above. The home is below the national average of 0.6 Mg.. When the temperature gets hotter it is expected to increase the amount of electro magnetic radiation going into the living areas of the home but it is the opinion of this inspector that it will reach and exceed the national average noted herein.

Opinion:

Thus in the opinion of this inspector **the interior and exterior of the home is ACCEPTABLE at the time of the inspection and judging from the size of the electrical conductors at the rear yard the amount of electricity flowing thru the cables is limited but will increase and exceed the national average and the 2 Mg. barrier. When the readings exceed 2.0 Mg. the property will NOT BE ACCEPTABLE and the occupants will be exposed to health related issues. The builder/developer should have disclosed this issue for he had to perform a Phase I site assessment according to ASTM standards which should have informed him of the potential of high EMF near the border power lines.**

Please visit our website, www.specialtyinspectionstx.com for additional details on EMF issues;

Introduction

Electric power is a fact of life in America, a familiar miracle. Generations have come to take for granted the simple flip of a switch that turns night into day. With electric power, however, come certain precautions that are also well known. Electric power lines, household wiring, and appliances can cause serious injury from electric shock if handled improperly. Recently, a new question has emerged about the electric power we all depend on: *Does it have anything to do with cancer?*

Some epidemiological studies have suggested that a link may exist between exposure to power-frequency electric and magnetic fields (EMFs) and certain types of cancer, primarily leukemia and brain cancer. Other studies have found no such link. Laboratory researchers are studying how such an association is biologically possible. At this point, there is no scientific consensus about the EMF issue—except a general agreement that better information is needed. A national EMF research effort is under way, and major study results are expected in the next few years.

This booklet provides some answers to common questions about the possible health effects of EMFs. First, we define some basic electrical terms, describe EMFs, and discuss recent scientific studies. We then describe what the government is doing to address public concerns about EMFs. Next, we address questions people have about their own exposure to EMFs. Lastly, we tell you how to obtain more detailed information about these issues.

This booklet was prepared by Oak Ridge National Laboratory, under the direction of the National Institute of Environmental Health Sciences and the U.S. Department of Energy, for the EMF Research and Public Information Dissemination (RAPID) Program. It was reviewed by staff from nine federal government agencies and by the National EMF Advisory Committee, which represents public advocacy groups, organized labor, state governments, academia, and industry. Much of this material was originally developed by the Bonneville Power Administration, one of the

Amount of
technical detail

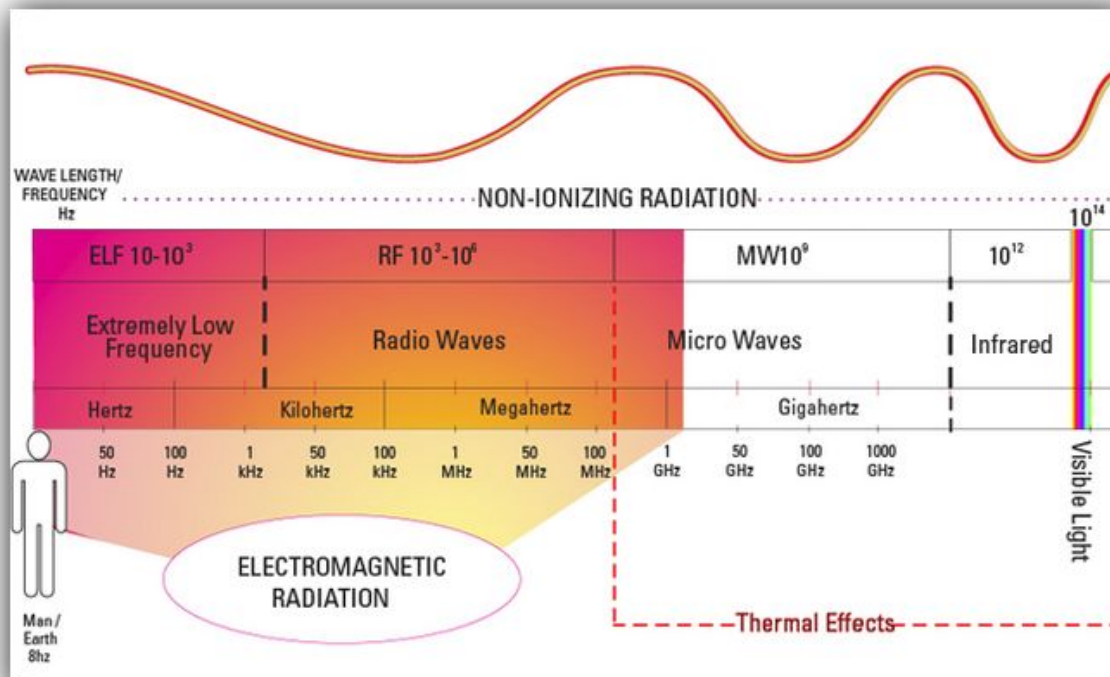
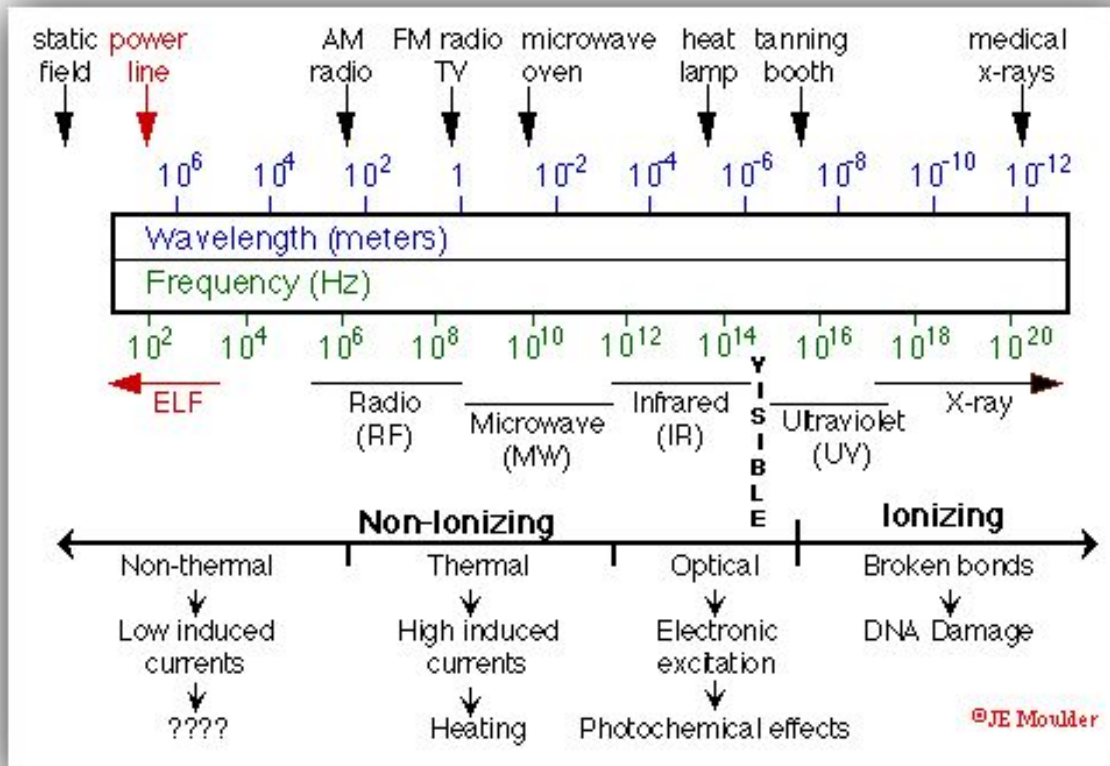
Moderate



Note to readers:
This publication
contains a
moderate level of
technical detail.

MAGNETIC SPECTRUM

The Magnetic Spectrum



EMF BACKGROUND INFORMATION

Electromagnetic radiation is present throughout the entire universe. It is quantitatively measured in units call "gausses", which are lines of magnetic flux per square centimeter.

Humans are routinely exposed to geomagnetic fields, and since these are naturally present in the earth and more importantly non-pulsating, they are considered "normal exposures", such as the sun rays. However since electric power has proliferated, the amount of electromagnetic fields to which we are now exposed has increased significantly.

Electromagnetic radiation is produced in various frequencies, identified as high, middle, low and extremely low. High frequency waves, such as X-rays, have been identified as carcinogenic in certain doses of exposures. Middle frequency waves, such as microwaves, have in some cases been shown to be harmful.

Low frequency waves, such as television waves, have not been shown to be harmful. Extremely low frequency waves (ELF) such as those emitted from power lines, appliances and house wiring are the waves that have been receiving increasing attention on potential health hazards.

Considerable public and private research (New England Journal of Medicine, American Journal of Epidemiology) publications has shown that ELF can impair human functions by slowing heart rates and altering brain waves. The human immune, circulation and psychological systems can be impacted by increases stress from bodily magnetic penetrations.

Statistical links between cancer rates and proximity to certain kinds of electrical equipment have been conclusively identified in laboratory animals, according to the American Assessment Association and recent articles related to breast cancer in woman working with hair dryers and computer monitors.

Just as with tobacco products there are currently no Federal or State guidelines published by the regulatory agencies or other laws to define the acceptable legal limits of EMF radiation from utility lines. There are guidelines on other EMF emissions such as VDT monitors. In California, developers in some areas have been restricted in certain areas from building homes where more than 2 Mg exposure at maximum loads.

National Average & Chart of other readings

7th FLOOR

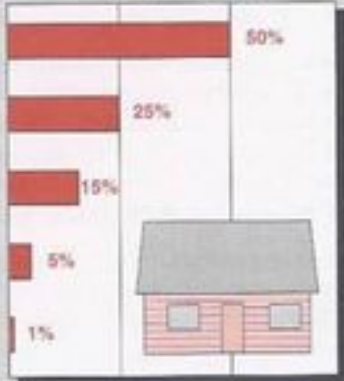
YOUR EMF ENVIRONMENT

Q How does the magnetic field throughout my home compare with that of other homes?

A As a source of comparison with the magnetic field throughout your home, see the figure below.

Magnetic Field Measured in 992 Homes

All-Room Mean Magnetic Field	% of Homes That Exceeded Magnetic Fields on the Left	
	25%	50%
0.6 mG	50%	50%
1.1 mG	25%	25%
2.1 mG	15%	15%
2.9 mG	5%	5%
6.6 mG	1%	1%



Source: Zaffanella 1993

The EPRI study of 992 homes was not designed to measure people's actual exposure to magnetic fields. Instead, it focused on identifying internal and external sources of these fields in the home. Your exposure to magnetic fields depends on how much time you spend near various sources and on the strength of the fields produced by the sources.

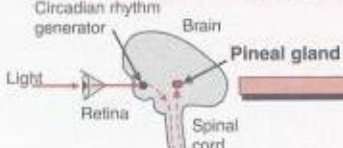
This chart summarizes data from a study by the Electric Power Research Institute (EPRI) in which spot measurements of magnetic fields were made in the center of rooms in 992 homes throughout the United States. Half of the homes studied had magnetic field measurements of 0.6 mG or less, when the average of measurements from all the rooms in the home was calculated (the all-room mean magnetic field). The all-room mean magnetic field for all homes studied was 0.9mG. Only 15% of the homes had mean magnetic fields greater than 2.1 mG. The measurements were made away from electrical appliances and primarily reflect the fields from outside power lines, household wiring, and electrical grounding sources.

Another area that is affected by EMF fields as low as two milligauss is the melatonin levels. Melatonin is vital for our sleep patterns, take a look at the following table that was developed by the U.S. Department of Energy.

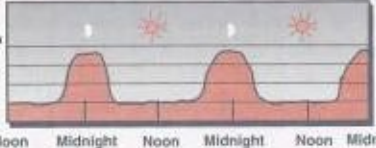
BIOLOGICAL STUDIES

Melatonin

What is it ?



The daily secretion of the hormone melatonin by the pineal gland is driven by a natural generator in the brain. Light regulates the generator so that melatonin secretion by the pineal matches the day-night cycle.



Melatonin levels are very low during the day and increase rapidly at night. The secretion corresponds to the length of the night. This provides biological information about the time of day and the time of year.

What does it do ?

<p>Regulation of seasonal breeding</p> <p>Wildlife and many domestic species, such as sheep breed only at certain times of the year. Melatonin provides the animals' reproductive system with the necessary time-of-year information. If melatonin patterns are altered, the timing of reproduction can be affected.</p>	<p>Regulation of circadian rhythms</p> <p>Melatonin helps regulate daily biological rhythms such as the sleep-wake cycle. It also appears to influence mood and behavior. Some types of depression and "jet lag" may be related to irregularities in the melatonin rhythm.</p>	<p>Tumor suppression</p> <p>Melatonin seems to have an anti-tumor effect. In some studies, breast cancer in women was associated with low levels of melatonin. Some animal and cell studies also found that melatonin helps reduce the growth of tumors.</p>
---	---	---

What affects it ?

Under certain conditions, nighttime melatonin can be depressed by light, stress, alcohol, and EMF.

<p>Laboratory rats</p> <p>Studies in the 1980s first reported that 60-Hz electric fields reduced greatly pineal melatonin in rats. Newer studies have not been able to repeat these findings. Some studies have reported that 50/60-Hz magnetic fields affect melatonin, but other studies did not find this effect.</p>	<p>Hamsters</p> <p>Two studies found that 60-Hz magnetic fields reduced melatonin levels in hamsters. Exposure to the field occurred for only 15 minutes during the light period.</p>	<p>Sheep</p> <p>A study found no effects of EMF on melatonin in sheep raised beneath a BPA 500-kV transmission line in Oregon. There were also no effects on reproductive cycles; however, a possible effect on the immune system was found.</p>	<p>Humans</p> <p>One study suggested melatonin was affected in certain women using specially made electric blankets. A study is under way to see whether magnetic fields affect melatonin in people under laboratory conditions. A study in Seattle is attempting to see whether breast cancer in women is related to EMF.</p>
---	--	---	---

25

PRUDENCE AVOIDANCE

Dr. Indira Nair, a world acclaimed physicist in Carnegie Mellon Department of Engineering and Public Policy and who is co-author of the Office of Technology Assessment paper that redirected the scientific community's attitude about EMF bioeffects was one of the team members who coined the term prudence avoidance.

In a town meeting held at New York University concerning a residential community's concern over high EMF fields, Dr. Nair stated, "If the fields near your house are much higher than normal ambient fields, move away!"

Thus many experts at all levels advice to the consumers is to use prudence avoidance, which means avoid high fields from interior sources (clocks, electronics, etc), and exterior fields, high tension wires that give off above normal EMF levels.

LACK OF REGULATORY GUIDANCE

The lack of regulatory intervention is not necessarily an approval of the safety of abnormal EMF fields. Just as if a person were to approach this environmental specialist and ask if cigarette smoking is harmful to their health, this consultant based on current information about the subject could very well state that yes indeed smoking tobacco products are harmful to your health. This consultant would not refer you to Phillip Morris research department for additional information, for they have been proven to have a conflict of interest in their research findings.

The same can be likened to EMF fields, this consultant would not refer you to a utility company or a utility funded EMF information "hot line" for they have a conflict of interest that is clear and thus their response would greatly differ from this consultant's viewpoint, opinion and conclusions based on the weight of the evidence.

To make a point on one occasion a Houston Newspaper an article was published in which the headlines read "Power line radiation doesn't cause illness, scientific panel says", however within the article states that "...but there is compelling evidence that there is a problem", and thus goes the misinformation to the public.

In the Medical College of Wisconsin web page found at;

<http://www.mcw.edu/radiationoncology/ourdepartment/radiationbiology/Power-Lines-and-Cancer-FAQs.htm>

In 1996 Congress authorized a five-year EMF research and Public Information campaign. The entities involved included the Department of Energy, National Institute of Environmental Health Sciences, Rural Electric Utilities Service, Federal Energy Regulatory Commission, OSHA, National Institute of Standards and Technology, Department of Defense Office of Naval Research, Energy & Safety Department of Transportation, and EPA. The report was met with controversy and has since been "water down".

POWER FREQUENCY FIELDS

Power-frequency fields in the US vary 60 times per second (60 Hz), and have a wavelength of 5,000 km. Power in most of the rest of the world is at 50 Hz. Broadcast AM radio has a frequency of around 10^6 (1,000,000) Hz and a wavelength of around 300 m. Microwave ovens have a frequency of 2.54×10^9 Hz, and a wavelength of about 12 cm. X-rays have frequencies above 10^{15} Hz, and wavelengths of less than 100 nm.

The published FAQ sheet will use the term "power frequency" to refer to both the 50- and 60-Hz alternating current (AC) frequencies used in electric power systems, and the term "power frequency field" to refer to the sinusoidal electric and magnetic fields produced by 50- and 60-Hz lines and devices.

The phrase "EMF" will be avoided since it is an imprecise term that could apply to many very different types of fields, and because the term has a long-standing usage in physics to refer to an entirely different quantity, electromotive force. The terms "electromagnetic radiation" and "non-ionizing radiation" will be avoided since power-frequency sources produce no appreciable radiation.

Power-frequency fields are also properly referred to as extremely low frequency (or ELF) fields. In strict electrical engineering terms, ELF refers to frequencies between 30 and 300 Hz, but the term is often used in the biological and occupational health literature to cover the range from above 0 Hz to 3000 Hz (everything above static fields and below radio-frequency).

How Far is Safe Question

YOUR EMF ENVIRONMENT

Q Is it safe to live close to a transmission line?

A Living close to a transmission line can increase your overall exposure to EMFs. As discussed earlier, government health or safety organizations worldwide have reportedly not concluded that EMFs cause cancer or other health effects.

It is generally acknowledged that several studies have reported increased cancer risks, especially for children living close to high-current power lines. Although these studies suggest potential risks, scientists do not yet know whether EMFs, other factors, or methodological problems are responsible for their findings.



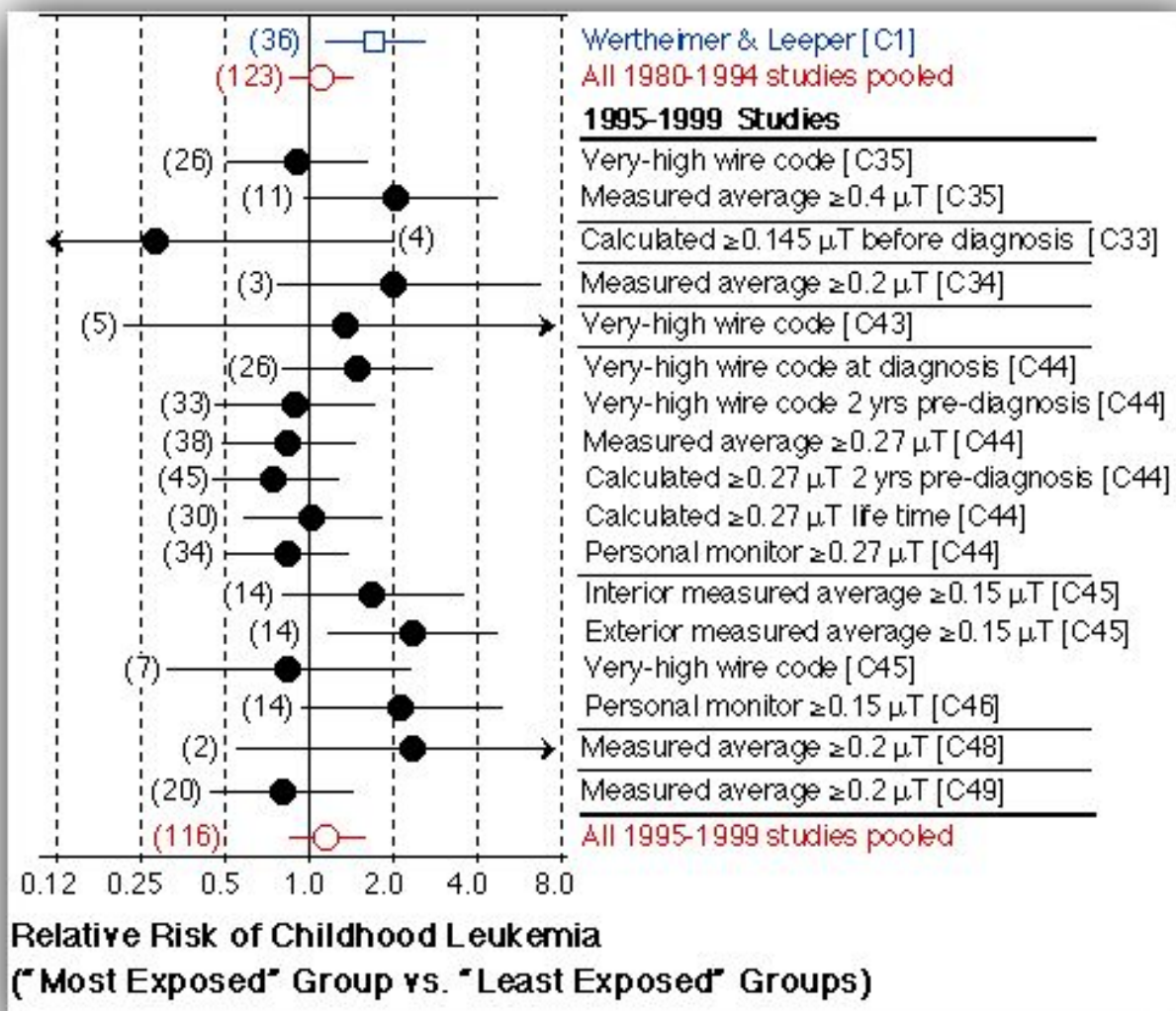
It is possible that future studies will provide sufficient information to establish whether EMFs are a hazard to human health. The newer studies may also show that factors other than EMFs were responsible for effects reported in earlier studies. It is also possible that, even with more research, there will be no scientific resolution to the EMF issue in the near future.

The answer to this question, therefore, involves (1) a great deal of judgment about the meaning of existing scientific evidence, (2) speculation about the possible results of future studies, and (3) individual perceptions about the relative importance of various potential health risks.



Summary of Residential Power-Line Cancer Studies

Study	Location	Leukemia	Other Cancers
Child Cancer Studies			
Wertheimer & Leeper '79	Denver	OR = 2.35*	All Cancer OR = 2.22*
Fulton et al. '80	Rhode Island	OR = 1.09	Not Studied
Tomenius '86	Sweden	OR = 0.30	CNS Tumors OR = 3.70*
Savitz et al. '88	Denver	OR = 1.54	All Cancer OR = 1.53*
Coleman et al. '89	U.K.	OR = 1.50	Not Studied
Lin & Lu '89	Taiwan	OR = 1.31	All Cancer OR = 1.30
Myers et al. '90	U.K.	OR = 1.14†	All Cancer OR = 0.98
London et al. '91	Los Angeles	OR = 2.15*	Not Studied
Lowenthal et al. '91	Australia	O/E = 2.00	
Feychting & Ahlbom '93	Sweden	OR = 3.80*	All Cancer OR = 1.30
Olsen et al. '93	Denmark	OR = 1.50	All Cancer OR = 5.60*
Petridou et al. '93	Greece	OR = 1.19	Not Studied
Verkasalo '93	Finland	SIR = 1.60	All Cancer SIR = 1.50, CNS Tumors in Boys, SIR = 4.20*
Fajardo-Gutiérrez et al. '93	Mexico	OR = 2.63*	Not Studied
Adult Cancer Studies			
Wertheimer & Leeper '82	Denver	OR = 1.00	All Cancer OR = 1.28*
McDowall '86	U.K.	SMR = 143	Lung Cancer SMR = 215*
Severson et al. '88	Seattle	OR = 0.80	Not Studied
Coleman et al. '89	U.K.	OR = 0.90	Not Studied
Youngson et al. '91	U.K.	Leukemia & Lymphoma OR = 1.29	
Eriksson & Karlsson '92	Sweden	Not studied	Multiple Myeloma OR = 0.94
Feychting & Ahlbom '92	Sweden	OR = 1.00 (Leukemia Subtypes OR = 1.70)	
Schreiber et al. '93	The Netherlands	No Cases	All Cancer SMR = 85, Hodgkins Disease SMR = 469
<p>Note: This table is intended to summarize briefly some of the selected, often-cited results of the residential cancer studies; consult the full papers for details (see <i>References</i>, p. 56).</p> <p>OR = Odds Ratio (see p. 10). An OR of 1.00 means no increased or decreased risk.</p> <p>SMR = Standardized Mortality Ratio. An SMR of 100 means no increased or decreased risk.</p> <p>SIR = Standardized Incidence Ratio. An SIR of 1.00 means no increased or decreased risk.</p> <p>CNS = Central nervous system.</p> <p>O/E = Observed number of cases divided by the expected number of cases.</p> <p>* The number is statistically significant (greater than expected by chance), p. 11.</p> <p>† For nonsolid tumors, which includes leukemias and lymphomas.</p>			



DUE DILIGENCE RESOURCES

[Microwave News](http://microwavenews.com/) - Recent headlines and up-to-date coverage of the entire electromagnetic field issue from the leading information resource in the field. (<http://microwavenews.com/>)

[World Health Organization - International EMF Project](http://www.who.int/peh-emf/) - Describes the scope of the International EMF Project, and provides access to reference documents and exposure standards produced by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). (<http://www.who.int/peh-emf/>)

[NIEHS - National Institute of Environmental Health Sciences](http://www.niehs.nih.gov/health/topics/agents/emf/) - Access to many U.S. government funded EMF reports from past years, and good background information on Electric and Magnetic Fields. (<http://www.niehs.nih.gov/health/topics/agents/emf/>)

[Federal Communications Commission - Office of Engineering and Technology - RF Safety Program Page](http://www.fcc.gov/encyclopedia/radio-frequency-safety) - Offers access to important documents on radio frequency exposure limitation, within the context of existing regulatory standards in the U.S. (<http://www.fcc.gov/encyclopedia/radio-frequency-safety>)

[CNET Cell Phone Radiation Chart](http://www.cnet.com/pictures/highest-cell-phone-radiation/) - Provides SAR (specific absorption rate) figures for many cell phone models. (<http://www.cnet.com/pictures/highest-cell-phone-radiation/>)

[Mike Holt](http://www.mikeholt.com/) - The premier educator for the electrical industry. Mike Holt's seminars and books on the NEC and electrical safety produce better electricians and better electrical installations. Strict code compliance is the best way to reduce AC magnetic fields in new construction. (<http://www.mikeholt.com/>)

[Safe Living Technologies](http://www.slt.co/) - Provides EMF and RF safety products, including shielding materials, demand switches, and field measuring instruments. (<http://www.slt.co/>)

[Axis Environmental Solutions](http://aesolutions.info/) - Provides EMF/RF Assessments & Mitigation throughout south Florida. (<http://aesolutions.info/>)

[Environmental Assay Inc.](http://www.emfrelief.com/) - Provides EMF testing and remediation, plus mold and indoor air quality surveys, to residential clients in NJ, PA, NY, and surrounding area. The website contains in-depth descriptions of many EMF problem conditions, written by an experienced and knowledgeable professional in the field. (<http://www.emfrelief.com/>)

[ScanTech](http://www.scantech7.com/) - A professional EMF survey firm in Texas that offers a variety of multi-spectral scanning services, such as infrared thermal imaging & thermography, digital Geiger counter surveys, air ion counts, and other technical services in the realms of industrial & commercial digital video and 3-D animation. (<http://www.scantech7.com/>)

[NJ Dept of Environmental Protection - Nonionizing Radiation Section](http://www.nj.gov/dep/rpp/nrs/index.htm) - Interesting coverage of a broad range of issues, including Lasers and UV light. (<http://www.nj.gov/dep/rpp/nrs/index.htm>)

[Electricssense – living with EMFs](http://electricssense.com/) - Tips and advice from Lloyd Burrell, an electrosensitive with nearly 10 years experience, on living a healthy life in the face of electromagnetic pollution from cell phones, Wifi, dirty electricity and the like. (<http://electricssense.com/>)

[Overcoming Electrical Sensitivity](http://www.electrical-sensitivity.info/) - One who has suffered from this condition traces the development of his illness, and details a comprehensive approach to recovery. A well written site that should be of benefit to anyone who is struggling with this problem. (<http://www.electrical-sensitivity.info/>)

[The EMR Policy Institute](http://www.emrpolicy.org/) - This activist site takes a responsible and informed position on EMF/EMR issues. Access to recent scientific papers and other resources. (<http://www.emrpolicy.org/>)

[Quacks](http://www.emfservices.com/quacks.htm) - Four ways to recognize questionable sources. (<http://www.emfservices.com/quacks.htm>)

Power Transmission Line Designs



Power Frequency Fields at Distances

