

## Radon Test Results

Report Date: October 3, 2013

Client: Norstar Development USA, L.P.

Site Address: Oakwood Street Housing Complex

3565-3585 Oakwood Street

Ann Arbor, Michigan

AKT Peerless Project #: 8356e-6-190

## Results

AKT Peerless conducted short-term sampling for radon gas at the Oakwood Street housing complex. Units 3575 and 3585 were tested during the period August 19 to August 22, 2013. Unit 3565 was tested from August 23 to August 26, 2013.

An AccuStar Charcoal LS CLS 100i Short Term Radon Test Kit was placed in the lowest livable space. One duplicate Quality Control sample and one Blank were also analyzed.

Table 1  Radon Test Results  3565-3585 Oakwood Street, Ann Arbor, Michigan							
Address	Dates Sampled	Test Location	Test Duration (Hours)	Test Result (pCi/L)			
3565 Oakwood	8/23/2013 – 8/26/2013	Basement on Hot Water Heater housing (Unit not operating)	71.8	3.9			
3565 Oakwood	8/23/2013 – 8/26/2013	Duplicate	71.8	3.9			
3575 Oakwood	8/19/2013 – 8/22/2013	Basement, 6' from East Wall on Stand	71.4	2.1			
3585 Oakwood	8/19/2013 – 8/22/2013	Basement Sleeping Area, North Wall on File Cabinet	71.4	4.2			

EPA Action level = of 4.0 picocuries per liter (pCi/L). Laboratory provided by AccuStar are included in Attachment A. BOLD CAPS = Result exceeds EPA Action level.

## Recommendation

Radon levels in 3585 Oakwood exceeded the EPA Action level of 4.0 picocuries per liter (pCi/L). Long-term testing is recommended but mitigation based on the initial test results is also an option. A radon mitigation professional should be consulted to determine design and installation criteria. No further actions are required at this time for the remaining addresses in the complex.

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## **Limitations**

The information and opinions obtained in this report are for the exclusive use of the Norstar Development USA, L.P. AKT Peerless will not distribute this report without Client's written consent or as required by law or by a Court order. Report contents must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Results indicate conditions present during the sampling period. Indoor radon levels can vary based on season and a variety of other factors.

Submitted by:

**AKT Peerless Environmental and Energy Services** 

James C. Fox, RPIH Sr. Project Manager

Attachment A

**Laboratory Analytical Results** 



NELAC NY 11769 NRPP 101193 AL NRSB ARL0017 EPA Method #402-R-92-004 Liquid Scintillation NRPP Device Code 8088 NRSB Device Code 12193

Laboratory Report For

**Property Tested** 

**AKT Peerless** 

Oakwood

22725 Orchard Lake Road

3565 Oakwood Street

Farmington Hills MI 48336

Ann Arbor MI 48104

Log Number	Device Number	Area Tested	Result (pCi/L)
1561439	2591916	Basement	3.9
1561440	2591917	Basement Duplicate	3.9

Radon test results are below the EPA action level of 4 pCi/L. No further action is required at this time. The EPA suggests that you may want to test again in the future to ensure that radon levels remain below the action level. If the property tested uses water from a private well, you may wish to consider testing for radon in water.

**Comment:** Environmental Monitoring Systems was emailed a copy of this report. A copy of this report was emailed to foxcj@aktpeerless.com.

Distributed By: Environmental Monitoring Systems

Test Performed By: James C. Fox

 Test Began:
 8/23/2013
 9:10 am
 Date Received:
 8/30/2013

 Test Ended:
 8/26/2013
 8:58 am
 Date Analyzed:
 8/31/2013

Test Exposure Duration 71.8 Hours

Date Reported:

9/3/2013

Report Reviewed By: M. Lay Report Approved By: Caroly K. Allen President, AccuStar Labs

Disclaimer:

The uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

This report may only be transferred to a third party in its entirety. Analytical results relate to the samples AS RECEIVED BY THE LABORATORY. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.



**NELAC NY 11769** NRPP 101193 AL NRSB ARL0017

EPA Method #402-R-92-004 Liquid Scintillation NRPP Device Code 8088 NRSB Device Code 12193

Laboratory Report For

**Property Tested** 

**AKT Peerless** 

Oakwood

22725 Orchard Lake Road Farmington Hills MI 48336 3575 Oakwood Street

Ann Arbor MI 48104

Log Number	Device Number	Area Tested	Result (pCi/L)
1560675	2591936	Basement	2.1
1560676	2591937	Field Blank	< 0.4
1560676	2591937	Field Blank	

Radon test results are below the EPA action level of 4 pCi/L. No further action is required at this time. The EPA suggests that you may want to test again in the future to ensure that radon levels remain below the action level. If the property tested uses water from a private well, you may wish to consider testing for radon in water.

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Distributed By: Environmental Monitoring Systems

Test Performed By: James C. Fox

Test Began: 8/19/2013 9:42 am Date Received: 8/30/2013 Test Ended: 8/22/2013 Date Analyzed: 9:08 am 8/31/2013 Test Exposure Duration 71.4 Hours Date Reported: 9/3/2013

Report Approved By: (aurly) K. Alan Carolyn K. Allen President, AccuStar Labs

The uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

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Disclaimer:





NELAC NY 11769 NRPP 101193 AL NRSB ARL0017 EPA Method #402-R-92-004 Liquid Scintillation NRPP Device Code 8088 NRSB Device Code 12193

Laboratory Report For

**Property Tested** 

**AKT Peerless** 

Oakwood

22725 Orchard Lake Road Farmington Hills MI 48336 3585 Oakwood Street Ann Arbor MI 48104

Log Number Device Number

**Area Tested** 

Result (pCi/L)

1561461

2591940

Basement

4.2

Radon test results are above the EPA action level of 4 pCi/L. The EPA recommends that action be taken to reduce radon levels if the result is 4 pCi/L or higher in a livable area. If the property tested uses water from a private well, you may wish to consider testing for radon in water.

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Distributed By: Environmental Monitoring Systems

 Test Began:
 8/19/2013
 9:35 am
 Date Received:
 8/30/2013

 Test Ended:
 8/22/2013
 9:00 am
 Date Analyzed:
 8/31/2013

 Test Exposure Duration 71.4 Hours
 Date Reported:
 9/3/2013

Report Reviewed By: M. Lhay

Report Approved By: (aurly) K. Allen

Carolyn K. Allen President, AccuStar Labs

Disclaimer:

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