

Manufacturer: Dwcetra
Job # G100463637

Model: 2000
Run Three

Page 1 of 6
Date 10-3-11
Tech KS

Pre/Post Checks

Moisture Meter Calibration Check:

Time: <u>8:20 A</u>	X: <input checked="" type="checkbox"/>	Y: <input checked="" type="checkbox"/>	12: <input checked="" type="checkbox"/>	22: <input checked="" type="checkbox"/>
---------------------	--	--	---	---

Pre-Test

Post-Test

Facility Conditions:

Air Velocity.....

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

Smoke Capture Check.....

<u>/</u>	<u>/</u>
----------	----------

Wood Heater Conditions:

Date Wood Heater Stack Cleaned.....

<u>9-1-11</u>

Date Dilution Tunnel Cleaned.....

<u>/</u>

Induced Draft Check.....

<u>/</u>	<u>/</u>
----------	----------

Tunnel Velocity.....

<u>/0.225</u>	<u>0.223</u>
---------------	--------------

Pitot Leak Check:

Side A.....

<u>/</u>	<u>/</u>
----------	----------

Side B.....

<u>/</u>	<u>/</u>
----------	----------

Temperature System:

Ambient (65°- 90°F).....

<u>78</u> °F

Proportional Checks:

CO Analyzer Drift Check.....

CO₂ Analyzer Check.....

O₂ Analyzer Check.....

Thermocouple check.....

<u>N/A</u>
<u>N/A</u>
<u>N/A</u>
<u>N/A</u>

Sampling Train ID Numbers:

Train 1

Train 2

Probe.....

<u>A</u>	<u>B</u>
----------	----------

Filter Front.....

<u>81</u>	<u>83</u>
-----------	-----------

Filter Back.....

<u>82</u>	<u>84</u>
-----------	-----------

Filter Thermocouple.....

<u>19</u>	<u>22</u>
-----------	-----------

Filter 5G-3 (<90°F).....

--	--

Thermocouple Identification Number

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

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

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

Manufacturer: Dwcetra
Job # G100463637

Model: 2000
Run Three

Page 2 of 6
Date 10-3-11
Tech RS

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 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%

Manufacturer: Dwtetra
Job # G100463637

Model: 2000
Run three

Page 3 of 6
Date 10-3-11
Tech KS

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	802	0	800
Initial 1 minute DGM (ft ³)	0	802	0	800
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		

Manufacturer: Dwtetra
Job # G100463637

Model: 2000
Run Kree

Page 4 of 6
Date 10-3-11
Tech KS

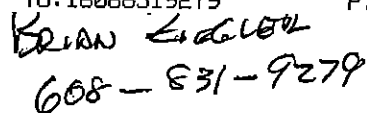
TEST DATA LOG

RAW DRY GAS METER READINGS

	System 1	System 2
Final (ft ³)	802	800
Initial (ft ³)	0	0

AMBIENT CONDITIONS

	Start	End
Barometer. (inches Hg)	30.09	30.05
Dry Bulb (°F)	73	82
Humidity (%)	41%	35%



Page 5 of 6
Date 10-3-11
Tech K3

PRE-TEST LOAD

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

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

1.87 Kindling

Lbs.	lbs.	Lbs.
------	------	------

Ft.³

Ft. 3

Lbs

Inches

lbs/ft³

lbs/ft³

Meter Moisture Content (% dry)*

7.5 x 3.5 x 23.5 in.	9.70	lbs.	22.2	%	24.2	%	24.2	%
7.5 x 5 x 23 in	14.44	lbs.	22.8	%	22.5	%	21.1	%
6.5 x 5 x 23 in	9.05	lbs.	22.1	%	24.2	%	24.3	%
5 x 6 x 24.5 in	13.61	lbs.	25.6	%	24.2	%	24.1	%
x x in	Removed	lbs.	20.6	%	25.2	%	25.5	%
4 x 5 x 23.5 in	14.44	lbs.	22.4	%	25.1	%	24.0	%
4 x 3.5 x 23 in	7.94	lbs.	21.0	%	19.4	%	19.8	%
6 x 5 x 23.5 in	11.60	lbs.	20.0	%	21.0	%	19.5	%
6 x 5 x 24 in	13.79	lbs.	22.5	%	24.3	%	22.6	%
4 x 5 x 23.5 in	10.93	lbs.	24.2	%	26.4	%	26.9	%
5 x 5 x 24 in	12.23	lbs.	27.1	%	27.8	%	27.3	%
4 x 6 x 24 in	11.46	lbs.	26.2	%	26.1	%	25.6	%
5 x 6 x 23 in	13.15	lbs.	20.3	%	21.9	%	20.5	%
5 x 5 x 23 in	10.30	lbs.	20.1	%	23.2	%	21.8	%
5 x 5 x 23 in	7.03	lbs.	21.3	%	20.9	%	19.6	%
x x in		lbs.		%		%		%
x x in		lbs.		%		%		%
x x in		lbs.		%		%		%

DRY WEIGHT:_____kg.

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

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

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

[illegible]

Manufacturer: Dwtetra
Job # G100463637

Model: 2000
Run three

Page 6 of 6
Date 10-5-11
Tech KS

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:	92.4378 grams	6.5416 grams	92.3387 grams	6.5768 grams
Pre Test Weight:	92.4377 grams	6.5370 grams	92.3378 grams	6.5710 Grams
Gain:	grams	grams	grams	Grams
	a1	b1	a2	b2

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

Pre-test Weight Record		SYSTEM 1			SYSTEM 2			Temp	Humidity
		Probe & Housing Number	Front Filter + gasket Number	Back Filter + gasket Number	Probe & Housing Number	Front Filter + gasket Number	Back Filter + gasket Number		
Date	Time	A	81	82	B	83	84	°F	%
9-29	8:30	92.4382	3.3078	3.2305	92.3382	3.3049	3.2676		
9-30	8:02	92.4377	3.3072	3.2300	92.3378	3.3045	3.2671	67.6	35
10-1	11:10	92.4377	3.3072	3.2298	92.3378	3.3042	3.2668	66.4	34
Total		6.537			Total	6.571			

Post-test Weight Record		SYSTEM 1		SYSTEM 2		Temp	Humidity
		Probe & Housing Number	Combined Filter + gasket Weight Number	Probe & Housing Number	Combined Filter + gasket Weight Number		
Date	Time	A	81 + 82	B	83 + 84	°F	%
10-7	10:35	92.4387	6.5424	92.3399	6.5773	73.8	42
10-11	7:50	92.4382	6.5423	92.3392	6.5773	71.4	40
10-12		92.4378	6.5423	92.3387	6.5773		
10-17	7:35	92.4378	6.5416	92.3387	6.5768		
10-21	8:30	92.4378	6.5416	92.3387	6.5768	67.8	25