

Manufacturer: Dwcetra
Job # G100463637

Model: 2000
Run Two

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Pre/Post Checks

Moisture Meter Calibration Check:

Time: <u>8:30 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.....
Smoke Capture Check.....

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

Wood Heater Conditions:

Date Wood Heater Stack Cleaned.....
Date Dilution Tunnel Cleaned.....
Induced Draft Check.....
Tunnel Velocity.....

<u>9-1-11</u>	
<u>—</u>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>0.245</u>	<u>0.234</u>

Pitot Leak Check:

Side A.....
Side B.....

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

Temperature System:

Ambient (65°- 90°F).....

<u>79</u>	°F
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Proportional Checks:

CO Analyzer Drift Check.....
CO₂ Analyzer Check.....
O₂ Analyzer Check.....
Thermocouple check.....

Sampling Train ID Numbers:

Train 1

Train 2

Probe.....
Filter Front.....
Filter Back.....
Filter Thermocouple.....
Filter 5G-3 (<90°F).....

<u>9</u>	<u>10</u>
<u>77</u>	<u>79</u>
<u>78</u>	<u>80</u>
<u>19</u>	<u>22</u>

Thermocouple Identification Number

Flue..... 1
Dilution Tunnel Wet Bulb..... 4
Unit Right Side..... 7
Catalys/Combustion Chamber..... 10

Room..... 2
Unit Top..... 5
Unit Left Side..... 8

Dilution Tunnel Dry Bulb..... 3
Unit Back..... 6
Unit Bottom..... 9

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Pre-Test Scale Audit

Scale Type	Audit Weight		Measured Weight	
Platform	<u>—</u> lbs., Class F		<u>—</u> lbs.	
Wood	<u>25</u>	lbs., Class F	<u>25</u>	lbs.
Analytical	<u>100</u>	mg, Class S	<u>100</u>	mg.

LIMITS OF WEIGHT RANGES

ANALYTICAL SCALE:..... 50%-150% of dry filter weight, ± 0.1 mg

PLATFORM SCALE20%-80% of ideal test load weight, ± 0.1 lbs. or 1%

WOOD SCALE20%-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	
Unplugged Flow Rate = .25cfm	Pre-Test	Post-Test	Pre-Test	Post-Test
Vacuum (inches Hg.)	10"	10"	10"	10"
Final 1 minute DGM (ft ³)	0	754	0	753
Initial 1 minute DGM (ft ³)	0	754	0	753
Change (C) (ft ³)	-	-	-	-
Allowable leakage .04 x Sample rate or .02cfm	0.0100	0.0100	0.0100	0.0100
Check OK	✓	✓	✓	✓

Leakage Checks Flue Gas Sampler

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

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TEST DATA LOG

RAW DRY GAS METER READINGS

	System 1	System 2
Final (ft ³)	754 L/m	753 L/m
Initial (ft ³)	0	0

AMBIENT CONDITIONS

	Start	End
Barometer. (inches Hg)	30.15	30.17
Dry Bulb (°F)	77	79
Humidity (%)	29	32

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FUEL DATA

FUEL DESCRIPTION:

Kindling weight: _____ lbs. Consisting of: Scrap and paper
Pre-test load weight: _____ lbs. Consisting of: 2X4X _____ inches
Pre-test moisture content: Uncorrected: _____ % Corrected Dry: _____ % Wet: _____ %

Test Air Control Settings: _____ Time: _____
Test Unit Fan Settings: _____ Time: _____

PRE-TEST LOAD

TEST LOAD

2029 Gallons
1869

Test Load Weight:

Lower Limit	Ideal	Upper Limit
Lbs.	lbs.	Lbs.

Fire Box Volume:

14.15 Ft.³

Ideal Length:

Inches

Load Volume:

Ft.³

Loading Density:

lbs/ft³

Spacer weight

Lbs

Load Density:

lbs/ft³

1.95 Kindling

Piece Size

Weight

Meter Moisture Content (% dry)*

5 x 5 x 24 in.	11.81 lbs.	20.6 %	22.2 %	19.2 %
3 x 6 x 24 in.	9.25 lbs.	26.5 %	25.9 %	25.2 %
5 x 5 x 23 in.	9.41 lbs.	19.0 %	21.5 %	20.8 %
5 x 4 x 24 in.	12.00 lbs.	26.7 %	26.7 %	27.5 %
3 x 6 x 25 in.	7.16 lbs.	23.8 %	24.0 %	20.8 %
7 x 4 x 24 in.	15.97 lbs.	27.6 %	26.7 %	24.1 %
7 x 3 x 24 in.	9.66 lbs.	23.1 %	25.7 %	25.3 %
5 x 5 x 24 in.	11.91 lbs.	20.1 %	20.9 %	20.2 %
5 x 5 x 24 in.	10.44 lbs.	25.3 %	25.9 %	22.9 %
6 x 4 x 23 in.	8.05 lbs.	21.3 %	22.0 %	21.2 %
4 x 3 x 24 in.	6.59 lbs.	19.6 %	22.3 %	20.7 %
4 x 6 x 23 in.	7.10 lbs.	18.0 %	18.6 %	20.0 %
6 x 5 x 23 in.	13.25 lbs.	23.7 %	27.0 %	22.0 %
6 x 4 x 24 in.	10.44 lbs.	19.9 %	21.9 %	22.5 %
5 x 5 x 23 in.	10.33 lbs.	20.0 %	22.0 %	21.8 %
x x in.	lbs.	%	%	%
x x in.	lbs.	%	%	%
x x in.	lbs.	%	%	%

TEST LOAD WEIGHT: 153.37 lbs.

DRY WEIGHT: _____ kg.

AVERAGE MOISTURE CONTENT:

(DRY) _____ % CORRECTED TO TWO PIN: (DRY) _____ % (WET) _____ %

COAL BED RANGE:

_____ lbs. to _____ lbs. (10% to 15% of test load)
_____ lbs. to _____ lbs. (20% to 25% of test load)

TEST CHARGE:

Time loaded: _____ Coal bed weight: _____ lbs. Coal bed weight = _____ % of test load weight

CHARCOALIZATION:

good | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | poor

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DILUTION TUNNEL PARTICULATE SAMPLER DATA

FILTER TYPE: Gelman 47mm A/E

	SYSTEM 1		SYSTEM 2	
	Probe and Front Half Housing #	Filters + gaskets Numbers	Probe and Front Half Housing #	Filters + gaskets Numbers
Post Test Weight:	91.5386 grams	3.6697 grams	92.0100 grams	3.7067 grams
Pre Test Weight:	91.5380 grams	3.6663 grams	92.0095 grams	3.7055 Grams
Gain:	0.0006 grams	0.0034 grams	0.0005 grams	0.0012 Grams
	a1	b1	a2	b2

Total Gain: a1 + b1 = grams a2 + b2 = grams

		SYSTEM 1			SYSTEM 2			Temp	Humidity
Pre-test Weight Record		Probe & Housing Number	Front Filter + gasket Number	Back Filter + gasket Number	Probe & Housing Number	Front Filter + gasket Number	Back Filter + gasket Number		
Date	Time	9	77	78	10	79	80	°F	%
9-29	8:15	91.5382	1.8287	1.8417	92.0097	1.8580	1.8518	67.5	35
9-30	7:59	91.5380	1.8270	1.8400	92.0095	1.8562	1.8500	67.5	35
10-1	11:05	91.5380	1.8266	1.8397	92.0095	1.8559	1.8496	66.0	34
Total		3.4663			Total	3.7055			

		SYSTEM 1		SYSTEM 2		Temp	Humidity
Post-test Weight Record		Probe & Housing Number	Combined Filter + gasket Weight Number	Probe & Housing Number	Combined Filter + gasket Weight Number		
Date	Time	9	77 + 78	10	79 + 80	°F	%
10-7	10:30	91.5395	3.6711	92.0107	3.7079	73.8	42
10-11	7:45	91.5389	3.6709	92.0102	3.7072	71.2	40
10-12	7:42	91.5386	3.6705	92.0100	3.7072	72.3	48
10-17	7:30	91.5386	3.6697	92.0100	3.7067		
10-21	8:30	91.5386	3.6697	92.0100	3.7067	68	25