



Manufacturer: Alternate Heating Systems Model: SE210  
 Job #G104711998 Run 2  
 Reviewer: \_\_\_\_\_

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 Date 9-22-21  
 Tech Karl Stier  
KS

### Pre/Post Checks

Moisture Meter Calibration Check:

Time: <u>6:00 A</u>	X: <input checked="" type="checkbox"/>	Y: <input checked="" type="checkbox"/>	12: <input checked="" type="checkbox"/>	22: <input checked="" type="checkbox"/>
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#### Pre-Test

#### Post-Test

#### Facility Conditions:

Air Velocity

<u>0</u> fpm	<u>0</u> fpm
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Smoke Capture Check

#### Wood Heater Conditions:

Date Wood Heater Stack Cleaned

<u>9-20-21</u>
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Date Dilution Tunnel Cleaned

<u>9-20-21</u>
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Induced Draft Check

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Tunnel Velocity

<u>0.147</u>	<u>0.123</u>
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#### Pitot Leak Check:

Side A

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Side B

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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#### Temperature System:

Ambient (65° - 90°F)

<u>81.48</u> °F
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#### Proportional Checks:

CO Analyzer Drift Check

<input checked="" type="checkbox"/>
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CO<sub>2</sub> Analyzer Check

<input checked="" type="checkbox"/>
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O<sub>2</sub> Analyzer Check

<input checked="" type="checkbox"/>
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Thermocouple check

<input checked="" type="checkbox"/>
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#### Sampling Train ID Numbers:

Probe

Train 1	Train 2	Train 3
<u>4</u>	<u>5</u>	<u>6</u>
<u>7</u>	<u>9</u>	<u>11</u>
<u>8</u>	<u>10</u>	<u>12</u>

Filter Front

Filter Back

Filter 5G-3 (<90°F)

## Pre-Test Scale Audit

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Scale Type	Audit Weight	Measured Weight
Platform	<u>25.00</u> lbs., Class F	<u>25.00</u> lbs.
Wood	<u>10.00</u> lbs., Class F	<u>10.00</u> lbs.
Analytical	<u>100.000</u> mg, Class S	<u>100.000</u> mg.

### LIMITS OF WEIGHT RANGES

**ANALYTICAL SCALE:** ..... 50%-150% of dry filter weight, ± 0.1 mg  
**PLATFORM SCALE** ..... 20%-80% of ideal test load weight, ± 0.1 lbs. or 1%  
**WOOD SCALE** ..... 20%-80% of ideal test load weight, ± 0.1 lbs. or 1%

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## SAMPLING EQUIPMENT CHECK OUT

### Leakage Checks Tunnel Samplers

	SAMPLE 1		SAMPLE 2		SAMPLE 3	
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-test	Post Test
Unplugged Flow Rate = .25cfm						
Vacuum (inches Hg.)	10"	10	10"	10	10"	10
Final 1 minute DGM (ft <sup>3</sup> )	0	0	0	0	0	0
Initial 1 minute DGM (ft <sup>3</sup> )	0	0	0	0	0	0
Change (C) (ft <sup>3</sup> )	0	0	0	0	0	0
Allowable leakage .04 x Sample rate or .02cfm	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
Check OK	✓	✓	✓	✓	✓	✓

### Leakage Checks Flue Gas Sampler

	Pre Test	Post Test
Plugged Probe		
Vacuum (inches Hg.)	10"	10"
Rotometer Reading (mm)	0	0
Flow Rate (CFM)	0	0
Allowable (.04 x Sample Rate)	.04	.04
Check OK	✓	✓

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## CONTINUOUS ANALYZERS

Pre-Test (Adjust and Record)

	ZERO		SPAN		CAL. (Record Only)	
CO <sub>2</sub>	<u>0</u>	<u>0</u>	<u>24.94</u>	<u>24.92</u>	<u>12.00</u>	<u>11.99</u>
CO	<u>0</u>	<u>0</u>	<u>7.75</u>	<u>7.748</u>	<u>3.97</u>	<u>4.00</u>
O <sub>2</sub>	<u>0</u>	<u>0</u>	<u>20.90</u>	<u>20.89</u>	<u>9.98</u>	<u>10.01</u>
	Actual	Should Be	Actual	Should Be	Actual	Should Be

Post Test (Record Only)

	Zero	Span	Cal.	Zero Drift	Span Drift	Cal. Drift	OK?	Not OK*
CO <sub>2</sub>	<u>0,01</u>	<u>24,72</u>	<u>11,91</u>	<u>0,01</u>	<u>0,20</u>	<u>0,09</u>	<u>✓</u>	
CO	<u>0,02</u>	<u>7,68</u>	<u>3,94</u>	<u>0,02</u>	<u>0,07</u>	<u>0,03</u>	<u>✓</u>	
O <sub>2</sub>	<u>0,05</u>	<u>20,60</u>	<u>9,87</u>	<u>0,05</u>	<u>0,29</u>	<u>0,11</u>	<u>✓</u>	

\* Greater than ± 5% of the range used.

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## TEST DATA LOG

### RAW DRY GAS METER READINGS

	System 1	System 2	System 3
Final (ft <sup>3</sup> )	119.242	119.298	8.485
Initial (ft <sup>3</sup> )	0	0	0

### AMBIENT CONDITIONS

	Start	End
Barometer. (inches Hg)	29.28	29.17
Ambient (°F)	85.0	87.7
Humidity (%)	33.4	29.2

