

**From:** [James Hudson](#)  
**To:** [Linda Schactler](#); [Shane Scott](#)  
**Cc:** [Kevin Dewitt](#); [Staci Sleigh-Layman](#); [Richard DeShields](#); [Kremiere Jackson](#); [Joseph Han](#)  
**Subject:** RE: Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus  
**Date:** Friday, September 08, 2017 8:27:33 AM  
**Attachments:** [image001.png](#)

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Hello Linda,

Here are the other numbers that you've requested from me (in blue). Please keep in mind that the original numbers that I sent to you below (in yellow) are also reported with the State AIQ report (by clicking on the individual colored dot). The number that I reported is for particulates of size 2.5 (those particles that can get deep into the lungs) and VOCs (what people "smell" and what irritant the eyes).

Jim

Ruby Street AQI (Ellensburg Library)  $172 \mu\text{g}/\text{m}^3$  for PM2.5 (particulate) last reported download at 2:00 p.m.  $270$

Barge: outside air (control) for PM2.5 at 1:00 p.m. was; N:  $156 \mu\text{g}/\text{m}^3$   $274$ ; W:  $139 \mu\text{g}/\text{m}^3$   $232$ ; S:  $167 \mu\text{g}/\text{m}^3$   $290$ ; E:  $89.5 \mu\text{g}/\text{m}^3$   $132$ ; Avg.:  $138 \mu\text{g}/\text{m}^3$   $233$

Barge indoor 1<sup>st</sup> floor: average  $1.3 \mu\text{g}/\text{m}^3$   $17$

Barge indoor 2<sup>nd</sup> floor: average  $1.7 \mu\text{g}/\text{m}^3$   $19$

Barge indoor 3<sup>rd</sup> floor: average  $1.1 \mu\text{g}/\text{m}^3$   $13$

Barge indoor 4<sup>th</sup> floor; average  $0.5 \mu\text{g}/\text{m}^3$   $7$

Results: Avg.  $1.2 \mu\text{g}/\text{m}^3$   $14$

Michaelsen/Randall Halls: outside air (control) for PM2.5 at 2:30 p.m. was; N:  $162 \mu\text{g}/\text{m}^3$   $289$ ; W:  $142 \mu\text{g}/\text{m}^3$   $271$ ; S:  $170 \mu\text{g}/\text{m}^3$   $243$ ; E:  $142 \mu\text{g}/\text{m}^3$   $292$ ; Avg.:  $154 \mu\text{g}/\text{m}^3$   $274$

Michaelsen indoor 1<sup>st</sup> floor: average  $0.7 \mu\text{g}/\text{m}^3$   $9$

Michaelsen indoor 2<sup>nd</sup> floor: average  $0.5 \mu\text{g}/\text{m}^3$   $7$

Randall indoor 1<sup>st</sup> floor: average  $1.6 \mu\text{g}/\text{m}^3$   $18$

Randall indoor 2<sup>nd</sup> floor; average  $1.2 \mu\text{g}/\text{m}^3$   $14$

Results: Avg.  $1.0 \mu\text{g}/\text{m}^3$   $12$

Sparks Residence Hall: outside air (control) for PM2.5 at 3:30 p.m. was; N:  $171 \mu\text{g}/\text{m}^3$   $297$ ; W:  $159 \mu\text{g}/\text{m}^3$   $274$ ; S:  $169 \mu\text{g}/\text{m}^3$   $293$ ; E:  $151 \mu\text{g}/\text{m}^3$   $260$ ; Avg.:  $163 \mu\text{g}/\text{m}^3$   $281$

Sparks indoor 1<sup>st</sup> floor west: average  $0.7 \mu\text{g}/\text{m}^3$   $16$

Sparks indoor 1<sup>st</sup> floor east: average  $0.9 \mu\text{g}/\text{m}^3$   $21$

Sparks indoor 2<sup>nd</sup> floor west: average  $1.2 \mu\text{g}/\text{m}^3$   $26$

Sparks indoor 2<sup>nd</sup> floor east: average  $0.9 \mu\text{g}/\text{m}^3$   $20$

Results:  $0.9 \mu\text{g}/\text{m}^3$   $21$



CENTRAL WASHINGTON UNIVERSITY

**James A. Hudson**

Industrial Hygienist IV  
Office of Environmental Health & Safety  
Central Washington University  
400 E. University Way,  
Ellensburg, WA 98926-7440  
Email: James.Hudson@cwu.edu  
Office: 509-963-2338  
Fax: 509-963-2238

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**From:** Linda Schactler

**Sent:** Thursday, September 07, 2017 7:57 PM

**To:** Shane Scott <Shane.Scott@cwu.edu>; Linda Schactler <Linda.Schactler@cwu.edu>

**Cc:** James Hudson <JHudson@cwu.edu>; Kevin Dewitt <kevin.dewitt@cwu.edu>; Staci Sleight-Layman <Staci.Sleight-Layman@cwu.edu>; Richard DeShields <Richard.DeShields@cwu.edu>; Krechiere Jackson <Krechiere.Jackson@cwu.edu>; Joseph Han <Joseph.Han@cwu.edu>

**Subject:** Re: Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus

Hi Jim,

Thanks again for This analysiswe. The University is using the state AQI chart. Your measurements will be more meaningful if we can place them within the measurement scale the state uses.

Also since comparisons to outside air will vary in value according to the degree of pollution outside, the AQI scale again will be more meaningful.

Can you please resend your results using that scale?

Thanks so much!

LS

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Shane Scott <[Shane.Scott@cwu.edu](mailto:Shane.Scott@cwu.edu)>

Date: 9/7/17 6:03 PM (GMT-08:00)

To: Linda Schactler <[Linda.Schactler@cwu.edu](mailto:Linda.Schactler@cwu.edu)>

Cc: James Hudson <[JHudson@cwu.edu](mailto:JHudson@cwu.edu)>, Kevin Dewitt <[kevin.dewitt@cwu.edu](mailto:kevin.dewitt@cwu.edu)>, Staci Sleigh-Layman <[Staci.Sleigh-Layman@cwu.edu](mailto:Staci.Sleigh-Layman@cwu.edu)>, Richard DeShields <[Richard.DeShields@cwu.edu](mailto:Richard.DeShields@cwu.edu)>, Kremiere Jackson <[Kremiere.Jackson@cwu.edu](mailto:Kremiere.Jackson@cwu.edu)>, Joseph Han <[Joseph.Han@cwu.edu](mailto:Joseph.Han@cwu.edu)>

Subject: Re: Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus

Great work Jim !

s.

On Sep 7, 2017, at 5:59 PM, Linda Schactler <[Linda.Schactler@cwu.edu](mailto:Linda.Schactler@cwu.edu)> wrote:

Thanks very much!

Linda Schactler, Chief of Staff  
Office of the President  
400 E. University Way  
Ellensburg, WA  
(O) 509-963-2111; (M) 509-607-4103  
[schactler@cwu.edu](mailto:schactler@cwu.edu)

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**From:** James Hudson

**Sent:** Thursday, September 7, 2017 5:15 PM

**To:** Linda Schactler

**Cc:** Kevin Dewitt; Shane Scott; Staci Sleigh-Layman; Richard DeShields; Kremiere Jackson; Joseph Han

**Subject:** RE: Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus

Hello Linda,

I will have a more formal report to you tomorrow morning but the preliminary data is as follows:

Ruby Street AQI (Ellensburg Library) **172  $\mu\text{g}/\text{m}^3$**  for PM2.5 (particulate) last reported download at 2:00 p.m.

Barge: outside air (control) for PM2.5 at 1:00 p.m. was; N: 156  $\mu\text{g}/\text{m}^3$ ; W: 139  
3 3 3 3 **3**

$\mu\text{g}/\text{m}^3$  ; S:  $167 \mu\text{g}/\text{m}^3$  ; E:  $89.5 \mu\text{g}/\text{m}^3$   $\mu\text{g}/\text{m}^3$  **Avg.:  $138 \mu\text{g}/\text{m}^3$**

Barge indoor 1<sup>st</sup> floor: average  $1.3 \mu\text{g}/\text{m}^3$

Barge indoor 2<sup>nd</sup> floor: average  $1.7 \mu\text{g}/\text{m}^3$

Barge indoor 3<sup>rd</sup> floor: average  $1.1 \mu\text{g}/\text{m}^3$

Barge indoor 4<sup>th</sup> floor; average  $0.5 \mu\text{g}/\text{m}^3$

Results: Avg.  $1.2 \mu\text{g}/\text{m}^3$  ; over 100 times better indoor air quality than outside

Michaelsen/Randall Halls: outside air (control) for PM<sub>2.5</sub> at 2:30 p.m. was; N:  $162 \mu\text{g}/\text{m}^3$  ; W:  $142 \mu\text{g}/\text{m}^3$ ; S:  $170 \mu\text{g}/\text{m}^3$ ; E:  $142 \mu\text{g}/\text{m}^3$   $\mu\text{g}/\text{m}^3$  **Avg.:  $154 \mu\text{g}/\text{m}^3$**

Michaelsen indoor 1<sup>st</sup> floor: average  $0.7 \mu\text{g}/\text{m}^3$

Michaelsen indoor 2<sup>nd</sup> floor: average  $0.5 \mu\text{g}/\text{m}^3$

Randall indoor 1<sup>st</sup> floor: average  $1.6 \mu\text{g}/\text{m}^3$

Randall indoor 2<sup>nd</sup> floor; average  $1.2 \mu\text{g}/\text{m}^3$

Results: Avg.  $1.0 \mu\text{g}/\text{m}^3$ ; over 100 times better indoor air quality than outside

Sparks Residence Hall: outside air (control) for PM<sub>2.5</sub> at 3:30 p.m. was; N:  $171 \mu\text{g}/\text{m}^3$  ; W:  $159 \mu\text{g}/\text{m}^3$ ; S:  $169 \mu\text{g}/\text{m}^3$ ; E:  $151 \mu\text{g}/\text{m}^3$   $\mu\text{g}/\text{m}^3$  **Avg.:  $163 \mu\text{g}/\text{m}^3$**

Sparks indoor 1<sup>st</sup> floor west: average  $0.7 \mu\text{g}/\text{m}^3$

Sparks indoor 1<sup>st</sup> floor east: average  $0.9 \mu\text{g}/\text{m}^3$

Sparks indoor 2<sup>nd</sup> floor west: average  $1.2 \mu\text{g}/\text{m}^3$

Sparks indoor 2<sup>nd</sup> floor east: average  $0.9 \mu\text{g}/\text{m}^3$

Results:  $0.9 \mu\text{g}/\text{m}^3$ ; over 100 times better indoor air quality than outside

Readings taken with TSI DustTrak DRX 8533 Dust/Aerosol monitor Serial #: 03011120; calibrated Mar 2017

In summary, all of the indoor readings are well over 100 times better indoor air quality than outside. Readings from a similar report back in February 2017 had indoor air readings of  $1.4 \mu\text{g}/\text{m}^3$

I hope this preliminary report is satisfactory.

Regards,

Jim Hudson



**CENTRAL WASHINGTON UNIVERSITY**

**James A. Hudson**

Industrial Hygienist IV

Office of Environmental Health & Safety

Central Washington University

400 E. University Way,  
Ellensburg, WA 98926-7440  
Email: [James.Hudson@cwu.edu](mailto:James.Hudson@cwu.edu)  
Office: 509-963-2338  
Fax: 509-963-2238

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**From:** Linda Schactler  
**Sent:** Thursday, September 07, 2017 12:44 PM  
**To:** James Hudson <[JHudson@cwu.edu](mailto:JHudson@cwu.edu)>  
**Cc:** Kevin Dewitt <[kevin.dewitt@cwu.edu](mailto:kevin.dewitt@cwu.edu)>; Shane Scott <[Shane.Scott@cwu.edu](mailto:Shane.Scott@cwu.edu)>; Staci Sleigh-Layman <[Staci.Sleigh-Layman@cwu.edu](mailto:Staci.Sleigh-Layman@cwu.edu)>; Richard DeShields <[Richard.DeShields@cwu.edu](mailto:Richard.DeShields@cwu.edu)>; Kremiere Jackson <[Kremiere.Jackson@cwu.edu](mailto:Kremiere.Jackson@cwu.edu)>; Joseph Han <[Joseph.Han@cwu.edu](mailto:Joseph.Han@cwu.edu)>  
**Subject:** RE: Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus  
**Importance:** High

Thanks very much!

Will I be able to have the AQI readings before the end of the day?

Linda Schactler, Chief of Staff  
Office of the President  
400 E. University Way  
Ellensburg, WA 98926  
[linda.schactler@cwu.edu](mailto:linda.schactler@cwu.edu)  
(O) 509-963-1384, (M) 509-607-4103

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**From:** James Hudson  
**Sent:** Thursday, September 07, 2017 12:42 PM  
**To:** Linda Schactler <[Linda.Schactler@cwu.edu](mailto:Linda.Schactler@cwu.edu)>  
**Cc:** Kevin Dewitt <[kevin.dewitt@cwu.edu](mailto:kevin.dewitt@cwu.edu)>; Shane Scott <[Shane.Scott@cwu.edu](mailto:Shane.Scott@cwu.edu)>; Staci Sleigh-Layman <[Staci.Sleigh-Layman@cwu.edu](mailto:Staci.Sleigh-Layman@cwu.edu)>; Richard DeShields <[Richard.DeShields@cwu.edu](mailto:Richard.DeShields@cwu.edu)>; Kremiere Jackson <[Kremiere.Jackson@cwu.edu](mailto:Kremiere.Jackson@cwu.edu)>; Joseph Han <[Joseph.Han@cwu.edu](mailto:Joseph.Han@cwu.edu)>  
**Subject:** Indoor Air Quality Monitoring of Academic & Business/Administrative Buildings on Campus

Hello Linda,

Kevin has asked that I respond to you and others regarding the dust/particulate monitoring for the campus buildings. EH&S has been responding to various indoor air quality issues/complaints since yesterday. EH&S will perform the sampling of the buildings that you and others have designated. I have a sampling protocol and I'm working directly with Kevin and Shane to accomplish the task.

Regards,

Jim



CENTRAL WASHINGTON UNIVERSITY

**James A. Hudson**

Industrial Hygienist IV  
Office of Environmental Health & Safety  
Central Washington University  
400 E. University Way,  
Ellensburg, WA 98926-7440  
Email: [James.Hudson@cwu.edu](mailto:James.Hudson@cwu.edu)  
Office: 509-963-2338  
Fax: 509-963-2238