

SOURCE TEST METHOD DETAILED VALIDATION CHECKLIST

Test Method: EPA 306
Substance: Chromium

Report ID Number: _____

Reviewer: _____

Review Date: _____

Method Description and Applicability

This method applies to the determination of chromium (Cr) in emissions from decorative and hard chrome electroplating facilities and anodizing operations. A sample is extracted isokinetically from the source and collected in an alkaline solution. Samples with high Cr concentrations may be analyzed using inductively coupled plasma emission spectrometry (ICP). If improved detection limits are required, a portion of the alkaline impinger solution is digested with nitric acid and analyzed by graphite furnace atomic absorption spectroscopy (GFAAS). If it desirable to determine hexavalent chromium (Cr⁺⁶) emissions, the samples may be analyzed using an ion chromatograph equipped with a post-column reactor (IC/PCR).

Quality Assurance/Quality Control Checks

Before preceding with the validation checklist, the method allows alternative procedures and analysis to be performed. The following questions will indicate which alternatives the contractor chose in order to perform the source test (circle correct answers).

- 1) Was hexavalent chromium quantified with this method? Yes No (if no, disregard all questions involving Cr⁺⁶)
- 2) Was the Cr⁺⁶ sample recovery option used? Yes No (if no, disregard questions 3 and 4)
- 3) Was the pH of the absorbing solution > 8.5 for NaOH
or > 8.0 for NaHCO₃? Yes No

4) Were samples shipped and stored at 4°C? Yes No

5) How was the total chromium analyzed? ICP GFAAS

Please complete the detailed checklist provided in the attached Table. If the statements are true, please circle "a"s or the corresponding run numbers; and if they are not reported, circle "b"s.

Other Comments

Device ID:

SAMPLE LOCATION				
<i>* Swirl Check</i>				
1.) Not conducted?	sc1a	sc1b	M	
2.) Average absolute value of angles > 10%?	sc2a	sc2b	M	
<i>* Stack Size</i>				
1.) Enter stack diameter (inches).				
2.) Stack diameter < 12 inch ? or	st2a	st2b	M	
3.) Area <113 inch squared?	st3a	st3b	M	
<i>* Number of Sample Points</i>				
1.) Enter total number of points.				
2.) Method 1 not used?	ns2a	ns2b	M	
SAMPLING EQUIPMENT				
<i>* Nozzle Size Check</i>				
1.) Not conducted prior to test?	nz1a	nz1b	M	
2.) Variation in diameter > 0.004 inch?	nz2a	nz2b	M	
<i>* Field Gas Dry Meter</i>				
1.) Not checked pre- and post-test?	gm1a	gm1b	M	
2.) Pre- and post-test Y not within (+/-) 5%?	gm2a	gm2b	M	
<i>* Pitot Tube</i>				
1.) Semi-annual calibration sheet not included?	pt1a	pt1b	M	
SAMPLING PROCEDURES				
<i>* Leak Check</i>				
1.) Not conducted?	lc1a	lc1b	M	
2.) Values not reported?	lc2a		M	
3.) Pretest >0.02 cfm or 4% of average?	lc3a	lc3a	lc3a	R
4.) Post-test >0.02 cfm or 4% of average?	lc4a	lc4a	lc4a	R
<i>* Isokinetic Variation</i>				
1.) Sample not taken isokinetically?	is1a	is1b	M	
2.) Isokinetic variation not reported?	is2a		M	
3.) Isokinetic <90 or >110%?	is3a	is3a	is3a	R
<i>* Probe Proof</i>				
1.) Not conducted per prob?	pp1a	pp1b	M	
2.) Value not reported ?	pp2a		M	
3.) Total chrome > DL ?	pp3a	pp3a	pp3a	S
<i>* Reagent Blank</i>				
1.) Not conducted one per sample batch?	rb1a	rb1b	M	
2.) Not used to correct sample?	rb2a	rb2b	M	
ANALYSIS (Hexavalent Chromium)				
<i>* Matrix Spike</i>				
1.) Not conducted per test?	ms1a	ms1b	M	
2.) Percent recovery not reported?	ms2a		M	
3.) Percent recovery > 10%?				
Hexavalent Chromium	ms3a	ms3a	ms3a	S
ANALYSIS (Total Chromium)				
<i>* Duplicates</i>				
1.) Not conducted for every 10 samples?	du1a	du1b	M	
<i>* Spikes</i>				
1.) Not conducted daily?	ms4a	ms4b	M	

M-Method

a-True

R-Run

b-Not reported

S-Substance

CALCULATION CHECK FOR EPA METHOD 306

Device ID:

DATA ENTRY-SAMPLING	SYMBOL	UNITS	DATA
RUN NUMBER	-	-	
ROUND STACK, DIAMETER	ds	inches	
RECTANGULAR STACK, LENGTH	L	inches	
WIDTH	W	inches	
NOZZLE DIAMETER	dn	inches	
AVERAGE STACK TEMPERATURE	Fs	degrees F	
AVERAGE METER TEMPERATURE	Fm	degrees F	
BAROMETRIC PRESSURE	Pbar	in. Hg	
STACK STATIC PRESSURE	Pg	in. H2O	
AVG. DELTA H	dH	in. H2O	
AVG. RMS VELOCITY HEAD	dP	in. H2O	
PITOT COEFFICIENT	Cp	-	
GAS SAMPLE VOLUME	Vm	cubic ft.	
METER CALIBRATION FACTOR	Y	-	
TOTAL SAMPLING TIME	min	minutes	
STACK GAS OXYGEN CONTENT	Co2,m	%	
STACK GAS CARBON DIOXIDE CONTENT	Cco2,m	%	
TOTAL IMPINGER GAIN (WATER & PARTICULATE)	Ww	grams	
CALCULATED DATA-SAMPLING			
RUN NUMBER	-	-	0
NOZZLE AREA, $A_n = 3.14(dn)^2/4$	An	sq. in.	0.000
STACK AREA, $A_s = 3.14*(ds)^2/576$ (ROUND) $= L * W/144$ (RECTANGULAR)	As	sq. feet	0.000
AVG. STACK TEMPERATURE, $T_s = F_s + 460$	Ts	degrees R	460.0
AVG. METER TEMPERATURE, $T_m = F_m + 460$	Tm	degrees R	460.0
GAS SAMPLE VOLUME AT STANDARD CONDITIONS, $V_{mStd} = 17.64*Y*(V_m/T_m)*(P_{bar} + dH/13.6)$	VmStd	cubic ft.	0.0
VOLUME OF WATER VAPOR, $V_{wStd} = 0.04707*W_w$	VwStd	cubic ft.	0.0
MOISTURE FRACTION, $B_{ws} = V_{wStd}/(V_{mStd} + V_{wStd})$	Bws	-	#DIV/0!
DRY STACK GAS MOL. WEIGHT, $M_d = 0.32(Co_{2,m}) + 0.44(Cco_{2,m}) + 0.28\{100 - (Co_{2,m}) - (Cco_{2,m})\}$	Md	g/g-mole	28.00
WET STACK GAS MOLECULAR WEIGHT, $M_w = M_d(1 - B_{ws}) + 18.0(B_{ws})$	Mw	g/g-mole	#DIV/0!
ABSOLUTE STACK PRESSURE, $P_s = P_{bar} + P_g/13.6$	Ps	in. Hg	0.00
STACK GAS VELOCITY $v_s = 85.49 C_p \{ \sqrt{dP * T_s} / (P_s * M_w) \}$	vs	ft/s	#DIV/0!
ACTUAL STACK GAS FLOW RATE, $Q = 60*v_s*A_s$	Q	acf/min	#DIV/0!
DRY GAS STACK FLOW RATE (DRY,STP) $Q_{sd} = 17.64*Q*(1 - B_{ws})*(P_s/T_s)$	Qsd	dscf/min	#DIV/0!
ISOKINETIC RATE, $I = 13.61 * T_s * V_{mStd} / [P_s * v_s * A_n * \min * (1 - B_{ws})]$	I	%	#DIV/0!
DATA ENTRY-ANALYTICAL			
TOTAL MASS OF HEXAVALENT CHROMIUM IN SAMPLE TRAIN	Mcr6	ug	
TOTAL MASS OF TOTAL CHROMIUM IN SAMPLE TRAIN	Mcr	ug	
CALCULATED DATA-OVERALL			
CONCENTRATION OF HEXAVALENT CHROMIUM $C_{cr6} = (35.31 * M_{cr6}) / V_{mstd}$	Ccr6	ug/dscm	#DIV/0!
CONCENTRATION OF TOTAL CHROMIUM $C_{cr} = (35.31 * M_{cr}) / V_{mstd}$	Ccr	ug/dscm	#DIV/0!
HEXAVALENT CHROMIUM MASS EMISSION RATE $E_{cr6} = ((Q_{sd} * M_{cr6}) / V_{mstd}) * 1.32e-7$	Ecr6	lb/hr	#DIV/0!
TOTAL CHROMIUM MASS EMISSION RATE $E_{cr} = ((Q_{sd} * M_{cr}) / V_{mstd}) * 1.32e-7$	Ecr	lb/hr	#DIV/0!

ATTACHMENT 4
VALIDATION PARAMETERS SUMMARY TABLES



VALIDATION PARAMETERS SUMMARY FOR CARB 11 (1983)
HYDROGEN SULFIDE

VALIDATION PARAMETERS	Stack ID				
	20210	21610	21710	21910	22810
SAMPLING EQUIPMENT					
Field gas meter pre- and post-test Y not within (+/-) 5%?		V	V		
SAMPLING PROCEDURES					
Sample time < 10 minutes?					2RF
Indication of leaks?					V
Reagent blank not conducted daily?		R	R		R
IMPINGER SOLUTIONS					
Hydrogen peroxide (H ₂ O ₂) not used?		R			R
Cadmium sulfate (CdS) not used?					
ANALYSIS METHOD					
0.01n sodium thiosulfate solution not used for titration?		R	R		
Iodine solution not used?	R	R	R		

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 12 (1986)
INORGANIC LEAD

VALIDATION PARAMETERS	Stack ID									
	21110	21810	22110	25010	25110	28010	28110	28210	45110	45210
SAMPLE LOCATION										
Average absolute value of swirl angles >10%?	V	V		V	V	V	V	V	V	V
Stack diameter < 12 inch?										
Stack area < 113 inch squared?										
Method 1 not used?	R	R		R	R					
SAMPLING EQUIPMENT										
Variation in nozzle diameter > 0.004 inch?	V	V		V	V					
Pre- and post-test meter Y not within (+/-) 5%?	V									
Pitot tube semi-annual calibration sheet included?	P					P	P	P	P	P
SAMPLING PROCEDURES										
Pre-test leak rate > 0.02 cfm or 4% of average?	V									
Post-test leak rate > 0.02 cfm or 4% of average?	V					1RN		3RN		
Isokinetic variation <90 or >110%?										
FIELD REAGENT BLANK										
Not conducted on 2 filters & 0.1N HNO ₃ ?	R		R			R	R	R		
Not used to correct samples?		R			Y				Y	Y
ANALYSIS METHOD										
Atomic absorption spectrometry not used?	R			Y	Y	R	R	R	R	R
Analysis not conducted in triplicate?	R					R	R	R	R	R

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 15 (1983)
HYDROGEN SULFIDE

VALIDATION PARAMETERS	Stack ID															
	22510	25910	26010	26110	26210	29010	43710	43810	44410	50510	50610	50710	50810	50910	51010	64210
SAMPLING PROCEDURES																
Indication of leaks?	V	V	V			V										
Sample line loss not conducted for post-test?	R	R	R		R	R										
Sample not corrected for < 20% loss?																
Sample corrected for > 20% loss?																
ANALYSIS METHOD																
GC/FPD not used?																

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 101A (1986)
MERCURY

VALIDATION PARAMETERS	Stack ID		
	45110	51010	64410
SAMPLE LOCATION			
Average absolute value of swirl angles >10%?	V	V	V
Stack diameter < 12 inch?			
Stack area < 113 inch squared?			
Method 1 not used?		R	
SAMPLING EQUIPMENT			
Variation in nozzle diameter > 0.004 inch?	Y		
Pre- and post-test meter Y not within (+/-) 5%?		N	N
Pitot tube semi-annual calibration sheet included?	P	P	P
SAMPLING PROCEDURES			
Pre-test leak rate > 0.02 cfm or 4% of average?			
Post-test leak rate > 0.02 cfm or 4% of average?	1RN		
Isokinetic variation <90 or >110%?			
Filter temperature not between 106 and 134 degrees?	R		R
Flow rate > 28 liter per minute (1 cfm)?			
FIELD REAGENT BLANK			
Not conducted once per test?			
Not used to correct samples?	Y	Y	Y
ANALYSIS METHOD			
Atomic absorption spectrometry not used?	R		
Combined analysis not used?	Y	Y	Y

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 104 (1986)
BERYLLIUM

VALIDATION PARAMETERS	Stack ID		
	21810	25010	25110
SAMPLE LOCATION			
Average absolute value of swirl angles >10%?	V	V	V
Stack diameter < 12 inch?			
Stack area < 113 inch squared?			
Method 1 not used?	R	R	R
SAMPLING EQUIPMENT			
Variation in nozzle diameter > 0.004 inch?	V	V	V
Pre- and post-test meter Y not within (+/-) 5%?			
Pitot tube semi-annual calibration sheet included?			
SAMPLING PROCEDURES			
Pre-test leak rate > 0.02 cfm or 4% of average?			
Post-test leak rate > 0.02 cfm or 4% of average?			
Isokinetic variation <90 or >110%?			
Flow rate < 0.5 or > 1 cfm?	V	V	V
FIELD REAGENT BLANK			
Not conducted for acetone?	R		R
Not used to correct samples?			Y
ANALYSIS METHOD			
Atomic absorption spectrometry not used?		Y	Y

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 106 (1983)
VINYL CHLORIDE

VALIDATION PARAMETERS	Stack ID			
	20112	23010	23810	24510
ANALYSIS METHOD				
GC/FID not used?	Y	R	Y	R
Analysis date not within 72 hours from collection?				
3-point calibration curve not conducted daily or before and after test?	R	R	R	R
Percent difference > 5%?				

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 410A (1986)

VALIDATION PARAMETERS	Stack ID																		
	16810	17010	17110	20010	20112	20210	20410	21410	21510	22310	22410	22510	22810	23010	23210	23810	24510	25410	25510
TEDLAR BAG CONTAMINATION CHECK																			
Not conducted for all bags?	R	R	R				R			R	R		R						R
LEAK CHECK																			
Not conducted before and after each test?	Y	Y	Y	R		R	R		R	R	R	R	R	R	R				R
ANALYSIS METHOD																			
FID not used for high concentrations (60ppb to .01)?	Y	Y	Y	R	R	R	R		R					R	R		R		
PID not used for low concentrations (1.0 to 1000 ppb)?	Y	Y	Y	R	R	R	R		R					R	R				
Analysis date not within 96 hours from collection?											Y								

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 421 (1987)
HYDROGEN CHLORIDE

VALIDATION PARAMETERS	Stack ID					
	20112	20310	21310	23310	23810	28310
SAMPLE LOCATION						
Average absolute value of swirl angles >10%?			V	V		V
Stack diameter < 12 inch?						
Stack area < 113 inch squared?						
Method 1 not used?						R
SAMPLING EQUIPMENT						
Variation in nozzle diameter > 0.004 inch?		V	V	V	V	V
Pre- and post-test meter Y not within (+/-) 5%?						V
Pitot tube semi-annual calibration sheet included?			P	P		P
SAMPLING PROCEDURES						
Pre-test leak rate > 0.02 cfm or 4% of average?						
Post-test leak rate > 0.02 cfm or 4% of average?						
Isokinetic variation <90 or >110%?				1RN		V
FIELD REAGENT BLANK						
Not collected once per test?		R	R		R	R
Not used to correct sample peaks on the chromatograph?						
IMPINGER SOLUTIONS						
Biocarbonate (NaHCO ₃) not used?						R
Sodium carbonate (Na ₂ CO ₃) not used?						R
Water not used?			R			R
ANALYSIS METHOD						
Ion chromatography not used?				R		R
Lab spike not conducted for 10% of samples?	R	R	R		R	R
Duplicate not conducted for each sample?	R	R	R			R
Percent difference > 5%?				1PN	V	

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 421 (1991)
HYDROGEN CHLORIDE

VALIDATION PARAMETERS	Stack ID								
	22710	23010	24710	25910	26010	26110	26210	27910	28410
SAMPLE LOCATION									
Average absolute value of swirl angles >10%?	V	V	V	V	V	V	V	V	
Stack diameter < 12 inch?		Y							
Stack area < 113 inch squared?									
Method 1 not used?									
SAMPLING EQUIPMENT									
Variation in nozzle diameter > 0.004 inch?			V						V
Pre- and post-test meter Y not within (+/-) 5%?			V						
Pitot tube semi-annual calibration sheet included?			P					P	
SAMPLING PROCEDURES									
Pre-test leak rate > 0.02 cfm or 4% of average?		V	V						
Post-test leak rate > 0.02 cfm or 4% of average?		V	V						
Isokinetic variation <90 or >110%?									N
Number of sample runs < 3?		Y	Y						
Sample time not reported for each run?									
Sample time < 60 minutes?		2RF							
FIELD BLANK									
Not collected per test?	R				R	R	R		
Used to correct sample peaks on the chromatograph?		R							
Contamination > 20% of any run?	R				R	R	R		
IMPINGER SOLUTIONS									
Biocarbonate (NaHCO ₃) not used?									
Sodium carbonate (Na ₂ CO ₃) not used?									
Water not used?			R	R	R	R	R	R	
ANALYSIS METHOD									
Ion chromatography not used?		R	R						
Lab spike not conducted prior, daily, and after every 40 samples?	R	R	R					R	R
Percent recovery < 95% or > 105%?									
Duplicate not conducted for 10% of all samples?	R		R						
Percent difference > 5% STD?		V				V			

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 422 (1987)
VOLATILE HALOGENATED ORGANIC COMPOUNDS

VALIDATION PARAMETERS	Stack ID				
	20310	21310	21810	25010	25110
TEDLAR BAG CONTAMINATION CHECK					
Not conducted for all bags?					R
Levels not reported?					Y
LEAK CHECK					
Not conducted before and after each test?		R			
Leak rate > 5% of sample rate?					
ANALYSIS METHOD					
GC not used?					
Analysis date not within 24 hours of collection?					Y

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 422 (1991)
VOLATILE HALOGENATED ORGANIC COMPOUNDS

VALIDATION PARAMETERS	Stack ID						
	20210	23010	26110	26210	28410	29010	64510
TEDLAR BAG CONTAMINATION CHECK							
Not conducted for all bags?		R			R		R
Levels not reported?							R
FIELD BLANK							
Not conducted once per test?	R						R
Used to correct sample?							R
Blank > 20% of the stack samples?	R						1PN
LEAK CHECK							
Not conducted before and after each test?	R	R			R		R
Leak rate > 5% of sample rate?			R				R
FIELD SPIKE							
Not collected once per source?	R	R	R	R	R		Y
ANALYSIS METHOD							
GC not used?		R					
Analysis date not within 72 hours from collection?							
Duplicates not conducted once per sample?	R	R					Y
Values > 3 x RSD?							V

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 423 (1987)
INORGANIC ARSENIC

VALIDATION PARAMETERS	Stack ID						
	20112	21510	21810	23310	25010	25110	28110
SAMPLE LOCATION							
Average absolute value of swirl angles >10%?			V	V		V	
Stack diameter < 12 inch?							
Stack area < 113 inch squared?							
Method 1 not used?			R		R	R	
SAMPLING EQUIPMENT							
Variation in nozzle diameter > 0.004 inch?			V	V	V		
Pre- and post-test meter Y not within (+/-) 5%?							
Pitot tube semi-annual calibration sheet included?				P			
SAMPLING PROCEDURES							
Pre-test leak rate > 0.02 cfm or 4% of average?							
Post-test leak rate > 0.02 cfm or 4% of average?							1RN
Isokinetic variation <90 or >110%?							
Filter temperature not between 107 and 135 degrees?	R	Y	R	R	Y	R	
Flow rate > 28 liter per minute (1 cfm)?	V		3RF	V	V	V	
FIELD REAGENT BLANK							
Not conducted for two filters and 0.1N NAOH?		R		R			
Not used to correct sample?	Y			R		Y	
ANALYSIS METHOD							
Atomic absorption spectrometry not used?			R	R			
Combined analysis used?	R	R		R	R	Y	

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 424 (1987)
INORGANIC CADMIUM

VALIDATION PARAMETERS	Stack ID			
	21410	23510	24510	45210
SAMPLE LOCATION				
Average absolute value of swirl angles >10%?		V		V
Stack diameter < 12 inch?				
Stack area < 113 inch squared?				
Method 1 not used?		R		
SAMPLING EQUIPMENT				
Variation in nozzle diameter > 0.004 inch?		V		N
Pre- and post-test meter Y not within (+/-) 5%?		V		
Pitot tube semi-annual calibration sheet included?				P
SAMPLING PROCEDURES				
Pre-test leak rate > 0.02 cfm or 4% of average?		V		
Post-test leak rate > 0.02 cfm or 4% of average?		V		
Isokinetic variation <90 or >110%?				
FIELD REAGENT BLANK				
Not conducted for two filters and 0.1N HNO ₃ ?	R	R		R
Not used to correct sample?				Y
ANALYSIS METHOD				
Atomic absorption spectrometry not used?				R
Not conducted in triplicate?	R	R		R

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 425 (1987)
TOTAL AND HEXAVALENT CHROMIUM

VALIDATION PARAMETERS	Stack ID			
	20010	22710	51010	64410
SAMPLE LOCATION				
Average absolute value of swirl angles >10%?	V		V	V
Stack diameter < 12 inch?				
Stack area < 113 inch squared?				
Method 1 not used?	R		R	
SAMPLING EQUIPMENT				
Variation in nozzle diameter > 0.004 inch?				
Pre- and post-test meter Y not within (+/-) 5%?			N	N
Pitot tube semi-annual calibration sheet included?	P		P	P
SAMPLING PROCEDURES				
Pre-test leak rate > 0.02 cfm or 4% of average?	2RN			
Post-test leak rate > 0.02 cfm or 4% of average?	1RN			
Isokinetic variation <90 or >110%?	1RF			
REAGENT BLANK				
Not conducted once per sample batch?				
Used to correct sample?	Y			
ANALYSIS METHOD				
Matrix spike not conducted once per test (Hexavalent Chromium)?			R	R
Percent recovery > 10%?			V	V
Matrix spike not conducted daily (Total Chromium)?			R	R
Duplicates not conducted for every 10 samples (Total Chromium)?			R	R

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 425 (1990)
TOTAL AND HEXAVALENT CHROMIUM

VALIDATION PARAMETERS	Stack ID																
	45110	45510	45610	45710	45810	46110	46111	47410	47510	47511	47610	47810	47811	47812	47813	47911	64610
SAMPLE LOCATION																	
Average absolute value of swirl angles >10%?	V	V	V			V	V	V						V		Y	V
Stack diameter < 12 inch?																	
Stack area < 113 inch squared?																	
Method 1 not used?																	R
SAMPLING EQUIPMENT																	
Variation in nozzle diameter > 0.004 inch?		V	V	V	V			V	V	V	V						
Pre- and post-test meter Y not within (+/-) 5%?		N		N	N	V	V	N	N	N	N			Y			
Pitot tube semi-annual calibration sheet included?	P					P	P					P	P	P	P		
SAMPLING PROCEDURES																	
Pre-test leak rate > 0.02 cfm or 4% of average?		V			V			V			V					1RF	
Post-test leak rate > 0.02 cfm or 4% of average?		V			V			V			V						
Isokinetic variation <90 or >110%?			1RF														
PROBE PROOF																	
Not conducted per probe?	R					R	R		R	R		R	R	R	R	Y	R
Total chrome > detection limit?	V	5PF	3PF			V	V	3PF	V	V	3PF	V	V	V	V	V	V
REAGENT BLANK																	
Not conducted once per sample batch?		Y		Y				Y									
Not used to correct sample?	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	
ANALYSIS METHOD																	
Matrix spike not conducted once per test (Hexavalent Chromium)?	Y	Y		Y		Y	Y										
Percent recovery > 10%?	1PF,2PN	V		V		V	V										
Matrix spike not conducted daily (Total Chromium)?	R	Y		Y													R
Duplicates not conducted for every 10 samples (Total Chromium)?		Y		Y													Y

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 428 (1988)
PCDD/PCDF

VALIDATION PARAMETERS	Stack ID		
	20010	21810	22710
SAMPLE LOCATION			
Average absolute value of swirl angles >10%?	V	V	
Stack diameter < 12 inch?			
Stack area < 113 inch squared?			
Method 1 not used?		R	
SAMPLING EQUIPMENT			
Variation in nozzle diameter > 0.004 inch?	V	V	
Pre- and post-test meter Y not within (+/-) 5%?			
Pitot tube semi-annual calibration sheet included?	P		
SAMPLING PROCEDURES			
Pre-test leak rate > 0.02 cfm or 4% of average?			
Post-test leak rate > 0.02 cfm or 4% of average?			
Isokinetic variation <90 or >110%?			
Sample runs < 3?			
Sample time < 3 hours?			
FIELD BLANK			
Not conducted once per test?			
Used to correct sample?			
SURROGATE STANDARDS			
Not conducted once per run?	R		
Percent recovery < 60 or > 140% (37C1-2,3,7,8-TCDD)?	R	3RN	
Percent recovery < 60 or > 140% (13C-1,2,3,4,6,7,8-HpCDF)?	R	3RN	
LABORATORY CONTROL SPIKE			
Percent accuracy < 60 or > 140 %?		V	V
INTERNAL STANDARDS			
Not conducted once per sample?			
Percent recovery < 60 or > 120%?	7PF	9PF,6PN	18PN

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 428 (1990)
PCDD/PCDF

VALIDATION PARAMETERS	Stack ID												
	20112	20210	20810	22610	23010	23310	23610	23810	24810	27910	29010	45010	45011
SAMPLE LOCATION													
Average absolute value of swirl angles >10%?			V	V	V	V	V		V	V			
Stack diameter < 12 inch?					Y							Y	Y
Stack area < 113 inch squared?												Y	Y
Method 1 not used?							R						
SAMPLING EQUIPMENT													
Variation in nozzle diameter > 0.004 inch?			V	V		V	V	V	V				
Pre- and post-test meter Y not within (+/-) 5%?							V		V				
Pitot tube semi-annual calibration sheet included?				P		P			P	P		P	P
SAMPLING PROCEDURES													
Pre-test leak rate > 0.02 cfm or 4% of average?			V		V		V		V			3RN	2RN
Post-test leak rate > 0.02 cfm or 4% of average?			V		V		V	3RN	V				
Isokinetic variation <90 or >110%?			1RF				1RF					1RF	
Sample runs < 3?									Y				
Sample time < 3 hours?					3RF	3RF		3RF					
FIELD BLANK													
Not conducted once per test?							R	R					
Used to correct sample?													
SURROGATE STANDARDS													
Not conducted once per run?													
Percent recovery < 60 or > 140% (LRMS)?							V						
Percent recovery < 60 or > 140% (HRMS)?			6PN	6PN	6PN	6PN		6PN	10PN	6PN	6PN	6PN	6PN
LABORATORY CONTROL SPIKE													
Laboratory control spike percent accuracy < 60 or > 140%?	48PN	47PN	24PN		24PN		V	24PN	V	24PN		24PN	24PN
INTERNAL STANDARDS													
Not conducted once per sample (LRMS)?													
Percent accuracy < 40 or > 120%?													
Not conducted once per sample (HRMS)?							R						
Percent accuracy < 40 or > 120%?	12PN		3PN	6PN	6PN	3PF,6PN		6PN	16PN	3PN	3PN	5PF,6PN	2PF,6PN

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 429 (1989)

PAH

VALIDATION PARAMETERS	Stack ID																		
	43910	44010	44110	44210	44310	44410	44510	45110	50510	50610	50710	50810	50910	51010	64210	64310	64410	64510	64610
SAMPLE LOCATION																			
Average absolute value of swirl angles >10%?		Y				V		V	V	V	V	V	V	V	V	V	V	V	V
Stack diameter < 12 inch?																			
Stack area < 113 inch squared?																			
Method 1 not used?						R	R		R	R	R	R	R	R					R
SAMPLING EQUIPMENT																			
Variation in nozzle diameter > 0.004 inch?						V	V									V		V	
Pre- and post-test meter Y not within (+/-) 5%?	N					N	N		N	N	N	N	N	N	N	N	N	N	
Pitot tube semi-annual calibration sheet included?	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	
SAMPLING PROCEDURES																			
Pre-test leak rate > 0.02 cfm or 4% of average?							V												
Post-test leak rate > 0.02 cfm or 4% of average?					1RF		V						1RN						
Isokinetic variation <90 or >110%?																			
Sample runs < 3?																			
FIELD BLANK																			
Not conducted once per test?																			
Used to correct sample?																			
SURROGATE STANDARDS																			
Not conducted once per run?						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Percent recovery < 50 or > 150%?	V	V	V	V	V	2RN	V	V	2RN	2RN	2RN	V	1RF,2RN	1RF	2RN	2RN	2RN	V	V
LABORATORY CONTROL SPIKE																			
Percent accuracy < 50 or > 150%?						V		V	V	V	V	V	V	V	V	V	V		
INTERNAL STANDARDS																			
Not conducted once per run?						Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		
Percent accuracy < 50 or > 150%?						V	6PF	37PF	V	V	V	V	V	V	V	V	V	12PF	7PF
ANALYSIS/EXTRACTION DATES																			
Analysis date not within 40 days of extraction?	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R		
Extraction date not within 7 days of collection?						R		R	R	R	R	R	R	R	R	R	R		

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 430 (1989)
ALDEHYDES

VALIDATION PARAMETERS	Stack ID															
	27710	28510	43710	43810	44410	44910	50510	50610	50710	50810	50910	51010	64210	64310	64410	64610
FIELD DRY GAS METER CHECK																
Pre- and post-test meter Y not within (+/-) 5%?	V		N	N	N	V	N	N	N	N	N	N	N	N	N	
SAMPLING PROCEDURES																
Sample flow not checked per run?																
Sample flow > 1.0 L/min?		3RF	3RF	3RF	6RF		3RF	3RF	3RF	3RF	3RF	3RF	3RF	3RF	3RF	3RF
Pre-test and post-test sample flow not within 15%?			3RN	3RN	6RN	3RN	3RN	3RN	3RN	3RN	3RN	3RN	3RN	3RN	3RN	3RN
Indication of leaks?	V	V														
FIELD BLANK																
Not conducted once per test?																
Not conducted on 2 impingers?						R					R					
Used to correct samples?	Y	Y														R
FIELD SPIKE																
Not conducted per run?																
ANALYSIS METHOD																
Extraction date not within 7 days of collection?		R	R		R	R				R	R		R	R	R	R
Analysis date not within 30 days of extraction?			R		R	R					R		R	R	R	
Reverse phase HPLC not used?			R	R	R			R	R	R	R	R				R
Matrix spike not conducted per test?		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Not reported?			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 430 (1991)
ALDEHYDES

VALIDATION PARAMETERS	Stack ID													
	20210	22410	22510	24710	25310	25910	26010	26110	26210	26310	26410	26510	26610	26710
CALIBRATION CHECK														
Not conducted for each rotometer?	R	R	R	R	R	R	R	R	R	R	R	R		R
Calibration sheet not included?														
SAMPLING PROCEDURES														
Sample flow not checked per run?		R	R	R								R		R
Sample flow > 1.0 L/min?														
Pre-test and post-test sample flow not within 15%?														
Indication of leaks?		V		V	V	V	V			V	V			V
Number of sample runs < 3?				Y										
FIELD BLANK														
Three blanks not collected per test?	R		R	R						Y	Y	R		R
Reporting limit not given (sample /field blank < 5)?									6PN					
Sample not corrected (sample/field blank > 5)?								5PN						
ANALYSIS METHOD														
Sampling date not within 2 days of reagent blank check?	R	R	R	R	R	R	R	R	R	R	R	R		R
Extraction date not within 7 days of collection?		R		R		R						R		R
Analysis date not within 30 days of extraction?				R		R						R		R
Reverse phase HPLC not used?				R								R		
Impingers not analyzed seperately?				R								R		
Matrix spike not conducted per test?	R			R							R	R		R
Recovery not reported?														

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 433 (1989)

NICKEL

VALIDATION PARAMETERS	Stack ID				
	23810	23910	25210	45210	64610
SAMPLE LOCATION					
Average absolute value of swirl angles >10%?			V	V	V
Stack diameter < 12 inch?					
Stack area < 113 inch squared?					
Method 1 not used?					R
SAMPLING EQUIPMENT					
Variation in nozzle diameter > 0.004 inch?	V	V	V		
Pre- and post-test meter Y not within (+/-) 5%?					
Pitot tube semi-annual calibration sheet included?				P	
SAMPLING PROCEDURES					
Pre-test leak rate > 0.02 cfm or 4% of average?		1RF			
Post-test leak rate > 0.02 cfm or 4% of average?		1RF			
Isokinetic variation <90 or >110%?					
FIELD REAGENT BLANK					
Not conducted for two filters and 0.1N HNO ₃ ?	R	R		R	
Not used to correct sample?				Y	Y
ANALYSIS METHOD					
Atomic absorption spectrometry not used?				R	R
Not conducted in triplicate?				R	R

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR CARB 436 (1992)
TRACE METALS

VALIDATION PARAMETERS	Stack ID												
	21310	23010	23310	23510	24710	25910	26010	26110	26210	26310	26410	27910	43610
SAMPLE LOCATION													
Average absolute value of swirl angles >10%?	V	V	V	V	V	V	V	V	V			V	V
Stack diameter < 12 inch?		Y											
Stack area < 113 inch squared?													
Method 1 not used?				R									
SAMPLING EQUIPMENT													
Variation in nozzle diameter > 0.004 inch?	V		V	V	V					V	V		
Pre- and post-test meter Y not within (+/-) 5%?				V	V								N
Pitot tube semi-annual calibration sheet included?	P		P		P							P	
SAMPLING PROCEDURES													
Pre-test leak rate > 0.02 cfm or 4% of average?	1RN	V		V	V						1RN		
Post-test leak rate > 0.02 cfm or 4% of average?		V		V	V						1RN		
Isokinetic variation <90 or >110%?		1RF											
Number of Sample runs < 3?	R				Y								
FIELD BLANK													
Not collected once per test?				R									
Used to correct samples?													
Sample/field blank < 5?	2PF	26PF	27PN	R	3PF	18PN		3PF	15PF	42PN	24PF	11PF	35PF
FIELD REAGENT BLANK													
Not collected once per test?	R		R	R					R				
Not used to correct samples?										R	R		
ANALYSIS DATES													
Not within 2 months (ICAP)?				R	R								R
Not within 2 months (GFAAS)?				R	R								
Not within 28 days (CVAAS)?				R	R							Y	
DUPLICATES													
Percent difference > 10% (ICAP)?	12PN	1PF,6PN		27PN	V					1PF,3PN	6PN	3PN	V
Not conducted per run (GFAAS)?	R			R	R							R	
Not conducted per run (CVAAS)?				R	R		R					R	3RF
MATRIX SPIKES													
Not conducted on front- and back-half (GFAAS)?	R			R	R		R					R	
Percent recovery < 75 or > 125%?	2PN			15PN								9PN	
Not conducted on one nitric impinger (CVAAS)?				R	R				R				R
Percent recovery < 75 or > 125%?													V

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR EPA MMT (1989)
TRACE METALS

VALIDATION PARAMETERS	Stack ID														
	20010	20112	21210	21410	21510	21910	22010	22110	22210	23810	23910	24510	51010	64410	64610
SAMPLE LOCATION															
Average absolute value of swirl angles >10%?	V		V									V	V	V	V
Stack diameter < 12 inch?															
Stack area < 113 inch squared?															
Method 1 not used?	R											R	R		R
SAMPLING EQUIPMENT															
Variation in nozzle diameter > 0.004 inch?			V							V	V	V			
Pre- and post-test meter Y not within (+/-) 5%?			V									V	N	N	
Pitot tube semi-annual calibration sheet included?	P		P									P	P	P	
SAMPLING PROCEDURES															
Pre-test leak rate > 0.02 cfm or 4% of average?					1RN						1RF				
Post-test leak rate > 0.02 cfm or 4% of average?					1RN						1RF				
Isokinetic variation <90 or >110%?			V												
FIELD REAGENT BLANK															
Not collected once per test?			R		R					R	R	R			
Not used to correct samples?		Y		Y					Y				Y	Y	Y
DUPLICATES															
Percent difference > 5% (ICAP)?	1PF	8PF	13PN	V	V	V	V	V	V		V	V	V	V	30PN
Not conducted per run (GFAAS)?	R		R	2RF					R		R				
Not conducted per run (CVAAS)?	Y		R	R	R	R	R	R	R			R			3RF
MATRIX SPIKES															
Not conducted on front- and back-half (GFAAS)?	R		R		R						R				
Percent recovery < 75 or > 125%?	V														
Not conducted on one nitric impinger (CVAAS)?			R			R	R	R	R	R					R
Percent recovery < 75 or > 125%?				V											V

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR EPA 306 (1990)

VALIDATION PARAMETERS	Stack ID														
	45910	46010	46210	46310	46410	46510	46610	46710	46810	46910	47010	47110	47210	47310	47710
SAMPLE LOCATION															
Average absolute value of swirl angles >10%?	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Stack diameter < 12 inch?												Y			Y
Stack area < 113 inch squared?															
Method 1 not used?			R												
SAMPLING EQUIPMENT															
Variation in nozzle diameter > 0.004 inch?	N				N	V	V				N				V
Field gas dry meter not checked pre-test															Y
Pitot tube semi-annual calibration sheet included?							P								P
SAMPLING PROCEDURES															
Pre-test leak rate > 0.02 cfm or 4% of average?															
Post-test leak rate > 0.02 cfm or 4% of average?															
Sample time < 2 hours?															
Isokinetic variation <90 or >110%?															
FIELD REAGENT BLANK															
Not conducted once per test?															
0.1 N NaOH or 0.1 N NaHCO3 not used?															
ANALYSIS DATES															
Not within 2 months (ICP)?															
Not within 2 months (GFAAS)?															
Not within 14 days (IC/PCR)?															
DUPLICATES															
Percent difference > 10% (ICP)?												1PF			
Percent difference > 10% (GFAAS)?															
Percent difference > 10% (IC/PCR)?															1PF
MATRIX SPIKES															
Percent recovery <75 or >125% (ICP)?															
Percent recovery <75 or >125% (GFAAS)?															

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR BAAQMD ST1B (1982)

VALIDATION PARAMETERS	Stack ID
	28810
SAMPLE LOCATION	
Average absolute value of swirl angles >10%?	
Stack diameter < 12 inch?	
Stack area < 113 inch squared?	
Method 1 not used?	
SAMPLING EQUIPMENT	
Variation in nozzle diameter > 0.004 inch?	V
Pre- and post-test meter Y not within (+/-) 5%?	V
Pitot tube semi-annual calibration sheet included?	P
SAMPLING PROCEDURES	
Pre-test leak rate > 0.02 cfm or 4% of average?	
Post-test leak rate > 0.02 cfm or 4% of average?	
Isokinetic variation <90 or >110%?	V
HCI not used?	
ANALYSIS METHOD	
Analytical procedure Lab-1 not used?	

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

VALIDATION PARAMETERS SUMMARY FOR SCAQMD 207.1 (1990)

VALIDATION PARAMETERS	Stack ID				
	25910	26010	26110	26210	26310
SAMPLE LOCATION					
Average absolute value of swirl angles >10%?	V	V	V	V	
Stack diameter < 12 inch?					
Stack area < 113 inch squared?					
Method 1 not used?					
SAMPLING EQUIPMENT					
Variation in nozzle diameter > 0.004 inch?					
Pre- and post-test meter Y not within (+/-) 5%?					
Pitot tube semi-annual calibration sheet included?					
SAMPLING PROCEDURES					
Pre-test leak rate > 0.02 cfm or 4% of average?					
Post-test leak rate > 0.02 cfm or 4% of average?					
Isokinetic variation <90 or >110%?					
ANALYSIS METHOD					
Colorimetric method not used?					

R-Not reported

V-Values not provided

N-Not conducted

P-Not provided

Y-Failed check

Blank Cells - Indicates check passed

RF-Runs do not pass check

RN-Runs could not be checked

PF-Points do not pass check

PN-Points could not be checked

ATTACHMENT 5
SUBSTANCE SPECIFIC QA FAILURE FREQUENCY



ATTACHMENT 5 - SUBSTANCE SPECIFIC QA FAILURE FREQUENCY.

Method	Version	Flags	Substance	Count
CARB 425	90	Matrix spike percent recovery > 10%	Chromium (Hex)	1
CARB 425	90	Probe proof total chrome > DL	Chromium (Total)	16
CARB 428	88	Internal standard percent recovery <60 or >120%	Dioxin:4D 2378	3
CARB 428	88		Dioxin:4D Total	1
CARB 428	88		Dioxin:5D Total	1
CARB 428	88		Dioxin:6D Total	2
CARB 428	88		Dioxin:7D Total	1
CARB 428	88		Dioxin:8D	3
CARB 428	88		Furan:4F 2378	3
CARB 428	88		Furan:4F Total	2
CARB 428	90	Internal standard percent accuracy <40 or >120%	Dioxin:5D 12378	3
CARB 428	90		Dioxin:6D 123678	1
CARB 428	90		Dioxin:8D	3
CARB 428	90		Furan:5F 12378	3
CARB 429	89	Laboratory control percent accuracy <50 or >150%	Naphthalene	2
CARB 429	89		Phenanthrene	2
CARB 429	89	Internal standard percent accuracy <50 or >150%	Acenaphthene	17
CARB 429	89		Acenaphthylene	18
CARB 429	89		Anthracene	20
CARB 429	89		Benzo(a)anthracene	11
CARB 429	89		Benzo(a)pyrene	13
CARB 429	89		Benzo(b)fluoranthene	9
CARB 429	89		Benzo(g,h,i)perylene	8
CARB 429	89		Benzo(k)fluoranthene	9
CARB 429	89		Chrysene	10
CARB 429	89		Fluoranthene	8
CARB 429	89		Fluorene	19
CARB 429	89		Naphthalene	27
CARB 429	89		Phenanthrene	12
CARB 429	89		Pyrene	10
CARB 430	91	Sample/field blank ratio <5 and reporting limit not given	Acetaldehyde	3
CARB 430	91		Acrolein	3
CARB 430	91		Formaldehyde	3
CARB 436	92	Sample / field blank ratio <5	Antimony	6
CARB 436	92		Arsenic	6
CARB 436	92		Barium	6
CARB 436	92		Beryllium	4
CARB 436	92		Cadmium	7
CARB 436	92		Chromium (Total)	13
CARB 436	92		Copper	10
CARB 436	92		Lead	14
CARB 436	92		Manganese	11
CARB 436	92		Nickel	12
CARB 436	92		Phosphorus	3
CARB 436	92		Selenium	8

ATTACHMENT 5 - SUBSTANCE SPECIFIC QA FAILURE FREQUENCY.

Method	Version	Flags	Substance	Count
CARB 436	92		Silver	4
CARB 436	92		Thallium	6
CARB 436	92		Zinc	16
EPA MMT	89	Duplicate percent difference > 5%?	Arsenic	1
EPA MMT	89		Cadmium	2
EPA MMT	89		Chromium (Total)	1
EPA MMT	89		Copper	2
EPA MMT	89		Lead	2
EPA MMT	89		Nickel	2
EPA MMT	89		Zinc	1

ATTACHMENT 6
STATISTICAL ANALYSIS OF GROUPS



TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10100401	9	1.06E-03	5.51E-04	1.00	10200401	18	5.07E-04	8.89E-04	0.79	No
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10100401	9	1.06E-03	5.51E-04	1.00	10200402	3	2.29E-04	5.83E-05	0.31	Yes
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10100401	9	1.06E-03	5.51E-04	1.00	10200403	3	1.44E-03	2.44E-04	0.00	No
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10200401	18	5.07E-04	8.89E-04	0.79	10200402	3	2.29E-04	5.83E-05	0.31	No
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10200401	18	5.07E-04	8.89E-04	0.79	10200403	3	1.44E-03	2.44E-04	0.00	No
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	10200402	3	2.29E-04	5.83E-05	0.31	10200403	3	1.44E-03	2.44E-04	0.00	Yes
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10100401	9	1.48E-05	1.50E-05	0.62	10200401	17	5.48E-04	1.18E-03	0.97	No
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10100401	9	1.48E-05	1.50E-05	0.62	10200402	3	5.12E-05	1.48E-06	0.00	Yes
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10100401	9	1.48E-05	1.50E-05	0.62	10200403	3	6.29E-05	7.69E-06	0.00	Yes
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10200401	17	5.48E-04	1.18E-03	0.97	10200402	3	5.12E-05	1.48E-06	0.00	No
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10200401	17	5.48E-04	1.18E-03	0.97	10200403	3	6.29E-05	7.69E-06	0.00	No
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	10200402	3	5.12E-05	1.48E-06	0.00	10200403	3	6.29E-05	7.69E-06	0.00	No
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10100401	9	2.23E-04	2.32E-04	1.00	10200401	16	3.88E-04	6.93E-04	0.80	No
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10100401	9	2.23E-04	2.32E-04	1.00	10200402	3	2.23E-04	2.32E-04	1.00	Yes
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10100401	9	2.23E-04	2.32E-04	1.00	10200403	3	8.56E-04	3.52E-04	0.00	Yes
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10200401	16	3.88E-04	6.93E-04	0.80	10200402	3	2.23E-04	2.32E-04	1.00	Yes
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10200401	16	3.88E-04	6.93E-04	0.80	10200403	3	8.56E-04	3.52E-04	0.00	No
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	10200402	3	2.23E-04	2.32E-04	1.00	10200403	3	8.56E-04	3.52E-04	0.00	No
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10100401	9	1.81E-04	1.72E-04	0.90	10200401	12	1.50E-04	8.63E-05	0.56	No
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10100401	9	1.81E-04	1.72E-04	0.90	10200402	3	3.48E-04	5.15E-05	0.00	No
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10100401	9	1.81E-04	1.72E-04	0.90	10200403	3	1.15E-03	5.70E-05	0.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10200401	12	1.50E-04	8.63E-05	0.56	10200402	3	3.48E-04	5.15E-05	0.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10200401	12	1.50E-04	8.63E-05	0.56	10200403	3	1.15E-03	5.70E-05	0.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	10200402	3	3.48E-04	5.15E-05	0.00	10200403	3	1.15E-03	5.70E-05	0.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10100401	9	6.09E-04	2.44E-04	1.00	10200401	18	1.05E-03	1.69E-03	0.98	No
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10100401	9	6.09E-04	2.44E-04	1.00	10200402	3	1.99E-03	4.18E-04	0.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10100401	9	6.09E-04	2.44E-04	1.00	10200403	3	4.86E-03	1.24E-03	1.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10200401	18	1.05E-03	1.69E-03	0.98	10200402	3	1.99E-03	4.18E-04	0.00	No
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10200401	18	1.05E-03	1.69E-03	0.98	10200403	3	4.86E-03	1.24E-03	1.00	Yes
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	10200402	3	1.99E-03	4.18E-04	0.00	10200403	3	4.86E-03	1.24E-03	1.00	Yes
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10100401	9	1.40E-03	5.60E-04	1.00	10200401	18	4.61E-03	5.18E-03	1.00	No
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10100401	9	1.40E-03	5.60E-04	1.00	10200402	3	3.41E-03	2.35E-03	1.00	Yes
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10100401	9	1.40E-03	5.60E-04	1.00	10200403	3	3.86E-03	4.20E-03	1.00	No
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10200401	18	4.61E-03	5.18E-03	1.00	10200402	3	3.41E-03	2.35E-03	1.00	No
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10200401	18	4.61E-03	5.18E-03	1.00	10200403	3	3.86E-03	4.20E-03	1.00	No
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	10200402	3	3.41E-03	2.35E-03	1.00	10200403	3	3.86E-03	4.20E-03	1.00	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10100401	9	1.61E-03	1.12E-03	1.00	10200401	18	5.32E-03	1.15E-02	0.95	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10100401	9	1.61E-03	1.12E-03	1.00	10200402	3	2.44E-03	4.06E-04	0.39	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10100401	9	1.61E-03	1.12E-03	1.00	10200403	3	1.56E-03	1.54E-03	0.00	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10200401	18	5.32E-03	1.15E-02	0.95	10200402	3	2.44E-03	4.06E-04	0.39	No

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10200401	18	5.32E-03	1.15E-02	0.95	10200403	3	1.56E-03	1.54E-03	0.00	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	10200402	3	2.44E-03	4.08E-04	0.39	10200403	3	1.56E-03	1.54E-03	0.00	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10100401	9	1.58E-03	1.37E-03	1.00	10200401	18	5.72E-02	1.59E-01	1.00	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10100401	9	1.58E-03	1.37E-03	1.00	10200402	3	1.66E-03	2.32E-04	0.00	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10100401	9	1.58E-03	1.37E-03	1.00	10200403	3	5.81E-03	5.54E-03	1.00	Yes
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10200401	18	5.72E-02	1.59E-01	1.00	10200402	3	1.66E-03	2.32E-04	0.00	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10200401	18	5.72E-02	1.59E-01	1.00	10200403	3	5.81E-03	5.54E-03	1.00	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	10200402	3	1.66E-03	2.32E-04	0.00	10200403	3	5.81E-03	5.54E-03	1.00	No
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10100401	9	3.06E-03	1.91E-03	0.00	10200401	18	2.46E-04	3.45E-04	0.70	Yes
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10100401	9	3.06E-03	1.91E-03	0.00	10200402	3	5.43E-05	9.58E-07	0.00	Yes
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10100401	9	3.06E-03	1.91E-03	0.00	10200403	3	1.03E-05	3.93E-06	0.00	Yes
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10200401	18	2.46E-04	3.45E-04	0.70	10200402	3	5.43E-05	9.58E-07	0.00	No
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10200401	18	2.46E-04	3.45E-04	0.70	10200403	3	1.03E-05	3.93E-06	0.00	No
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	10200402	3	5.43E-05	9.58E-07	0.00	10200403	3	1.03E-05	3.93E-06	0.00	Yes
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10100401	9	9.75E-02	5.45E-02	1.00	10200401	18	1.15E-01	1.57E-01	1.00	No
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10100401	9	9.75E-02	5.45E-02	1.00	10200402	3	1.59E-02	1.97E-03	0.65	Yes
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10100401	9	9.75E-02	5.45E-02	1.00	10200403	3	1.59E-02	1.97E-03	0.65	Yes
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10200401	18	1.15E-01	1.57E-01	1.00	10200402	3	1.59E-02	1.97E-03	0.65	No
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10200401	18	1.15E-01	1.57E-01	1.00	10200403	3	1.59E-02	1.97E-03	0.65	Yes
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	10200402	3	1.59E-02	1.97E-03	0.65	10200403	3	1.59E-02	1.97E-03	0.65	Yes
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10100401	9	9.61E-04	6.71E-04	0.87	10200401	18	3.77E-03	1.06E-02	0.71	No
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10100401	9	9.61E-04	6.71E-04	0.87	10200402	3	3.67E-04	6.47E-05	0.00	No
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10100401	9	9.61E-04	6.71E-04	0.87	10200403	3	2.88E-03	1.24E-03	0.17	Yes
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10200401	18	3.77E-03	1.06E-02	0.71	10200402	3	3.67E-04	6.47E-05	0.00	No
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10200401	18	3.77E-03	1.06E-02	0.71	10200403	3	2.88E-03	1.24E-03	0.17	No
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	10200402	3	3.67E-04	6.47E-05	0.00	10200403	3	2.88E-03	1.24E-03	0.17	Yes
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10100401	9	1.41E-02	8.27E-03	1.00	10200401	18	1.07E-01	2.61E-01	1.00	No
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10100401	9	1.41E-02	8.27E-03	1.00	10200402	3	3.55E-02	1.74E-02	1.00	Yes
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10100401	9	1.41E-02	8.27E-03	1.00	10200403	3	1.60E-02	1.29E-02	1.00	No
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10200401	18	1.07E-01	2.61E-01	1.00	10200402	3	3.55E-02	1.74E-02	1.00	No
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10200401	18	1.07E-01	2.61E-01	1.00	10200403	3	1.60E-02	1.29E-02	1.00	No
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	10200402	3	3.55E-02	1.74E-02	1.00	10200403	3	1.60E-02	1.29E-02	1.00	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10100401	12	3.11E-05	3.67E-05	0.99	10200401	18	3.38E-05	3.40E-05	0.02	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10100401	12	3.11E-05	3.67E-05	0.99	10200402	3	2.79E-06	1.87E-06	1.00	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10100401	12	3.11E-05	3.67E-05	0.99	10200403	6	8.93E-07	6.01E-07	0.87	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10200401	18	3.38E-05	3.40E-05	0.02	10200402	3	2.79E-06	1.87E-06	1.00	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10200401	18	3.38E-05	3.40E-05	0.02	10200403	6	8.93E-07	6.01E-07	0.87	Yes
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	10200402	3	2.79E-06	1.87E-06	1.00	10200403	6	8.93E-07	6.01E-07	0.87	Yes
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200401	18	3.44E-06	3.36E-06	0.03	Yes
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200402	3	2.48E-06	9.67E-07	0.81	Yes

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200403	6	3.17E-07	4.53E-08	0.00	Yes
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10200401	18	3.44E-05	3.36E-05	0.03	10200402	3	7.48E-05	9.57E-05	0.81	No
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10200401	18	3.44E-05	3.36E-05	0.03	10200403	6	3.17E-07	4.53E-08	0.00	Yes
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	10200402	3	7.48E-05	9.57E-05	0.81	10200403	6	3.17E-07	4.53E-08	0.00	No
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10100401	12	2.27E-06	1.56E-06	0.90	10200401	18	3.45E-06	3.43E-06	0.01	Yes
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10100401	12	2.27E-06	1.56E-06	0.90	10200402	3	9.08E-07	8.86E-07	0.00	No
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10100401	12	2.27E-06	1.56E-06	0.90	10200403	6	3.22E-07	3.19E-07	0.94	Yes
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10200401	18	3.45E-05	3.35E-05	0.04	10200402	3	9.08E-07	8.86E-07	0.00	No
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10200401	18	3.45E-05	3.35E-05	0.04	10200403	6	3.22E-07	3.19E-07	0.94	Yes
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	10200402	3	9.08E-07	8.86E-07	0.00	10200403	6	3.22E-07	3.19E-07	0.94	No
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10100401	12	2.08E-06	3.45E-06	0.52	10200401	18	3.35E-05	3.43E-05	0.01	Yes
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10100401	12	2.08E-06	3.45E-06	0.52	10200402	3	1.76E-08	1.92E-08	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10100401	12	2.08E-06	3.45E-06	0.52	10200403	6	2.04E-07	1.60E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10200401	18	3.35E-05	3.43E-05	0.01	10200402	3	1.76E-08	1.92E-08	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10200401	18	3.35E-05	3.43E-05	0.01	10200403	6	2.04E-07	1.60E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	10200402	3	1.76E-08	1.92E-08	0.00	10200403	6	2.04E-07	1.60E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200401	18	3.73E-05	3.15E-05	0.12	Yes
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200402	3	9.09E-07	1.53E-06	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10100401	12	1.08E-06	2.09E-07	0.00	10200403	6	2.09E-07	1.54E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10200401	18	3.73E-05	3.15E-05	0.12	10200402	3	9.09E-07	1.53E-06	0.00	No
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10200401	18	3.73E-05	3.15E-05	0.12	10200403	6	2.09E-07	1.54E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	10200402	3	9.09E-07	1.53E-06	0.00	10200403	6	2.09E-07	1.54E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(b)fluoranthene	lbs/Mgal	10200401	12	8.01E-06	3.03E-06	0.02	10200402	3	2.36E-06	1.25E-06	0.63	Yes
Boiler, Fuel Oil	PAH	Benzo(b)fluoranthene	lbs/Mgal	10200401	12	8.01E-06	3.03E-06	0.02	10200403	6	1.21E-06	8.93E-07	0.40	Yes
Boiler, Fuel Oil	PAH	Benzo(b)fluoranthene	lbs/Mgal	10200402	3	2.36E-06	1.25E-06	0.63	10200403	6	1.21E-06	8.93E-07	0.40	No
Boiler, Fuel Oil	PAH	Benzo(b+k)fluoranthene	lbs/Mgal	10100401	12	1.52E-06	1.52E-06	0.34	10200401	6	1.60E-06	1.28E-06	0.43	No
Boiler, Fuel Oil	PAH	Benzo(e)pyrene	lbs/Mgal	10200402	3	1.03E-06	1.42E-06	0.00	10200403	3	8.53E-07	3.85E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10100401	12	1.29E-06	7.46E-07	0.23	10200401	18	3.38E-05	3.41E-05	0.02	Yes
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10100401	12	1.29E-06	7.46E-07	0.23	10200402	3	1.02E-06	1.50E-06	0.00	No
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10100401	12	1.29E-06	7.46E-07	0.23	10200403	6	9.99E-07	7.75E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10200401	18	3.38E-05	3.41E-05	0.02	10200402	3	1.02E-06	1.50E-06	0.00	No
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10200401	18	3.38E-05	3.41E-05	0.02	10200403	6	9.99E-07	7.75E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	10200402	3	1.02E-06	1.50E-06	0.00	10200403	6	9.99E-07	7.75E-07	0.00	No
Boiler, Fuel Oil	PAH	Benzo(k)fluoranthene	lbs/Mgal	10200401	12	4.96E-06	3.14E-06	0.00	10200402	3	1.28E-08	9.24E-09	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(k)fluoranthene	lbs/Mgal	10200401	12	4.96E-06	3.14E-06	0.00	10200403	6	2.08E-07	1.59E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Benzo(k)fluoranthene	lbs/Mgal	10200402	3	1.28E-08	9.24E-09	0.00	10200403	6	2.08E-07	1.59E-07	0.00	No
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10100401	12	1.14E-06	2.70E-07	0.12	10200401	18	3.35E-05	3.44E-05	0.01	Yes
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10100401	12	1.14E-06	2.70E-07	0.12	10200402	3	2.16E-05	3.99E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10100401	12	1.14E-06	2.70E-07	0.12	10200403	6	3.88E-06	3.08E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10200401	18	3.35E-05	3.44E-05	0.01	10200402	3	2.16E-05	3.99E-06	1.00	No

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10200401	18	3.35E-05	3.44E-05	0.01	10200403	6	3.88E-06	3.06E-06	1.00	No
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	10200402	3	2.16E-06	3.89E-06	1.00	10200403	6	3.88E-06	3.06E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10100401	12	1.10E-06	2.11E-07	0.09	10200401	18	3.38E-05	3.41E-05	0.02	Yes
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10100401	12	1.10E-06	2.11E-07	0.09	10200402	3	1.16E-06	1.44E-06	0.00	No
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10100401	12	1.10E-06	2.11E-07	0.09	10200403	6	7.06E-07	9.66E-07	0.00	No
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10200401	18	3.38E-05	3.41E-05	0.02	10200402	3	1.16E-06	1.44E-06	0.00	No
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10200401	18	3.38E-05	3.41E-05	0.02	10200403	6	7.06E-07	9.66E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	10200402	3	1.16E-06	1.44E-06	0.00	10200403	6	7.06E-07	9.66E-07	0.00	No
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10100401	12	3.24E-06	4.80E-06	0.87	10200401	18	3.43E-05	3.52E-05	0.17	Yes
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10100401	12	3.24E-06	4.80E-06	0.87	10200402	3	2.86E-05	9.51E-06	0.58	Yes
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10100401	12	3.24E-06	4.80E-06	0.87	10200403	6	7.78E-06	6.84E-06	1.00	No
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10200401	18	3.43E-05	3.52E-05	0.17	10200402	3	2.86E-05	9.51E-06	0.58	No
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10200401	18	3.43E-05	3.52E-05	0.17	10200403	6	7.78E-06	6.84E-06	1.00	No
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	10200402	3	2.86E-05	9.51E-06	0.58	10200403	6	7.78E-06	6.84E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10100401	12	3.75E-06	3.60E-06	0.90	10200401	18	3.46E-05	3.47E-05	0.05	Yes
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10100401	12	3.75E-06	3.60E-06	0.90	10200402	3	4.65E-06	3.87E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10100401	12	3.75E-06	3.60E-06	0.90	10200403	6	4.65E-06	3.87E-06	1.00	No
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10200401	18	3.46E-05	3.47E-05	0.05	10200402	3	7.01E-05	1.63E-05	1.00	No
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10200401	18	3.46E-05	3.47E-05	0.05	10200403	6	4.65E-06	3.87E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	10200402	3	7.01E-05	1.63E-05	1.00	10200403	6	4.65E-06	3.87E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10100401	12	1.26E-06	6.42E-07	0.21	10200401	18	3.38E-05	3.43E-05	0.01	Yes
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10100401	12	1.26E-06	6.42E-07	0.21	10200402	3	5.01E-07	5.86E-07	0.00	No
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10100401	12	1.26E-06	6.42E-07	0.21	10200403	6	4.59E-07	2.01E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10200401	18	3.38E-05	3.43E-05	0.01	10200402	3	5.01E-07	5.86E-07	0.00	No
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10200401	18	3.38E-05	3.43E-05	0.01	10200403	6	4.59E-07	2.01E-07	0.00	Yes
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	10200402	3	5.01E-07	5.86E-07	0.00	10200403	6	4.59E-07	2.01E-07	0.00	No
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10100401	12	3.21E-03	2.85E-03	1.00	10200401	18	7.39E-03	1.60E-02	1.00	No
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10100401	12	3.21E-03	2.85E-03	1.00	10200402	3	9.77E-05	6.35E-05	1.00	No
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10100401	12	3.21E-03	2.85E-03	1.00	10200403	6	6.07E-05	1.55E-05	1.00	Yes
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10200401	18	7.39E-03	1.60E-02	1.00	10200402	3	9.77E-05	6.35E-05	1.00	No
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10200401	18	7.39E-03	1.60E-02	1.00	10200403	6	6.07E-05	1.55E-05	1.00	No
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	10200402	3	9.77E-05	6.35E-05	1.00	10200403	6	6.07E-05	1.55E-05	1.00	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10100401	12	7.47E-06	7.63E-06	0.97	10200401	18	5.21E-05	7.86E-05	0.46	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10100401	12	7.47E-06	7.63E-06	0.97	10200402	3	6.00E-05	3.15E-05	1.00	Yes
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10100401	12	7.47E-06	7.63E-06	0.97	10200403	6	1.10E-05	6.39E-06	1.00	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10200401	18	5.21E-05	7.86E-05	0.46	10200402	3	6.00E-05	3.15E-05	1.00	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10200401	18	5.21E-05	7.86E-05	0.46	10200403	6	1.10E-05	6.39E-06	1.00	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	10200402	3	6.00E-05	3.15E-05	1.00	10200403	6	1.10E-05	6.39E-06	1.00	Yes
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10100401	12	2.50E-06	3.53E-06	0.78	10200401	18	3.38E-05	3.43E-05	0.01	Yes
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10100401	12	2.50E-06	3.53E-06	0.78	10200402	3	1.87E-06	1.90E-06	0.70	No

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10100401	12	2.50E-06	3.53E-06	0.78	10200403	6	4.01E-06	4.42E-06	0.97	No
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10200401	18	3.35E-05	3.43E-05	0.01	10200402	3	1.87E-06	1.90E-06	0.70	No
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10200401	18	3.35E-05	3.43E-05	0.01	10200403	6	4.01E-06	4.42E-06	0.97	No
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	10200402	3	1.87E-06	1.90E-06	0.70	10200403	6	4.01E-06	4.42E-06	0.97	No
Boiler, Fuel Oil	SVOC	2-Chloronaphthalene	lbs/Mgal	10200402	3	2.84E-07	9.93E-08	0.00	10200403	3	2.27E-08	6.16E-09	0.00	Yes
Boiler, Fuel Oil	SVOC	2-Methylnaphthalene	lbs/Mgal	10200402	3	1.48E-04	1.87E-05	1.00	10200403	3	1.09E-05	1.25E-06	1.00	Yes
Boiler, Fuel Oil	SVOC	Perylene	lbs/Mgal	10200402	3	9.17E-07	1.52E-06	0.00	10200403	3	1.09E-07	9.58E-08	0.00	No
Boiler, Fuel Oil	VOC	Acetaldehyde	lbs/Mgal	10100401	3	5.33E-03	4.23E-03	0.82	10200401	3	4.86E-03	4.86E-04	0.00	No
Boiler, Fuel Oil	VOC	Acetaldehyde	lbs/Mgal	10100401	3	5.33E-03	4.23E-03	0.82	10200403	6	1.04E-03	1.20E-03	0.75	Yes
Boiler, Fuel Oil	VOC	Acetaldehyde	lbs/Mgal	10200401	3	4.86E-03	4.86E-04	0.00	10200403	6	1.04E-03	1.20E-03	0.75	Yes
Boiler, Fuel Oil	VOC	Acrolein	lbs/Mgal	10200401	3	4.86E-03	4.86E-04	0.00	10200403	3	2.17E-03	1.03E-03	0.00	Yes
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10100401	9	3.49E-04	2.54E-05	0.00	10200401	21	4.00E-02	1.12E-01	0.97	No
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10100401	9	3.49E-04	2.54E-05	0.00	10200402	2	3.82E-03	6.70E-04	0.56	Yes
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10100401	9	3.49E-04	2.54E-05	0.00	10200403	3	4.63E-03	1.51E-04	0.00	Yes
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10200401	21	4.00E-02	1.12E-01	0.97	10200402	2	3.82E-03	6.70E-04	0.56	No
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10200401	21	4.00E-02	1.12E-01	0.97	10200403	3	4.63E-03	1.51E-04	0.00	No
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	10200402	2	3.82E-03	6.70E-04	0.56	10200403	3	4.63E-03	1.51E-04	0.00	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10100401	9	4.90E-02	5.13E-02	1.00	10200401	12	8.82E-02	1.52E-01	0.99	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10100401	9	4.90E-02	5.13E-02	1.00	10200402	3	1.02E-03	7.55E-04	0.48	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10100401	9	4.90E-02	5.13E-02	1.00	10200403	6	6.72E-03	6.12E-03	0.18	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10200401	12	8.82E-02	1.52E-01	0.99	10200402	3	1.02E-03	7.55E-04	0.48	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10200401	12	8.82E-02	1.52E-01	0.99	10200403	6	6.72E-03	6.12E-03	0.18	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	10200402	3	1.02E-03	7.55E-04	0.48	10200403	6	6.72E-03	6.12E-03	0.18	No
Boiler, Fuel Oil	VOC	Toluene	lbs/Mgal	10200401	3	8.85E-03	3.86E-03	1.00	10200403	3	5.75E-03	1.88E-04	0.00	No
Boiler, Fuel Oil	VOC	Xylene (Total)	lbs/Mgal	10200401	3	7.52E-03	4.61E-03	1.00	10200403	3	1.10E-02	3.61E-04	0.00	No
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	30904010	3	6.67E-02	4.53E-02	1.00	30904020	5	1.04E+01	1.45E+01	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	30904010	3	7.64E+00	3.38E+00	1.00	30904020	6	1.73E+02	3.04E+02	1.00	No
Coating, Powder	Metals	Nickel	lbs/ton powder	30904010	3	3.08E+00	7.58E-01	1.00	30904020	1	3.21E+00		1.00	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20200102	15	2.08E-03	5.18E-03	1.00	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20300101	6	8.71E-04	1.33E-03	0.84	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	20200102	15	2.08E-03	5.18E-03	1.00	20300101	6	8.71E-04	1.33E-03	0.84	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20200102	15	2.87E-03	4.43E-03	1.00	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20300101	6	9.45E-04	7.35E-04	0.90	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	20200102	15	2.87E-03	4.43E-03	1.00	20300101	6	9.45E-04	7.35E-04	0.90	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	20100102	6	4.02E-03	2.94E-03	0.17	20200102	15	5.80E-04	8.01E-04	1.00	Yes
ICE, Diesel	PAH	Anthracene	lbs/Mgal	20100102	6	4.02E-03	2.94E-03	0.17	20300101	6	2.67E-04	2.33E-05	0.47	Yes
ICE, Diesel	PAH	Anthracene	lbs/Mgal	20200102	15	5.80E-04	8.01E-04	1.00	20300101	6	2.67E-04	2.33E-05	0.47	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	20100102	6	3.90E-03	3.06E-03	0.14	20200102	15	1.61E-04	1.76E-04	1.00	Yes
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	20100102	6	3.90E-03	3.06E-03	0.14	20300101	6	1.42E-04	1.52E-04	0.01	Yes
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	20200102	15	1.61E-04	1.76E-04	1.00	20300101	6	1.42E-04	1.52E-04	0.01	No

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20200102	15	1.81E-05	2.28E-05	0.19	Yes
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	20100102	6	3.35E-03	3.67E-03	0.00	20300101	6	1.40E-04	1.53E-04	0.00	No
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	20200102	15	1.81E-05	2.28E-05	0.19	20300101	6	1.40E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	20100102	3	6.70E-03	1.84E-05	0.00	20200102	12	8.31E-05	7.26E-05	0.63	Yes
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	20100102	3	6.70E-03	1.84E-05	0.00	20300101	6	1.44E-04	1.49E-04	0.03	Yes
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	20200102	12	8.31E-05	7.26E-05	0.63	20300101	6	1.44E-04	1.49E-04	0.03	No
ICE, Diesel	PAH	Benzo(b+k)fluoranthene	lbs/Mgal	20100102	3	2.85E-06	1.15E-07	0.00	20200102	3	1.44E-08	2.72E-08	0.00	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	20100102	6	3.42E-03	3.48E-03	0.05	20200102	15	4.52E-05	4.40E-05	0.65	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	20100102	6	3.42E-03	3.48E-03	0.05	20300101	6	1.42E-04	1.51E-04	0.02	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	20200102	15	4.52E-05	4.40E-05	0.65	20300101	6	1.42E-04	1.51E-04	0.02	Yes
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	20100102	3	6.70E-03	1.84E-05	0.00	20200102	12	2.42E-05	2.33E-05	0.70	Yes
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	20100102	3	6.70E-03	1.84E-05	0.00	20300101	6	1.41E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	20200102	12	2.42E-05	2.33E-05	0.70	20300101	6	1.41E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	20100102	6	3.68E-03	3.42E-03	0.05	20200102	15	7.43E-05	7.53E-05	1.00	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	20100102	6	3.68E-03	3.42E-03	0.05	20300101	6	1.53E-04	1.39E-04	0.09	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	20200102	15	7.43E-05	7.53E-05	1.00	20300101	6	1.53E-04	1.39E-04	0.09	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	20100102	6	3.49E-03	3.61E-03	0.04	20200102	15	4.27E-05	4.44E-05	0.28	Yes
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	20100102	6	3.49E-03	3.61E-03	0.04	20300101	6	1.40E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	20200102	15	4.27E-05	4.44E-05	0.28	20300101	6	1.40E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	20100102	6	4.00E-03	2.96E-03	0.16	20200102	15	9.45E-04	8.20E-04	1.00	Yes
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	20100102	6	4.00E-03	2.96E-03	0.16	20300101	6	2.84E-04	2.40E-05	0.51	Yes
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	20200102	15	9.45E-04	8.20E-04	1.00	20300101	6	2.84E-04	2.40E-05	0.51	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	20100102	6	2.11E-02	1.61E-02	0.96	20200102	15	3.82E-03	3.61E-03	1.00	Yes
ICE, Diesel	PAH	Fluorene	lbs/Mgal	20100102	6	2.11E-02	1.61E-02	0.96	20300101	6	6.49E-04	4.23E-04	0.78	Yes
ICE, Diesel	PAH	Fluorene	lbs/Mgal	20200102	15	3.82E-03	3.61E-03	1.00	20300101	6	6.49E-04	4.23E-04	0.78	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	20100102	6	3.48E-03	3.65E-03	0.03	20200102	15	3.94E-05	4.34E-05	0.34	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	20100102	6	3.48E-03	3.65E-03	0.03	20300101	6	1.40E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	20200102	15	3.94E-05	4.34E-05	0.34	20300101	6	1.40E-04	1.53E-04	0.00	Yes
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	20100102	6	5.64E-02	4.16E-02	1.00	20200102	15	3.92E-02	5.28E-02	1.00	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	20100102	6	5.64E-02	4.16E-02	1.00	20300101	6	1.56E-02	1.41E-02	1.00	Yes
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	20200102	15	3.92E-02	5.28E-02	1.00	20300101	6	1.56E-02	1.41E-02	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	20100102	6	3.90E-02	2.99E-02	1.00	20200102	15	7.27E-03	7.13E-03	1.00	Yes
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	20100102	6	3.90E-02	2.99E-02	1.00	20300101	6	3.11E-03	3.07E-03	1.00	Yes
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	20200102	15	7.27E-03	7.13E-03	1.00	20300101	6	3.11E-03	3.07E-03	1.00	No
ICE, Diesel	PAH	Pyrene	lbs/Mgal	20100102	6	8.42E-03	3.11E-03	0.73	20200102	15	6.57E-04	4.83E-04	1.00	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	20100102	6	8.42E-03	3.11E-03	0.73	20300101	6	2.37E-04	5.42E-05	0.41	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	20200102	15	6.57E-04	4.83E-04	1.00	20300101	6	2.37E-04	5.42E-05	0.41	No
ICE, Diesel	VOC	Benzene	lbs/Mgal	20100102	3	3.25E-02	4.18E-03	1.00	20200102	9	1.15E-01	4.80E-02	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	20100102	3	3.25E-02	4.18E-03	1.00	20300101	3	2.85E-01	4.33E-02	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	20200102	9	1.15E-01	4.80E-02	1.00	20300101	3	2.85E-01	4.33E-02	1.00	Yes

TABLE A6-1. SCC COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description SCC	Size	Average	Standard Deviation	Detect Ratio	Description SCC	Size	Average	Standard Deviation	Detect Ratio	
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	20100102	6	1.11E+00	1.14E+00	1.00	20200102	15	7.47E-02	9.47E-02	1.00	Yes
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	20100102	6	1.11E+00	1.14E+00	1.00	20300101	6	8.79E-02	6.83E-02	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	20200102	15	7.47E-02	9.47E-02	1.00	20300101	6	8.79E-02	6.83E-02	1.00	No
ICE, Diesel	VOC	Propylene	lbs/Mgal	20200102	9	3.67E-01	1.62E-01	1.00	20300101	3	2.97E-01	4.54E-02	1.00	No
ICE, Diesel	VOC	Toluene	lbs/Mgal	20200102	9	4.92E-02	1.88E-02	1.00	20300101	3	1.51E-02	6.93E-03	1.00	Yes
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	20200102	9	4.92E-02	1.88E-02	1.00	20300101	3	1.51E-02	6.93E-03	1.00	Yes
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	20100201	12	3.88E+00	1.35E+00	1.00	20200203	24	9.17E-01	2.02E+00	1.00	Yes
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	20100201	12	3.88E+00	1.35E+00	1.00	20200201	3	4.68E+00	8.15E-01	1.00	No
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	20100201	12	3.88E+00	1.35E+00	1.00	20200203	25	9.17E-01	2.02E+00	1.00	Yes
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	20200201	3	4.68E+00	8.15E-01	1.00	20200203	25	9.17E-01	2.02E+00	1.00	Yes

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics				Second Sample Statistics				Significant Difference at 95% Confidence		
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average		Standard Deviation	Detect Ratio
Asphalt Prod., Oil	Metals	Arsenic	lbs/ton production	C/BH	5	4.11E-06	7.36E-07	0.21	C/W/S	3	2.37E-06	1.60E-06	1.00	No
Asphalt Prod., Oil	Metals	Beryllium	lbs/ton production	C/BH	5	3.83E-07	6.98E-08	0.00	C/W/S	3	4.16E-07	2.80E-08	0.00	No
Asphalt Prod., Oil	Metals	Cadmium	lbs/ton production	C/BH	5	7.72E-07	1.81E-07	0.00	C/W/S	3	7.67E-07	9.69E-07	0.82	No
Asphalt Prod., Oil	Metals	Chromium (Hex)	lbs/ton production	C/BH	5	6.26E-07	1.33E-07	0.00	C/W/S	3	1.04E-07	3.14E-08	1.00	Yes
Asphalt Prod., Oil	Metals	Chromium (Total)	lbs/ton production	C/BH	5	1.13E-06	8.81E-08	1.00	C/W/S	3	9.04E-08	7.40E-08	1.00	No
Asphalt Prod., Oil	Metals	Copper	lbs/ton production	C/BH	5	7.89E-06	2.84E-06	1.00	C/W/S	3	6.01E-06	2.96E-06	1.00	No
Asphalt Prod., Oil	Metals	Lead	lbs/ton production	C/BH	5	3.74E-06	2.24E-06	1.00	C/W/S	3	1.41E-06	6.60E-07	1.00	No
Asphalt Prod., Oil	Metals	Manganese	lbs/ton production	C/BH	5	2.09E-06	2.24E-06	1.00	C/W/S	3	1.41E-06	6.60E-07	1.00	Yes
Asphalt Prod., Oil	Metals	Mercury	lbs/ton production	C/BH	5	3.67E-06	3.32E-06	1.00	C/W/S	3	7.02E-06	5.71E-06	1.00	No
Asphalt Prod., Oil	Metals	Nickel	lbs/ton production	C/BH	5	1.98E-04	2.55E-04	1.00	C/W/S	3	8.42E-06	2.63E-06	1.00	No
Asphalt Prod., Oil	Metals	Selenium	lbs/ton production	C/BH	5	1.11E-06	1.03E-06	0.00	C/W/S	3	2.08E-07	1.40E-08	0.00	Yes
Asphalt Prod., Oil	Metals	Zinc	lbs/ton production	C/BH	5	1.62E-04	1.43E-04	1.00	C/W/S	3	2.62E-05	8.55E-06	1.00	No
Asphalt Prod., Oil	PAH	Acenaphthene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	3.06E-07	8.20E-08	1.00	No
Asphalt Prod., Oil	PAH	Acenaphthylene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	5.28E-07	2.35E-07	1.00	No
Asphalt Prod., Oil	PAH	Anthracene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	5.74E-08	1.78E-08	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(a)anthracene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	1.11E-08	2.14E-09	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(a)pyrene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	1.84E-09	1.84E-09	0.72	Yes
Asphalt Prod., Oil	PAH	Benzo(b)fluoranthene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	2.10E-09	2.45E-10	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(g,h,i)perylene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	1.20E-09	2.59E-10	0.76	Yes
Asphalt Prod., Oil	PAH	Benzo(k)fluoranthene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Chrysene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Dibenz(a,h)anthracene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Fluoranthene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	3.57E-08	9.68E-09	1.00	Yes
Asphalt Prod., Oil	PAH	Fluorene	lbs/ton production	C/BH	5	3.17E-06	3.24E-06	1.00	C/W/S	3	6.56E-07	2.07E-07	1.00	No
Asphalt Prod., Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Naphthalene	lbs/ton production	C/BH	5	2.38E-04	2.50E-04	1.00	C/W/S	3	3.08E-06	2.70E-06	1.00	No
Asphalt Prod., Oil	PAH	Phenanthrene	lbs/ton production	C/BH	5	2.73E-06	2.52E-06	1.00	C/W/S	3	6.84E-07	2.18E-07	1.00	No
Asphalt Prod., Oil	PAH	Pyrene	lbs/ton production	C/BH	5	3.62E-07	1.88E-07	0.00	C/W/S	3	5.62E-08	2.23E-08	1.00	Yes
Asphalt Prod., Oil	VOC	Benzene	lbs/ton production	C/BH	5	6.00E-04	1.28E-03	1.00	C/W/S	3	5.90E-06	1.11E-06	1.00	Yes
Asphalt Prod., Oil	VOC	Formaldehyde	lbs/ton production	C/BH	5	5.44E-04	4.15E-04	1.00	C/W/S	3	1.38E-04	2.29E-05	1.00	No
Boiler, Ref. Gas	SVOC	Phenol	lbs/MMcf	NONE	12	2.65E-03	1.91E-03	0.85	SCR	3	7.80E-04	4.53E-05	0.00	No
Boiler, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	NONE	16	1.19E-01	2.38E-01	1.00	SCR	3	2.13E-03	6.87E-04	1.00	No
Boiler, Ref. Gas	VOC	Benzene	lbs/MMcf	NONE	16	1.28E-01	1.98E-01	0.82	SCR	3	5.04E-01	7.73E-01	0.82	No
Boiler, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	NONE	16	3.97E-01	8.05E-01	1.00	SCR	3	1.93E-02	1.92E-02	1.00	No
Boiler, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	NONE	19	5.42E-01	4.03E-01	0.00	SCR	3	6.38E-02	2.02E-03	0.00	No
Boiler, Ref. Gas	VOC	Toluene	lbs/MMcf	NONE	9	3.02E-01	3.34E-01	0.85	SCR	3	1.71E+00	2.85E+00	0.97	No
Catalytic Reformer	Dioxin/Furan	Dioxin:4D 2378	lbs/1000 Barrels	AC	3	1.93E-11	1.33E-11	0.00	NONE	3	1.46E-11	5.15E-12	0.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:4D Total	lbs/1000 Barrels	AC	3	1.93E-11	1.33E-11	0.00	NONE	3	1.46E-11	5.15E-12	0.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:5D 12378	lbs/1000 Barrels	AC	3	8.57E-12	1.81E-12	0.00	NONE	3	1.11E-11	1.88E-11	0.42	Yes
Catalytic Reformer	Dioxin/Furan	Dioxin:5D Total	lbs/1000 Barrels	AC	3	3.95E-11	4.88E-11	0.00	NONE	3	1.11E-10	7.82E-11	1.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:6D 123478	lbs/1000 Barrels	AC	3	2.39E-11	9.02E-12	0.00	NONE	3	3.73E-11	5.00E-12	0.36	No
Catalytic Reformer	Dioxin/Furan	Dioxin:6D 123678	lbs/1000 Barrels	AC	3	2.61E-11	8.53E-12	0.00	NONE	3	3.44E-11	1.52E-11	0.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:6D 123789	lbs/1000 Barrels	AC	3	2.29E-11	9.46E-12	0.00	NONE	3	3.18E-11	9.28E-12	0.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:8D Total	lbs/1000 Barrels	AC	3	8.65E-11	8.20E-11	0.70	NONE	3	3.99E-10	2.69E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:7D 1234678	lbs/1000 Barrels	AC	3	1.19E-10	2.74E-11	0.72	NONE	3	2.19E-10	1.26E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Dioxin:7D Total	lbs/1000 Barrels	AC	3	1.92E-10	8.80E-11	0.82	NONE	3	4.33E-10	3.01E-10	1.00	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description	Size	Average	Standard Deviation	Detect Ratio	Description	Size	Average	Standard Deviation	Detect Ratio	
				APCS					APCS					
Catalytic Reformer	Dioxin/Furan	Dioxin:8D	lbs/1000 Barrels	AC	3	8.37E-10	4.97E-10	1.00	NONE	3	7.95E-10	1.07E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:4F 2378	lbs/1000 Barrels	AC	3	1.79E-11	1.16E-11	0.00	NONE	3	7.22E-11	5.40E-11	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:4F Total	lbs/1000 Barrels	AC	3	2.82E-10	2.46E-10	1.00	NONE	3	8.42E-10	3.95E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:5F 12378	lbs/1000 Barrels	AC	3	3.37E-11	1.46E-11	0.61	NONE	3	1.46E-10	8.94E-11	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:5F 23478	lbs/1000 Barrels	AC	3	6.64E-11	3.01E-11	0.73	NONE	3	3.41E-10	2.87E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:5F Total	lbs/1000 Barrels	AC	3	4.47E-10	2.25E-10	1.00	NONE	3	1.69E-09	1.23E-09	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:6F 123478	lbs/1000 Barrels	AC	3	7.44E-11	2.14E-11	0.77	NONE	3	3.23E-10	3.11E-10	1.00	Yes
Catalytic Reformer	Dioxin/Furan	Furan:6F 123678	lbs/1000 Barrels	AC	3	9.99E-11	4.77E-11	0.81	NONE	3	3.36E-10	1.44E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:6F 123789	lbs/1000 Barrels	AC	3	3.31E-11	1.47E-11	0.00	NONE	3	4.26E-11	7.73E-12	0.00	No
Catalytic Reformer	Dioxin/Furan	Furan:6F 234678	lbs/1000 Barrels	AC	3	1.96E-10	1.32E-10	0.88	NONE	3	3.81E-10	1.85E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:6F Total	lbs/1000 Barrels	AC	3	7.39E-10	4.51E-10	1.00	NONE	3	2.74E-10	3.39E-10	1.00	Yes
Catalytic Reformer	Dioxin/Furan	Furan:7F 1234678	lbs/1000 Barrels	AC	3	2.90E-10	3.81E-10	0.99	NONE	3	9.15E-10	1.08E-09	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:7F 1234789	lbs/1000 Barrels	AC	3	1.73E-10	2.60E-10	0.91	NONE	3	2.69E-10	2.02E-10	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:7F Total	lbs/1000 Barrels	AC	3	5.40E-10	7.58E-10	0.99	NONE	3	1.52E-09	1.74E-09	1.00	No
Catalytic Reformer	Dioxin/Furan	Furan:8F	lbs/1000 Barrels	AC	3	1.48E-10	9.99E-11	0.43	NONE	3	3.14E-10	3.81E-10	1.00	No
Coating, Base/Catalyst/Water Mix	Metals	Chromium (Hex)	lbs/gal paint	AF	9	7.76E-05	8.77E-05	0.95	S	9	8.42E-05	9.11E-05	1.00	Yes
Coating, Base/Catalyst/Water Mix	Metals	Chromium (Total)	lbs/gal paint	AF	9	9.58E-05	9.45E-05	0.95	S	9	9.41E-05	9.10E-05	1.00	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	AF	2	4.81E-01	1.69E-01	1.00	NONE	8	8.61E+00	1.37E+01	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	AF	2	5.88E-01	3.08E-01	1.00	NONE	7	1.52E+02	2.84E+02	1.00	No
Coating, Powder	Metals	Nickel	lbs/ton powder	AE	1	3.21E+00		1.00	NONE	3	3.08E+00	7.68E-01	1.00	No
Dryer, Pot ash	Metals	Arsenic	lbs/ton ore	BH	3	2.40E-03	5.74E-04	1.00	S	3	4.88E-03	6.08E-03	1.00	No
Dryer, Pot ash	Metals	Beryllium	lbs/ton ore	BH	3	2.87E-04	1.22E-04	0.00	S	3	1.04E-05	5.10E-06	0.42	Yes
Dryer, Pot ash	Metals	Lead	lbs/ton ore	BH	3	1.43E-03	6.12E-04	0.00	S	3	5.20E-05	2.69E-05	0.42	Yes
Dryer, Pot ash	SVOC	1,2-Dichlorobenzene	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	SVOC	Ethylbenzene	lbs/ton ore	BH	3	3.58E-04	5.68E-04	0.93	S	3	8.79E-06	5.25E-07	0.00	No
Dryer, Pot ash	VOC	1,1,1-Trichloroethane	lbs/ton ore	BH	3	6.78E-03	8.26E-03	1.00	S	3	6.18E-05	1.04E-04	0.98	No
Dryer, Pot ash	VOC	1,1,2,2-Tetrachloroethane	lbs/ton ore	BH	3	6.30E-04	5.13E-04	0.98	S	3	3.84E-06	0.00E+00	0.00	No
Dryer, Pot ash	VOC	1,1,2-Trichloroethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	1,1-Dichloroethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	1,1-Dichloroethane	lbs/ton ore	BH	3	6.43E-05	4.76E-05	0.81	S	3	1.82E-06	0.00E+00	0.00	No
Dryer, Pot ash	VOC	1,2-Dichloroethane	lbs/ton ore	BH	3	7.24E-05	6.15E-05	0.88	S	3	1.82E-06	0.00E+00	0.00	No
Dryer, Pot ash	VOC	1,2-Dichloroethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	1,2-Dichloropropane	lbs/ton ore	BH	3	1.19E-04	9.51E-05	0.56	S	3	1.82E-06	0.00E+00	0.00	No
Dryer, Pot ash	VOC	Acetone	lbs/ton ore	BH	1	4.43E-03		0.00	S	3	3.38E+00	5.73E+00	1.00	No
Dryer, Pot ash	VOC	Benzene	lbs/ton ore	BH	3	1.33E-02	6.83E-03	1.00	S	3	1.63E-04	1.18E-04	1.00	Yes
Dryer, Pot ash	VOC	Bromodichloromethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	2	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Bromoform	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Bromomethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Carbon disulfide	lbs/ton ore	BH	3	6.00E-04		1.00	S	3	2.24E-05	3.57E-05	0.00	Yes
Dryer, Pot ash	VOC	Carbon Tetrachloride	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Chlorobenzene	lbs/ton ore	BH	3	7.43E-04	2.25E-04	1.00	S	2	2.73E-06	1.29E-06	1.00	Yes
Dryer, Pot ash	VOC	Chloroethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Chloroform	lbs/ton ore	BH	3	1.10E-04	1.39E-04	0.82	S	3	8.79E-06	5.25E-07	0.00	No
Dryer, Pot ash	VOC	Chloromethane	lbs/ton ore	BH	3	3.34E-04	2.51E-04	0.88	S	3	1.82E-06	0.00E+00	0.00	No
Dryer, Pot ash	VOC	Dibromochloromethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-06	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Dichloromethane	lbs/ton ore	BH	3	1.38E-01	1.46E-01	1.00	S	3	1.19E-02	1.33E-02	1.00	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average	Standard Deviation	Detect Ratio	
Dryer, Pot ash	VOC	Formaldehyde	lbs/ton ore	BH	3	2.28E-01	3.79E-02	1.00	S	3	6.42E-03	2.65E-03	1.00	Yes
Dryer, Pot ash	VOC	Methyl Ethyl Ketone	lbs/ton ore	BH	3	1.49E-02	2.18E-02	0.10	S	3	1.81E-04	2.08E-04	1.00	No
Dryer, Pot ash	VOC	Styrene	lbs/ton ore	BH	2	7.36E-04	9.79E-04	0.97	S	3	1.82E-08	0.00E+00	0.00	No
Dryer, Pot ash	VOC	Tetrachloroethene	lbs/ton ore	BH	3	3.52E-05	1.57E-05	0.00	S	3	1.82E-08	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Toluene	lbs/ton ore	BH	2	1.34E-02	1.21E-02	1.00	S	3	8.48E-05	6.95E-05	1.00	Yes
Dryer, Pot ash	VOC	Trichloroethene	lbs/ton ore	BH	3	1.83E-04	1.93E-04	0.73	S	3	1.82E-08	0.00E+00	0.00	No
Dryer, Pot ash	VOC	Trichlorofluoromethane	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-08	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Vinyl Chloride	lbs/ton ore	BH	3	3.95E-05	8.25E-06	0.00	S	3	1.82E-08	0.00E+00	0.00	Yes
Dryer, Pot ash	VOC	Xylene (Total)	lbs/ton ore	BH	3	3.09E-03	1.23E-03	1.00	S	3	8.73E-05	1.45E-04	0.97	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	ESP	3	2.89E-11	1.03E-11	0.00	FF	9	1.81E-10	2.00E-10	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	ESP	3	3.28E-11	1.14E-11	0.00	EE	9	4.24E-10	5.18E-10	0.26	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	ESP	3	4.36E-11	4.86E-12	0.29	FF	9	4.67E-10	6.12E-10	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	ESP	3	6.38E-11	2.75E-11	0.50	FF	9	4.80E-10	6.33E-10	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	ESP	3	4.77E-11	8.26E-12	0.40	FF	9	4.36E-10	6.00E-10	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	ESP	3	6.80E-10	2.02E-10	1.00	EE	9	2.81E-09	4.28E-09	0.99	No
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	ESP	3	6.89E-09	2.53E-09	1.00	EE	9	1.96E-08	2.97E-08	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	ESP	3	1.29E-10	5.26E-11	1.00	EE	9	1.19E-09	2.02E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	ESP	3	6.27E-11	2.28E-11	1.00	EE	9	1.11E-09	1.82E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	ESP	3	1.03E-10	2.60E-11	1.00	EE	9	1.60E-09	2.47E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	ESP	3	7.59E-11	3.96E-11	1.00	EE	9	8.60E-10	7.92E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	ESP	3	1.12E-10	5.11E-11	1.00	EE	9	5.63E-10	7.72E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	ESP	3	2.77E-11	2.63E-11	0.70	FF	9	2.47E-10	4.07E-10	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	ESP	3	3.02E-10	2.69E-10	1.00	EE	9	8.16E-10	8.55E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	ESP	3	1.37E-09	1.44E-09	1.00	EE	9	2.69E-09	3.59E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	ESP	3	8.97E-11	9.71E-11	0.92	EE	9	2.80E-10	4.56E-10	0.56	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	ESP	3	1.61E-09	1.85E-09	1.00	EE	9	1.87E-09	3.06E-09	0.82	No
FBC, Biomass	PAH	Acenaphthene	lbs/ton	ESP	3	7.04E-07	3.53E-07	1.00	EE	9	8.51E-06	7.92E-06	0.39	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	ESP	3	2.87E-05	1.31E-05	1.00	EE	9	3.18E-05	6.79E-05	0.95	No
FBC, Biomass	PAH	Anthracene	lbs/ton	ESP	3	5.88E-07	1.92E-07	1.00	EE	9	4.32E-06	5.98E-06	0.07	No
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	ESP	3	2.05E-08	4.18E-09	0.74	EE	9	4.05E-08	6.16E-08	0.01	No
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	ESP	3	1.84E-08	6.23E-10	0.00	EE	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	ESP	3	1.25E-07	1.86E-08	1.00	EE	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	ESP	3	5.94E-08	3.59E-08	1.00	FF	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	ESP	3	3.00E-08	9.88E-09	1.00	FF	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Chrysene	lbs/ton	ESP	3	2.35E-07	3.52E-08	1.00	FF	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	ESP	3	1.84E-08	6.23E-10	0.00	FF	9	4.03E-08	6.17E-08	0.00	No
FBC, Biomass	PAH	Fluoranthene	lbs/ton	ESP	3	6.73E-08	2.44E-08	1.00	EE	9	1.71E-05	2.39E-05	1.00	No
FBC, Biomass	PAH	Fluorene	lbs/ton	ESP	3	1.32E-06	6.67E-07	1.00	EE	9	4.59E-06	5.81E-06	0.13	No
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	ESP	3	2.47E-08	1.15E-08	0.78	FF	9	4.03E-06	6.17E-06	0.00	No
FBC, Biomass	PAH	Naphthalene	lbs/ton	ESP	3	2.99E-04	9.94E-05	1.00	EE	9	2.40E-03	3.83E-03	1.00	No
FBC, Biomass	PAH	Phenanthrene	lbs/ton	ESP	3	1.92E-05	5.38E-06	1.00	EE	9	4.34E-05	6.02E-05	1.00	No
FBC, Biomass	PAH	Pyrene	lbs/ton	ESP	3	4.78E-06	1.86E-06	1.00	EE	9	1.69E-05	2.55E-05	1.00	No
FBC, Biomass	PCB	PCB:Decachlorinated biphenyls	lbs/ton	ESP	3	6.47E-10	2.09E-10	0.00	FF	9	3.58E-09	1.88E-09	0.69	Yes
FBC, Biomass	PCB	PCB:Dichlorinated biphenyls	lbs/ton	ESP	3	1.53E-08	4.82E-09	0.00	EE	9	6.88E-07	7.98E-07	0.94	No
FBC, Biomass	PCB	PCB:Heptachlorinated biphenyls	lbs/ton	ESP	3	7.82E-10	6.88E-11	0.00	EE	9	1.69E-08	1.46E-08	0.87	No
FBC, Biomass	PCB	PCB:Hexachlorinated biphenyls	lbs/ton	ESP	3	1.32E-09	6.27E-10	0.00	EE	9	3.32E-08	3.25E-08	1.00	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics				Second Sample Statistics				Significant Difference at 95% Confidence		
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average		Standard Deviation	Detect Ratio
FBC, Biomass	PCB	PCB:Monochlorinated biphenyls	lbs/ton	ESP	3	2.43E-08	3.07E-09	1.00	FF	8	1.81E-07	1.55E-07	1.00	No
FBC, Biomass	PCB	PCB:Nonachlorinated biphenyls	lbs/ton	ESP	3	8.25E-10	2.77E-10	0.00	FF	8	3.04E-09	1.60E-09	0.87	No
FBC, Biomass	PCB	PCB:Octachlorinated biphenyls	lbs/ton	ESP	3	1.16E-09	2.65E-10	0.00	FF	8	5.04E-08	1.58E-08	0.00	Yes
FBC, Biomass	PCB	PCB:Pentachlorinated biphenyls	lbs/ton	ESP	3	4.61E-09	1.92E-09	1.00	FF	8	6.08E-08	6.48E-08	0.98	No
FBC, Biomass	PCB	PCB:Tetrachlorinated biphenyls	lbs/ton	ESP	3	1.68E-08	4.54E-09	1.00	FF	8	1.86E-07	1.74E-07	1.00	No
FBC, Biomass	PCB	PCB:Trichlorinated biphenyls	lbs/ton	ESP	3	1.63E-08	4.08E-09	1.00	FF	8	2.18E-08	2.63E-08	1.00	No
FBC, Biomass	VOC	Formaldehyde	lbs/ton	ESP	3	3.88E-04	1.35E-04	1.00	FF	8	8.80E-03	1.11E-02	1.00	No
Heater, Ref. Gas	Metals	Antimony	lbs/MMcf	DeNOx	3	5.81E-04	3.14E-04	1.00	NONE	3	3.30E-04	4.28E-04	0.83	No
Heater, Ref. Gas	Metals	Arsenic	lbs/MMcf	DeNOx	3	9.54E-04	5.74E-04	1.00	NONE	9	6.92E-04	4.28E-04	0.38	No
Heater, Ref. Gas	Metals	Barium	lbs/MMcf	DeNOx	3	6.49E-03	1.59E-04	0.00	NONE	3	1.33E-03	2.20E-04	1.00	Yes
Heater, Ref. Gas	Metals	Beryllium	lbs/MMcf	DeNOx	3	2.88E-04	7.08E-08	0.00	NONE	9	1.28E-04	7.36E-06	0.00	Yes
Heater, Ref. Gas	Metals	Cadmium	lbs/MMcf	DeNOx	3	1.11E-03	2.08E-04	1.00	NONE	9	3.97E-04	9.13E-05	0.27	Yes
Heater, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	DeNOx	3	2.43E-03	1.12E-04	0.00	NONE	9	2.20E-04	3.16E-04	0.08	Yes
Heater, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	DeNOx	3	2.43E-03	1.12E-04	0.00	SCR	3	2.62E-03	1.34E-04	1.00	No
Heater, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	NONE	9	2.20E-04	3.16E-04	0.08	SCR	3	2.62E-03	1.34E-04	1.00	Yes
Heater, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	DeNOx	3	1.20E-03	8.34E-04	0.60	NONE	2	1.58E-03	4.28E-04	0.33	No
Heater, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	DeNOx	3	1.20E-03	8.34E-04	0.60	SCR	3	6.08E-04	1.94E-04	1.00	No
Heater, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	NONE	9	1.20E-03	8.34E-04	0.60	SCR	3	6.08E-04	1.94E-04	1.00	Yes
Heater, Ref. Gas	Metals	Copper	lbs/MMcf	DeNOx	3	4.73E-03	5.05E-03	1.00	NONE	9	4.81E-03	4.69E-03	0.78	No
Heater, Ref. Gas	Metals	Lead	lbs/MMcf	DeNOx	3	3.48E-03	2.18E-03	1.00	NONE	9	9.39E-04	5.29E-04	0.87	Yes
Heater, Ref. Gas	Metals	Manganese	lbs/MMcf	DeNOx	3	7.55E-03	1.77E-03	1.00	NONE	6	1.80E-03	5.63E-04	1.00	Yes
Heater, Ref. Gas	Metals	Mercury	lbs/MMcf	DeNOx	3	2.02E-04	1.31E-05	0.38	NONE	9	4.74E-04	3.75E-04	0.00	No
Heater, Ref. Gas	Metals	Nickel	lbs/MMcf	DeNOx	3	1.06E-02	1.58E-02	0.95	NONE	9	3.39E-03	2.08E-03	0.72	No
Heater, Ref. Gas	Metals	Phosphorus	lbs/MMcf	DeNOx	3	7.21E-04	1.77E-05	0.00	NONE	3	1.74E-02	2.46E-03	0.00	Yes
Heater, Ref. Gas	Metals	Selenium	lbs/MMcf	DeNOx	3	2.20E-05	6.88E-06	0.78	NONE	9	5.81E-03	1.38E-02	0.98	No
Heater, Ref. Gas	Metals	Silver	lbs/MMcf	DeNOx	3	1.81E-03	1.85E-03	0.94	NONE	3	1.25E-04	3.93E-05	1.00	No
Heater, Ref. Gas	Metals	Thallium	lbs/MMcf	DeNOx	3	6.49E-03	1.59E-04	0.00	NONE	3	4.36E-05	6.15E-08	0.00	Yes
Heater, Ref. Gas	Metals	Zinc	lbs/MMcf	DeNOx	3	2.34E-02	1.21E-02	1.00	NONE	9	9.69E-03	6.86E-03	1.00	Yes
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	DeNOx	3	2.30E-06	7.92E-07	0.80	NONE	32	2.19E-05	8.13E-05	0.89	No
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	DeNOx	3	2.30E-06	7.92E-07	0.80	SCR	3	6.61E-06	3.22E-06	1.00	No
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	NONE	32	2.19E-05	8.13E-05	0.89	SCR	3	6.61E-06	3.22E-06	1.00	No
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	DeNOx	3	1.40E-06	1.45E-08	0.00	NONE	32	1.15E-05	2.44E-05	0.77	No
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	DeNOx	3	1.40E-06	1.45E-08	0.00	SCR	2	4.20E-06	2.48E-06	1.00	No
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	NONE	32	1.15E-05	2.44E-05	0.77	SCR	2	4.20E-06	2.48E-06	1.00	No
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	DeNOx	3	2.20E-06	7.35E-07	0.79	NONE	32	3.80E-05	1.01E-04	0.89	No
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	DeNOx	3	2.20E-06	7.35E-07	0.79	SCR	3	3.78E-06	2.44E-06	0.89	No
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	NONE	32	3.80E-05	1.01E-04	0.89	SCR	3	3.78E-06	2.44E-06	0.89	No
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	DeNOx	3	2.34E-06	3.81E-07	1.00	NONE	47	2.92E-05	7.89E-05	0.88	No
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	DeNOx	3	2.34E-06	3.81E-07	1.00	SCR	3	8.35E-06	6.88E-06	1.00	No
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	NONE	47	2.92E-05	7.89E-05	0.88	SCR	3	8.35E-06	6.88E-06	1.00	No
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	DeNOx	3	1.40E-06	1.45E-08	0.00	NONE	47	5.81E-05	2.56E-04	0.98	No
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	DeNOx	3	1.40E-06	1.45E-08	0.00	SCR	3	1.29E-06	5.67E-09	0.33	Yes
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	NONE	47	5.81E-05	2.56E-04	0.98	SCR	3	1.29E-06	5.67E-09	0.33	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	DeNOx	3	3.20E-06	1.42E-08	1.00	NONE	47	4.87E-05	1.41E-04	0.99	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	DeNOx	3	3.20E-06	1.42E-08	1.00	SCR	3	4.24E-06	2.16E-06	1.00	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	NONE	47	4.87E-05	1.41E-04	0.99	SCR	3	4.24E-06	2.16E-06	1.00	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average	Standard Deviation	Detect Ratio	
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	NONE	32	3.42E-06	7.84E-06	0.72	No
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	SCR	3	1.67E-06	4.76E-07	0.45	No
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	NONE	32	3.42E-06	7.84E-06	0.72	SCR	3	1.67E-06	4.76E-07	0.45	No
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	NONE	47	2.20E-05	6.88E-05	0.98	No
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	SCR	3	1.30E-06	9.16E-09	0.34	Yes
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	NONE	47	2.20E-05	6.88E-05	0.98	SCR	3	1.30E-06	9.16E-09	0.34	No
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	DeNOx	3	2.94E-06	2.14E-06	0.84	NONE	32	4.61E-05	1.43E-04	0.99	No
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	DeNOx	3	2.94E-06	2.14E-06	0.84	SCR	3	3.01E-06	1.89E-06	1.00	No
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	NONE	32	4.61E-05	1.43E-04	0.99	SCR	3	3.01E-06	1.89E-06	1.00	No
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	NONE	47	7.28E-06	2.13E-05	0.14	No
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	SCR	3	1.26E-06	5.99E-08	0.00	Yes
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	NONE	47	7.28E-06	2.13E-05	0.14	SCR	3	1.26E-06	5.99E-08	0.00	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	DeNOx	3	3.88E-06	1.67E-06	1.00	NONE	32	7.89E-05	2.33E-04	0.98	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	DeNOx	3	3.88E-06	1.67E-06	1.00	SCR	3	2.90E-05	2.60E-05	1.00	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	NONE	32	7.89E-05	2.33E-04	0.98	SCR	3	2.90E-05	2.60E-05	1.00	No
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	DeNOx	3	8.45E-06	4.58E-06	1.00	NONE	32	2.02E-04	9.20E-04	0.94	No
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	DeNOx	3	8.45E-06	4.58E-06	1.00	SCR	3	2.36E-05	1.47E-05	1.00	No
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	NONE	32	2.02E-04	9.20E-04	0.94	SCR	3	2.36E-05	1.47E-05	1.00	No
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	NONE	47	6.60E-05	2.97E-04	0.98	No
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	DeNOx	3	1.40E-06	1.46E-06	0.00	SCR	3	1.39E-06	1.73E-07	0.38	No
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	NONE	47	6.60E-05	2.97E-04	0.98	SCR	3	1.39E-06	1.73E-07	0.38	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	DeNOx	3	1.57E-04	2.24E-05	1.00	NONE	32	1.50E-03	3.95E-03	0.84	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	DeNOx	3	1.57E-04	2.24E-05	1.00	SCR	3	1.85E-03	2.87E-03	1.00	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	NONE	32	1.50E-03	3.95E-03	0.84	SCR	3	1.85E-03	2.87E-03	1.00	No
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	DeNOx	3	1.48E-05	6.28E-06	1.00	NONE	32	1.88E-04	4.63E-04	0.80	No
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	DeNOx	3	1.48E-05	6.28E-06	1.00	SCR	3	1.25E-04	1.12E-04	1.00	No
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	NONE	32	1.88E-04	4.63E-04	0.80	SCR	3	1.25E-04	1.12E-04	1.00	No
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	DeNOx	3	3.63E-06	1.48E-06	1.00	NONE	32	9.34E-05	3.25E-04	0.98	No
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	DeNOx	3	3.63E-06	1.48E-06	1.00	SCR	3	1.10E-05	1.13E-05	1.00	No
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	NONE	32	9.34E-05	3.25E-04	0.98	SCR	3	1.10E-05	1.13E-05	1.00	No
Heater, Ref. Gas	SVOC	Ethylbenzene	lbs/MMcf	DeNOx	3	5.06E-02	0.00E+00	0.00	NONE	33	2.17E-02	3.34E-02	0.29	No
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	NONE	21	6.36E-03	1.50E-02	0.89	SCR	8	9.21E-03	1.03E-02	0.98	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	DeNOx	3	2.89E-02	4.12E-03	0.38	NONE	39	6.18E-02	5.25E-02	0.44	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	DeNOx	3	2.89E-02	4.12E-03	0.38	SCR	9	1.52E-02	1.85E-02	1.00	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	NONE	39	6.18E-02	5.25E-02	0.44	SCR	9	1.52E-02	1.85E-02	1.00	Yes
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	DeNOx	3	3.73E-02	0.00E+00	0.00	NONE	48	6.18E-02	9.40E-02	0.30	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	DeNOx	3	3.73E-02	0.00E+00	0.00	SCR	9	8.69E-02	5.93E-02	0.12	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	NONE	48	6.18E-02	9.40E-02	0.30	SCR	9	8.69E-02	5.93E-02	0.12	No
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	DeNOx	3	6.91E-02	2.27E-02	1.00	NONE	38	2.57E-01	7.03E-01	0.94	No
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	DeNOx	3	6.91E-02	2.27E-02	1.00	SCR	6	7.99E-03	6.03E-03	1.00	Yes
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	NONE	38	2.57E-01	7.03E-01	0.94	SCR	6	7.99E-03	6.03E-03	1.00	No
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	NONE	21	6.99E-01	6.51E-01	0.00	SCR	9	1.77E-01	1.25E-01	0.00	Yes
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	DeNOx	3	4.39E-02	0.00E+00	0.00	NONE	48	8.14E-02	1.82E-01	0.56	No
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	DeNOx	3	4.39E-02	0.00E+00	0.00	SCR	6	1.72E-01	6.88E-02	0.47	Yes
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	NONE	48	8.14E-02	1.82E-01	0.56	SCR	6	1.72E-01	6.88E-02	0.47	No
Heater, Ref. Gas	VOC	Xylene (Total)	lbs/MMcf	DeNOx	3	5.06E-02	0.00E+00	0.00	NONE	15	6.98E-02	6.17E-02	0.30	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average	Standard Deviation	Detect Ratio	
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	NONE	34	1.18E+00	2.29E+00	1.00	NSCR	6	7.39E-02	6.71E-02	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	NONE	34	1.34E+01	1.48E+01	0.99	NSCR	6	4.99E-02	6.30E-02	1.00	Yes
Incinerator, Medical Waste	Halogens	HCl	lbs/ton	NONE	3	4.99E+01	1.26E+01	1.00	S	3	6.43E-02	2.26E-02	1.00	Yes
Turbine, Natural Gas	PAH	Acenaphthene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	NONE	12	2.80E-05	4.00E-05	0.16	No
Turbine, Natural Gas	PAH	Acenaphthene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	SCR	3	6.76E-07	2.92E-07	0.28	Yes
Turbine, Natural Gas	PAH	Acenaphthene	lbs/MMcf	NONE	12	2.80E-05	4.00E-05	0.16	SCR	3	6.76E-07	2.92E-07	0.28	No
Turbine, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	COC/SCR	3	2.79E-06	2.59E-06	0.69	NONE	12	2.13E-05	3.22E-05	0.39	No
Turbine, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	COC/SCR	3	2.79E-06	2.59E-06	0.69	SCR	3	3.21E-07	2.04E-07	0.00	No
Turbine, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	NONE	12	2.13E-05	3.22E-05	0.39	SCR	3	3.21E-07	2.04E-07	0.00	No
Turbine, Natural Gas	PAH	Anthracene	lbs/MMcf	COC/SCR	3	5.43E-05	8.57E-05	1.00	NONE	12	3.70E-05	4.18E-05	0.31	No
Turbine, Natural Gas	PAH	Anthracene	lbs/MMcf	COC/SCR	3	5.43E-05	8.57E-05	1.00	SCR	3	6.08E-07	2.74E-07	0.00	No
Turbine, Natural Gas	PAH	Anthracene	lbs/MMcf	NONE	12	3.70E-05	4.18E-05	0.31	SCR	3	6.08E-07	2.74E-07	0.00	No
Turbine, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	COC/SCR	3	1.89E-06	5.05E-08	0.00	NONE	12	3.33E-05	5.31E-05	0.04	No
Turbine, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	COC/SCR	3	1.89E-06	5.05E-08	0.00	SCR	3	3.88E-07	7.64E-08	0.00	Yes
Turbine, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	NONE	12	3.33E-05	5.31E-05	0.04	SCR	3	3.88E-07	7.64E-08	0.00	No
Turbine, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	NONE	12	2.03E-05	3.16E-05	0.38	No
Turbine, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	SCR	3	7.00E-07	2.32E-07	0.00	Yes
Turbine, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	NONE	12	2.03E-05	3.16E-05	0.38	SCR	3	7.00E-07	2.32E-07	0.00	No
Turbine, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	COC/SCR	3	3.84E-06	4.41E-06	0.78	NONE	12	1.67E-05	2.30E-05	0.00	No
Turbine, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	COC/SCR	3	3.84E-06	4.41E-06	0.78	SCR	3	7.77E-07	1.66E-07	0.00	No
Turbine, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	NONE	12	1.57E-05	2.30E-05	0.00	SCR	3	7.77E-07	1.66E-07	0.00	No
Turbine, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	COC/SCR	3	1.96E-06	1.17E-06	0.58	NONE	12	1.96E-05	2.97E-05	0.00	No
Turbine, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	COC/SCR	3	1.96E-06	1.17E-06	0.58	SCR	3	2.02E-06	1.37E-06	0.00	No
Turbine, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	NONE	12	1.96E-05	2.97E-05	0.00	SCR	3	2.02E-06	1.37E-06	0.00	No
Turbine, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	COC/SCR	3	2.37E-06	1.88E-06	0.64	NONE	12	1.57E-05	2.30E-05	0.00	No
Turbine, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	COC/SCR	3	2.37E-06	1.88E-06	0.64	SCR	3	4.27E-07	1.13E-07	0.00	No
Turbine, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	NONE	12	1.57E-05	2.30E-05	0.00	SCR	3	4.27E-07	1.13E-07	0.00	No
Turbine, Natural Gas	PAH	Chrysene	lbs/MMcf	COC/SCR	3	6.05E-06	1.61E-07	0.00	NONE	12	3.82E-05	5.76E-05	0.08	No
Turbine, Natural Gas	PAH	Chrysene	lbs/MMcf	COC/SCR	3	6.05E-06	1.61E-07	0.00	SCR	3	2.06E-07	7.87E-08	0.57	Yes
Turbine, Natural Gas	PAH	Chrysene	lbs/MMcf	NONE	12	3.62E-05	5.76E-05	0.08	SCR	3	2.06E-07	7.87E-08	0.57	No
Turbine, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	NONE	12	3.40E-05	5.55E-05	0.00	No
Turbine, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	COC/SCR	3	1.30E-06	3.46E-08	0.00	SCR	3	3.82E-06	1.37E-06	0.00	Yes
Turbine, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	NONE	12	3.40E-05	5.55E-05	0.00	SCR	3	3.82E-06	1.37E-06	0.00	No
Turbine, Natural Gas	PAH	Fluoranthene	lbs/MMcf	COC/SCR	3	1.39E-05	4.00E-06	1.00	NONE	12	6.12E-05	9.86E-05	1.00	No
Turbine, Natural Gas	PAH	Fluoranthene	lbs/MMcf	COC/SCR	3	1.39E-05	4.00E-06	1.00	SCR	3	2.01E-07	3.32E-08	1.00	Yes
Turbine, Natural Gas	PAH	Fluoranthene	lbs/MMcf	NONE	12	6.12E-05	9.86E-05	1.00	SCR	3	2.01E-07	3.32E-08	1.00	No
Turbine, Natural Gas	PAH	Fluorene	lbs/MMcf	COC/SCR	3	1.22E-05	3.60E-06	1.00	NONE	12	8.37E-05	1.31E-04	1.00	No
Turbine, Natural Gas	PAH	Fluorene	lbs/MMcf	COC/SCR	3	1.22E-05	3.60E-06	1.00	SCR	3	7.05E-07	2.32E-07	1.00	Yes
Turbine, Natural Gas	PAH	Fluorene	lbs/MMcf	NONE	12	8.37E-05	1.31E-04	1.00	SCR	3	7.05E-07	2.32E-07	1.00	No
Turbine, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	COC/SCR	3	1.79E-06	8.64E-07	0.52	NONE	12	3.40E-05	5.55E-05	0.00	No
Turbine, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	COC/SCR	3	1.79E-06	8.64E-07	0.52	SCR	3	3.33E-06	1.02E-06	0.00	No
Turbine, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	NONE	12	3.40E-05	5.55E-05	0.00	SCR	3	3.33E-06	1.02E-06	0.00	No
Turbine, Natural Gas	PAH	Naphthalene	lbs/MMcf	COC/SCR	3	9.34E-04	2.49E-05	1.00	NONE	12	2.25E-03	2.58E-03	0.84	No
Turbine, Natural Gas	PAH	Naphthalene	lbs/MMcf	COC/SCR	3	9.34E-04	2.49E-05	1.00	SCR	3	2.41E-05	3.99E-06	1.00	Yes
Turbine, Natural Gas	PAH	Naphthalene	lbs/MMcf	NONE	12	2.25E-03	2.58E-03	0.84	SCR	3	2.41E-05	3.99E-06	1.00	No
Turbine, Natural Gas	PAH	Phenanthrene	lbs/MMcf	COC/SCR	3	4.17E-05	1.35E-05	1.00	NONE	12	4.59E-04	8.97E-04	0.99	No

TABLE A6-2. AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics				Second Sample Statistics				Significant Difference at 95% Confidence		
				Description APCS	Size	Average	Standard Deviation	Detect Ratio	Description APCS	Size	Average		Standard Deviation	Detect Ratio
Turbine, Natural Gas	PAH	Phenanthrene	lbs/MMcf	COC/SCR	3	4.17E-08	1.38E-08	1.00	SCR	3	9.60E-07	1.78E-07	1.00	Yes
Turbine, Natural Gas	PAH	Phenanthrene	lbs/MMcf	NONE	12	4.59E-04	6.97E-04	0.89	SCR	3	9.60E-07	1.78E-07	1.00	No
Turbine, Natural Gas	PAH	Pyrene	lbs/MMcf	COC/SCR	3	3.48E-05	9.45E-06	1.00	NONE	12	3.28E-05	4.38E-05	1.00	No
Turbine, Natural Gas	PAH	Pyrene	lbs/MMcf	COC/SCR	3	3.48E-05	9.45E-06	1.00	SCR	3	2.56E-07	3.65E-08	1.00	Yes
Turbine, Natural Gas	PAH	Pyrene	lbs/MMcf	NONE	12	3.28E-05	4.38E-05	1.00	SCR	3	2.56E-07	3.65E-08	1.00	No
Turbine, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	COC/SCR	3	2.11E-02	6.59E-04	0.00	NONE	12	1.71E-02	1.68E-02	0.64	No
Turbine, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	NONE	3	3.44E-04	1.69E-04	1.00	NONE	10	6.86E-02	8.47E-02	0.97	Yes
Turbine, Natural Gas	VOC	Acrolein	lbs/MMcf	AI/SCR	3	1.10E-02	0.00E+00	0.00	COC	3	7.44E-03	1.34E-03	0.00	Yes
Turbine, Natural Gas	VOC	Acrolein	lbs/MMcf	AI/SCR	3	1.10E-02	0.00E+00	0.00	NONE	12	2.37E-02	2.25E-02	0.70	No
Turbine, Natural Gas	VOC	Acrolein	lbs/MMcf	COC	3	7.44E-03	1.34E-03	0.00	NONE	12	2.37E-02	2.25E-02	0.70	No
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	COC	3	1.13E-02	2.94E-04	0.00	COC/SCR	3	1.77E-02	7.20E-04	0.00	Yes
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	COC	3	1.13E-02	2.94E-04	0.00	NONE	21	3.54E-02	3.75E-02	0.80	No
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	COC	3	1.13E-02	2.94E-04	0.00	SCR	3	1.16E-02	1.25E-04	0.00	No
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	COC/SCR	3	1.77E-02	7.20E-04	0.00	NONE	21	3.54E-02	3.75E-02	0.80	No
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	COC/SCR	3	1.77E-02	7.20E-04	0.00	SCR	3	1.16E-02	1.25E-04	0.00	Yes
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	NONE	21	3.54E-02	3.75E-02	0.80	SCR	3	1.16E-02	1.25E-04	0.00	No
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	COC	3	7.22E-01	4.65E-01	1.00	NONE	31	2.02E+00	2.18E+00	1.00	No
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	COC	3	7.22E-01	4.65E-01	1.00	SCR	8	3.14E+00	3.39E+00	1.00	No
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	NONE	31	2.02E+00	2.18E+00	1.00	SCR	8	3.14E+00	3.39E+00	1.00	No
Turbine, Natural Gas	VOC	Toluene	lbs/MMcf	COC/SCR	3	1.25E-01	3.80E-02	1.00	NONE	12	6.75E-02	4.94E-02	0.99	Yes
Turbine, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	COC/SCR	3	4.21E-02	1.72E-03	0.00	NONE	6	1.81E-02	2.24E-02	0.75	No

TABLE A6-3. RICE STROKES PER CYCLE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Strokes	Size	Average	Standard Deviation	Detect Ratio	Description Strokes	Size	Average	Standard Deviation	Detect Ratio	
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	3	6.46E-02	0.00E+00	0.00	4S	9	5.13E-02	4.11E-02	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	3	2.95E-01	3.65E-02	1.00	4S	37	1.07E+00	2.22E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	9	5.15E+00	7.50E+00	0.91	4S	51	1.33E+01	1.52E+01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	3	1.89E-01	1.28E-01	1.00	4S	25	5.02E-01	6.27E-01	1.00	No
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	3	1.29E-01	0.00E+00	0.00	4S	9	4.51E-01	3.76E-01	1.00	No

TABLE A6-4. RICE OXYGEN COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Oxygen	Size	Average	Standard Deviation	Detect Ratio	Description Oxygen	Size	Average	Standard Deviation	Detect Ratio	
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	O2<13%	12	6.71E-04	9.39E-04	0.90	O2>13%	15	3.23E-03	5.46E-03	0.58	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	O2<13%	12	1.02E-03	5.28E-04	0.95	O2>13%	15	3.78E-03	4.72E-03	0.65	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	O2<13%	12	2.23E-04	7.13E-05	0.89	O2>13%	15	2.11E-03	2.45E-03	0.13	Yes
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	O2<13%	12	9.60E-05	1.16E-04	0.27	O2>13%	15	1.74E-03	2.01E-03	0.13	Yes
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	O2<13%	12	7.92E-05	1.22E-04	0.05	O2>13%	15	1.35E-03	2.77E-03	0.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	O2<13%	12	1.12E-04	1.20E-04	0.12	O2>13%	15	1.11E-03	1.31E-03	0.02	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	O2<13%	12	9.05E-05	1.19E-04	0.22	O2>13%	15	1.44E-03	2.73E-03	0.06	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	O2<13%	12	7.81E-05	1.23E-04	0.08	O2>13%	15	1.28E-03	1.33E-03	0.01	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	O2<13%	12	1.30E-04	1.24E-04	0.46	O2>13%	15	1.46E-03	2.71E-03	0.08	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	O2<13%	12	8.23E-05	1.21E-04	0.00	O2>13%	15	1.43E-03	2.73E-03	0.05	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	O2<13%	12	3.29E-04	1.45E-04	0.79	O2>13%	15	2.39E-03	2.82E-03	0.44	Yes
ICE, Diesel	PAH	Fluorene	lbs/Mgal	O2<13%	12	9.62E-04	5.67E-04	0.93	O2>13%	15	1.01E-03	1.17E-03	0.09	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	O2<13%	12	8.47E-05	1.20E-04	0.06	O2>13%	15	1.41E-03	2.74E-03	0.04	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	O2<13%	12	1.60E-02	9.64E-03	1.00	O2>13%	15	1.31E-02	5.00E-02	1.00	Yes
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	O2<13%	12	3.53E-03	2.46E-03	1.00	O2>13%	15	2.01E-02	2.37E-02	1.00	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	O2<13%	12	2.63E-04	1.72E-04	0.73	O2>13%	15	3.11E-03	4.23E-03	0.77	Yes
ICE, Diesel	VOC	Acetaldehyde	lbs/Mgal	O2<13%	3	3.47E-03	2.61E-03	1.00	O2>13%	3	1.07E-01	4.60E-02	1.00	Yes
ICE, Diesel	VOC	Acrolein	lbs/Mgal	O2<13%	3	1.07E-03	6.19E-04	0.56	O2>13%	6	1.30E-02	9.64E-03	0.82	No
ICE, Diesel	VOC	Benzene	lbs/Mgal	O2<13%	6	1.83E-01	1.04E-01	1.00	O2>13%	9	9.23E-02	6.48E-02	1.00	Yes
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	O2<13%	12	5.05E-02	6.07E-02	1.00	O2>13%	15	5.14E-01	8.53E-01	1.00	No
ICE, Diesel	VOC	Propylene	lbs/Mgal	O2<13%	6	3.41E-01	5.93E-02	1.00	O2>13%	6	3.58E-01	2.03E-01	1.00	No
ICE, Diesel	VOC	Toluene	lbs/Mgal	O2<13%	6	6.12E-02	3.01E-02	1.00	O2>13%	6	5.60E-02	2.10E-02	1.00	No
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	O2<13%	6	2.10E-02	7.79E-03	1.00	O2>13%	3	3.58E-02	1.48E-02	1.00	No
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	Lean	9	3.40E-04	3.05E-04	1.00	Rich	3	1.94E-03	1.28E-03	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	Lean	9	2.88E-03	3.87E-03	1.00	Rich	3	1.48E-02	1.74E-02	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	Lean	9	1.65E-04	9.21E-05	1.00	Rich	3	1.64E-03	3.92E-04	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	Lean	9	6.51E-05	2.94E-05	1.00	Rich	3	2.94E-04	4.08E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	Lean	9	1.36E-05	1.79E-05	0.66	Rich	3	1.18E-04	3.18E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	Lean	9	1.36E-04	2.98E-04	0.96	Rich	3	2.37E-04	5.53E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	Lean	9	3.93E-05	8.27E-05	0.99	Rich	3	1.94E-04	4.48E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	Lean	9	1.82E-04	3.69E-04	0.98	Rich	3	1.03E-04	2.07E-05	1.00	No
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	Lean	9	4.17E-05	4.35E-05	0.99	Rich	3	3.10E-04	2.71E-05	1.00	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	Lean	9	5.44E-06	4.60E-06	0.67	Rich	3	1.11E-05	1.72E-06	1.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	Lean	9	2.77E-04	1.26E-04	1.00	Rich	3	9.95E-04	1.64E-04	1.00	Yes
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	Lean	9	4.44E-04	2.14E-04	0.65	Rich	3	9.21E-04	1.99E-04	1.00	Yes
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	Lean	9	4.47E-05	9.47E-05	1.00	Rich	3	1.68E-04	3.43E-05	1.00	No
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	Lean	9	5.74E-02	6.59E-02	1.00	Rich	3	7.65E-02	1.58E-02	1.00	No
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	Lean	9	1.53E-03	7.46E-04	1.00	Rich	3	7.70E-03	1.17E-02	1.00	Yes

TABLE A6-4. RICE OXYGEN COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Oxygen	Size	Average	Standard Deviation	Detect Ratio	Description Oxygen	Size	Average	Standard Deviation	Detect Ratio	
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	Lean	9	1.66E-04	8.39E-05	1.00	Rich	3	1.79E-04	7.43E-05	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	Lean	9	6.90E-02	2.65E-02	0.69	Rich	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	VOC	1,3-Butadiene	lbs/MMcf	Lean	6	3.97E-01	1.37E-02	1.00	Rich	3	1.04E-01	3.92E-04	1.00	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	Lean	21	3.00E+00	2.75E+00	1.00	Rich	6	8.83E-01	9.05E-01	1.00	No
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	Lean	20	1.16E+00	1.45E+00	0.99	Rich	9	5.47E-01	4.57E-01	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	Lean	23	8.29E-01	6.51E-01	1.00	Rich	17	1.26E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	Lean	19	1.77E+01	1.62E+01	0.99	Rich	21	1.69E+00	3.57E+00	1.00	Yes
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	Lean	20	1.47E+01	1.81E+01	0.97	Rich	5	1.80E+01	2.15E+01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	Lean	23	3.38E-01	1.58E-01	1.00	Rich	23	1.10E+00	3.32E+00	1.00	Yes
ICE, Natural Gas	VOC	Xylene (m,p)	lbs/MMcf	Lean	14	8.63E-02	3.99E-02	1.00	Rich	23	2.24E-01	3.97E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (o)	lbs/MMcf	Lean	14	4.94E-02	1.95E-02	0.95	Rich	23	2.07E-01	7.33E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	Lean	9	4.74E-01	3.49E-01	0.91	Rich	3	6.02E-02	1.86E-02	1.00	No

TABLE A6-5. EXTERNAL COMBUSTION BURNER TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Burner Type	Size	Average	Standard Deviation	Detect Ratio	Description Burner Type	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Ref. Gas	SVOC	Phenol	lbs/MMcf	CB	6	1.56E-03	1.87E-03	0.76	LNB	6	2.80E-03	2.28E-03	0.90	No
Boiler, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	CB	9	3.03E-03	3.83E-03	1.00	LNB	6	5.38E-03	4.46E-03	1.00	No
Boiler, Ref. Gas	VOC	Benzene	lbs/MMcf	CB	10	2.96E-01	4.56E-01	0.90	LNB	6	5.68E-02	1.28E-02	0.00	No
Boiler, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	CB	9	1.88E-02	1.10E-02	1.00	LNB	6	1.18E-02	7.05E-03	1.00	No
Boiler, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	CB	10	2.55E-01	3.09E-01	0.00	LNB	6	3.05E-01	8.56E-02	0.00	No
Boiler, Ref. Gas	VOC	Toluene	lbs/MMcf	CB	6	1.23E+00	1.88E+00	0.98	LNB	3	6.17E-02	2.11E-02	0.45	No
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	CB	8	2.34E-06	1.78E-06	1.00	LNB	15	5.59E-06	6.63E-06	0.38	No
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	CB	8	1.57E-06	6.96E-07	0.88	LNB	14	7.12E-06	1.13E-05	0.15	No
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	CB	8	3.03E-06	1.83E-06	0.96	LNB	15	1.09E-05	1.74E-05	0.20	No
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	CB	17	5.23E-05	1.18E-04	1.00	LNB	21	5.23E-06	5.46E-06	0.94	No
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	CB	17	1.50E-04	4.16E-04	0.99	LNB	21	1.88E-06	2.08E-06	0.30	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	CB	17	6.78E-05	1.78E-04	0.89	LNB	21	4.26E-06	4.53E-06	0.93	No
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	CB	8	1.08E-06	1.38E-07	0.00	LNB	15	1.25E-06	5.86E-07	0.11	No
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	CB	17	3.99E-05	1.03E-04	0.97	LNB	21	2.28E-06	2.34E-06	0.63	No
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	CB	8	1.18E-06	2.51E-07	0.44	LNB	15	2.90E-06	3.64E-06	0.83	No
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	CB	17	7.56E-06	1.57E-05	0.00	LNB	21	7.62E-06	2.83E-05	0.00	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	CB	8	2.75E-06	8.50E-07	1.00	LNB	15	1.01E-05	1.82E-05	0.69	Yes
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	CB	8	1.14E-05	8.03E-06	1.00	LNB	15	2.43E-05	3.11E-05	0.29	No
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	CB	17	1.75E-04	4.83E-04	0.99	LNB	21	2.20E-06	3.19E-06	0.54	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	CB	8	3.56E-04	1.97E-04	1.00	LNB	15	7.79E-04	1.34E-03	0.52	No
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	CB	8	1.43E-05	4.46E-06	1.00	LNB	15	9.38E-05	1.21E-04	0.37	No
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	CB	8	2.54E-06	5.79E-07	1.00	LNB	15	1.04E-05	1.01E-05	0.48	Yes
Heater, Ref. Gas	SVOC	Ethylbenzene	lbs/MMcf	CB	9	2.37E-02	3.30E-02	0.88	LNB	12	2.83E-02	2.77E-02	0.00	No
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	CB	6	3.53E-03	2.71E-03	0.95	LNB	18	7.10E-03	7.84E-03	0.95	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	CB	6	2.21E-02	2.00E-02	1.00	LNB	30	4.44E-02	5.07E-02	0.21	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	CB	15	5.87E-02	8.25E-02	0.06	LNB	30	7.08E-02	7.13E-02	0.04	No
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	CB	6	9.99E-02	1.39E-01	1.00	LNB	27	1.13E-01	3.39E-01	0.90	No
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	CB	6	5.91E-01	3.70E-01	0.00	LNB	21	3.64E-01	3.49E-01	0.00	No
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	CB	15	9.76E-02	1.05E-01	0.52	LNB	27	1.20E-01	2.30E-01	0.55	No
Heater, Ref. Gas	VOC	Xylene (Total)	lbs/MMcf	CB	9	3.29E-02	4.09E-02	0.91	LNB	6	5.46E-02	4.37E-03	0.00	No
SG, Natural/CVR Gas	PAH	Acenaphthene	lbs/MMcf	CB	3	1.38E-06	9.82E-07	0.90	LNB	3	7.01E-07	5.56E-08	0.36	No
SG, Natural/CVR Gas	PAH	Acenaphthylene	lbs/MMcf	CB	3	4.74E-08	5.08E-06	0.97	LNB	3	6.56E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Anthracene	lbs/MMcf	CB	3	2.04E-06	1.41E-06	0.93	LNB	3	2.14E-06	1.51E-06	1.00	No
SG, Natural/CVR Gas	PAH	Benzo(a)anthracene	lbs/MMcf	CB	3	1.13E-06	2.46E-08	0.00	LNB	3	1.32E-06	7.61E-07	0.83	No
SG, Natural/CVR Gas	PAH	Benzo(a)pyrene	lbs/MMcf	CB	3	7.14E-07	5.34E-07	0.62	LNB	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	CB	3	3.35E-06	1.93E-06	1.00	LNB	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	CB	3	1.30E-06	7.71E-07	0.89	LNB	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	CB	3	9.84E-07	5.11E-07	0.86	LNB	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Chrysene	lbs/MMcf	CB	3	1.85E-06	4.05E-08	0.00	LNB	3	1.25E-06	7.95E-07	0.82	No

TABLE A6-5. EXTERNAL COMBUSTION BURNER TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Burner Type	Size	Average	Standard Deviation	Detect Ratio	Description Burner Type	Size	Average	Standard Deviation	Detect Ratio	
SG, Natural/CVR Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	CB	3	4.02E-07	8.80E-09	0.00	LNB	3	6.58E-07	2.32E-08	0.00	Yes
SG, Natural/CVR Gas	PAH	Fluoranthene	lbs/MMcf	CB	3	6.03E-06	3.93E-06	1.00	LNB	3	1.29E-06	4.76E-07	1.00	No
SG, Natural/CVR Gas	PAH	Fluorene	lbs/MMcf	CB	3	9.08E-06	6.02E-06	1.00	LNB	3	2.18E-06	5.44E-07	1.00	No
SG, Natural/CVR Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	CB	3	1.67E-06	1.09E-06	0.92	LNB	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Naphthalene	lbs/MMcf	CB	3	1.12E-04	1.12E-04	1.00	LNB	3	1.66E-04	1.45E-05	1.00	Yes
SG, Natural/CVR Gas	PAH	Phenanthrene	lbs/MMcf	CB	3	2.18E-05	1.34E-05	1.00	LNB	3	1.11E-05	3.63E-06	1.00	No
SG, Natural/CVR Gas	PAH	Pyrene	lbs/MMcf	CB	3	1.02E-05	7.40E-06	1.00	LNB	3	1.82E-06	1.06E-06	1.00	No
SG, Natural/CVR Gas	SVOC	Ethylbenzene	lbs/MMcf	CB	3	7.32E-03	6.84E-05	0.00	LNB	3	1.11E-02	7.47E-03	0.89	No
SG, Natural/CVR Gas	VOC	Benzene	lbs/MMcf	CB	3	6.14E-03	5.74E-05	0.00	LNB	3	2.64E-03	8.58E-05	0.00	Yes
SG, Natural/CVR Gas	VOC	Toluene	lbs/MMcf	CB	3	2.68E-02	4.63E-03	1.00	LNB	3	1.75E-02	4.71E-03	1.00	No
SG, Natural/CVR Gas	VOC	Xylene (Total)	lbs/MMcf	CB	3	1.46E-02	1.37E-04	0.00	LNB	3	2.16E-02	1.62E-02	1.00	No

TABLE A6-6. EXTERNAL COMBUSTION EXCESS AIR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	
Boiler, Ref. Gas	Metals	Arsenic	lbs/MMcf	EA<100%	3	7.04E-04	4.65E-04	1.00	EA>100%	3	3.57E-03	3.05E-03	0.71	No
Boiler, Ref. Gas	Metals	Beryllium	lbs/MMcf	EA<100%	2	1.55E-04	2.08E-06	1.00	EA>100%	3	2.60E-04	5.35E-05	0.00	No
Boiler, Ref. Gas	Metals	Cadmium	lbs/MMcf	EA<100%	3	2.38E-03	8.44E-04	1.00	EA>100%	3	6.60E-04	1.38E-04	0.00	Yes
Boiler, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	EA<100%	3	7.70E-03	3.09E-03	0.00	EA>100%	3	2.38E-04	7.18E-05	0.00	Yes
Boiler, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	EA<100%	3	1.28E-02	1.57E-02	1.00	EA>100%	3	2.48E-03	8.57E-05	0.34	No
Boiler, Ref. Gas	Metals	Copper	lbs/MMcf	EA<100%	2	6.30E-03	1.99E-03	1.00	EA>100%	3	5.30E-03	5.18E-03	0.71	No
Boiler, Ref. Gas	Metals	Lead	lbs/MMcf	EA<100%	2	2.42E-03	9.38E-05	1.00	EA>100%	3	3.01E-03	4.09E-03	0.94	No
Boiler, Ref. Gas	Metals	Manganese	lbs/MMcf	EA<100%	2	2.39E-03	1.06E-03	1.00	EA>100%	3	1.43E-01	2.19E-01	1.00	No
Boiler, Ref. Gas	Metals	Mercury	lbs/MMcf	EA<100%	3	3.23E-04	5.60E-05	0.00	EA>100%	3	1.10E-03	2.89E-04	0.00	Yes
Boiler, Ref. Gas	Metals	Nickel	lbs/MMcf	EA<100%	2	5.59E-03	2.03E-03	1.00	EA>100%	3	1.97E-02	2.60E-02	0.84	No
Boiler, Ref. Gas	Metals	Selenium	lbs/MMcf	EA<100%	3	2.06E-03	9.62E-04	0.16	EA>100%	3	3.30E-01	3.08E-01	1.00	No
Boiler, Ref. Gas	Metals	Zinc	lbs/MMcf	EA<100%	3	3.42E+00	5.51E+00	1.00	EA>100%	3	9.89E-02	1.55E-01	1.00	No
Boiler, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	EA<100%	3	5.88E-06	5.28E-07	0.37	EA>100%	3	1.23E-05	6.63E-06	1.00	No
Boiler, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	EA<100%	3	2.58E-06	5.23E-08	0.00	EA>100%	3	1.42E-04	1.19E-04	1.00	No
Boiler, Ref. Gas	PAH	Anthracene	lbs/MMcf	EA<100%	3	2.28E-05	1.74E-05	1.00	EA>100%	3	3.49E-05	1.55E-05	1.00	No
Boiler, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	EA<100%	3	1.83E-05	6.06E-06	1.00	EA>100%	3	1.07E-05	1.25E-05	1.00	No
Boiler, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	EA<100%	3	3.42E-06	9.48E-07	0.76	EA>100%	3	2.09E-06	1.57E-07	0.00	No
Boiler, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	EA<100%	3	6.76E-06	1.82E-06	1.00	EA>100%	3	1.54E-04	1.81E-04	1.00	No
Boiler, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	EA<100%	3	3.85E-06	1.33E-06	0.78	EA>100%	3	2.09E-06	1.57E-07	0.00	No
Boiler, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	EA<100%	3	2.56E-06	5.23E-08	0.00	EA>100%	3	3.05E-05	2.87E-05	0.98	No
Boiler, Ref. Gas	PAH	Chrysene	lbs/MMcf	EA<100%	3	3.42E-06	1.52E-06	0.50	EA>100%	3	9.72E-05	1.03E-04	1.00	No
Boiler, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	EA<100%	3	2.56E-06	5.23E-08	0.00	EA>100%	3	3.02E-06	1.52E-06	0.53	No
Boiler, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	EA<100%	3	4.25E-05	2.62E-05	1.00	EA>100%	3	1.02E-04	2.74E-05	1.00	Yes
Boiler, Ref. Gas	PAH	Fluorene	lbs/MMcf	EA<100%	3	9.78E-06	7.26E-06	1.00	EA>100%	3	8.29E-05	5.40E-05	1.00	No
Boiler, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	EA<100%	3	2.56E-06	5.23E-08	0.00	EA>100%	3	4.86E-06	3.75E-06	0.84	No
Boiler, Ref. Gas	PAH	Naphthalene	lbs/MMcf	EA<100%	3	2.06E-04	2.99E-05	1.00	EA>100%	3	1.88E-03	3.10E-04	0.74	Yes
Boiler, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	EA<100%	3	5.64E-05	2.78E-05	1.00	EA>100%	3	3.08E-04	1.49E-04	1.00	Yes
Boiler, Ref. Gas	PAH	Pyrene	lbs/MMcf	EA<100%	3	5.98E-05	2.02E-05	1.00	EA>100%	3	6.66E-05	5.06E-06	1.00	No
Boiler, Ref. Gas	SVOC	Phenol	lbs/MMcf	EA<100%	12	2.18E-03	2.09E-03	0.85	EA>100%	3	2.63E-03	3.27E-04	1.00	No
Boiler, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	EA<100%	15	3.97E-03	4.00E-03	1.00	EA>100%	3	8.78E-01	0.90E-02	1.00	Yes
Boiler, Ref. Gas	VOC	Benzene	lbs/MMcf	EA<100%	16	2.06E-01	3.73E-01	0.80	EA>100%	3	8.38E-02	4.32E-03	0.00	No
Boiler, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	EA<100%	15	1.60E-02	9.95E-03	1.00	EA>100%	3	1.99E+00	3.92E-01	1.00	Yes
Boiler, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	EA<100%	16	2.74E-01	2.46E-01	0.00	EA>100%	6	1.02E+00	1.94E-01	0.00	Yes
Boiler, Ref. Gas	VOC	Toluene	lbs/MMcf	EA<100%	9	8.40E-01	1.59E+00	0.97	EA>100%	3	9.88E-02	5.02E-03	0.00	No
Heater, Ref. Gas	Halogens	HCl	lbs/MMcf	EA<100%	3	2.36E-01	3.35E-02	0.00	EA>100%	3	8.13E-01	3.64E-01	0.83	No
Heater, Ref. Gas	Metals	Arsenic	lbs/MMcf	EA<100%	9	8.39E-04	5.05E-04	0.68	EA>100%	3	5.12E-04	3.67E-05	0.00	No
Heater, Ref. Gas	Metals	Beryllium	lbs/MMcf	EA<100%	9	1.55E-04	1.10E-04	0.00	EA>100%	3	2.01E-04	1.46E-05	0.00	No
Heater, Ref. Gas	Metals	Cadmium	lbs/MMcf	EA<100%	9	5.96E-04	3.99E-04	0.80	EA>100%	3	5.12E-04	3.67E-05	0.00	No

TABLE A6-6. EXTERNAL COMBUSTION EXCESS AIR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	
Heater, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	EA<100%	12	1.28E-03	1.25E-03	0.50	EA>100%	3	4.71E-04	4.91E-04	0.00	No
Heater, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	EA<100%	12	1.16E-03	5.73E-04	0.62	EA>100%	3	1.92E-03	2.28E-04	0.00	Yes
Heater, Ref. Gas	Metals	Copper	lbs/MMcf	EA<100%	9	5.71E-03	4.95E-03	0.92	EA>100%	3	2.01E-03	1.46E-04	0.00	No
Heater, Ref. Gas	Metals	Lead	lbs/MMcf	EA<100%	9	2.47E-03	2.66E-03	0.95	EA>100%	3	9.02E-04	3.67E-05	1.00	No
Heater, Ref. Gas	Metals	Manganese	lbs/MMcf	EA<100%	6	4.63E-03	4.93E-03	1.00	EA>100%	3	1.98E-03	7.39E-04	1.00	No
Heater, Ref. Gas	Metals	Mercury	lbs/MMcf	EA<100%	9	2.41E-04	1.91E-04	0.10	EA>100%	3	9.01E-04	1.02E-04	0.00	Yes
Heater, Ref. Gas	Metals	Nickel	lbs/MMcf	EA<100%	9	4.95E-03	8.98E-03	0.77	EA>100%	3	5.87E-03	1.32E-03	1.00	No
Heater, Ref. Gas	Metals	Selenium	lbs/MMcf	EA<100%	9	4.95E-03	1.41E-02	0.95	EA>100%	3	1.99E-03	2.45E-04	1.00	No
Heater, Ref. Gas	Metals	Zinc	lbs/MMcf	EA<100%	9	1.46E-02	1.12E-02	1.00	EA>100%	3	8.61E-03	9.93E-04	1.00	No
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	EA<100%	35	4.08E-06	4.82E-06	0.43	EA>100%	3	1.98E-04	2.29E-04	1.00	Yes
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	EA<100%	34	4.00E-06	7.67E-06	0.34	EA>100%	3	3.11E-04	3.19E-04	1.00	Yes
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	EA<100%	35	5.83E-06	1.21E-05	0.34	EA>100%	3	3.21E-04	3.27E-04	1.00	Yes
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	EA<100%	50	2.02E-05	7.14E-05	0.98	EA>100%	3	1.31E-04	1.00E-04	1.00	Yes
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	EA<100%	50	5.19E-05	2.48E-04	0.97	EA>100%	3	4.68E-05	3.89E-05	1.00	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	EA<100%	50	2.51E-05	1.06E-04	0.98	EA>100%	3	3.28E-04	2.81E-04	1.00	Yes
Heater, Ref. Gas	PAH	Benzo(e)pyrene	lbs/MMcf	EA<100%	21	1.25E-06	1.22E-06	0.23	EA>100%	3	1.00E-04	1.20E-04	1.00	Yes
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	EA<100%	35	1.11E-06	4.57E-07	0.05	EA>100%	3	2.34E-05	1.68E-05	1.00	Yes
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	EA<100%	50	1.47E-05	6.16E-05	0.93	EA>100%	3	1.01E-04	7.92E-05	1.00	Yes
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	EA<100%	35	1.88E-06	2.52E-06	0.70	EA>100%	3	4.78E-04	1.08E-04	1.00	Yes
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	EA<100%	50	6.00E-06	2.04E-05	0.00	EA>100%	3	1.63E-05	1.39E-05	0.97	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	EA<100%	35	8.71E-06	1.17E-05	0.63	EA>100%	3	7.73E-04	2.08E-04	1.00	Yes
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	EA<100%	35	1.66E-05	2.18E-05	0.34	EA>100%	3	1.99E-03	2.80E-03	1.00	Yes
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	EA<100%	50	6.06E-05	2.88E-04	0.98	EA>100%	3	2.69E-05	2.55E-05	0.98	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	EA<100%	35	4.74E-04	9.07E-04	0.54	EA>100%	3	1.26E-02	6.16E-03	1.00	Yes
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	EA<100%	35	5.20E-05	8.65E-05	0.36	EA>100%	3	1.82E-03	5.32E-04	1.00	Yes
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	EA<100%	35	6.29E-06	7.62E-06	0.47	EA>100%	3	9.37E-04	6.75E-04	1.00	Yes
Heater, Ref. Gas	SVOC	2-Methylnaphthalene	lbs/MMcf	EA<100%	21	7.80E-05	1.26E-04	0.16	EA>100%	3	2.29E-03	1.31E-03	1.00	Yes
Heater, Ref. Gas	SVOC	Ethylbenzene	lbs/MMcf	EA<100%	33	1.77E-02	2.60E-02	0.35	EA>100%	3	9.46E-02	0.00E+00	0.00	Yes
Heater, Ref. Gas	SVOC	Perylene	lbs/MMcf	EA<100%	21	1.02E-06	5.20E-07	0.00	EA>100%	3	1.62E-05	1.09E-05	0.73	Yes
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	EA<100%	21	4.63E-03	5.39E-03	0.92	EA>100%	3	2.23E-02	2.45E-02	0.91	Yes
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	EA<100%	45	5.18E-02	5.08E-02	0.48	EA>100%	6	5.05E-02	4.82E-02	0.39	No
Heater, Ref. Gas	VOC	Ammonia	lbs/MMcf	EA<100%	3	1.42E-01	7.93E-02	1.00	EA>100%	3	2.76E+00	7.14E-01	1.00	Yes
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	EA<100%	54	4.76E-02	6.86E-02	0.07	EA>100%	3	2.14E-01	1.02E-01	0.69	Yes
Heater, Ref. Gas	VOC	Carbonyl Sulfide	lbs/MMcf	EA<100%	3	9.47E-01	3.21E-02	0.00	EA>100%	3	2.16E+00	3.19E-01	0.00	Yes
Heater, Ref. Gas	VOC	Cyanide	lbs/MMcf	EA<100%	3	6.16E-03	8.89E-04	0.00	EA>100%	3	1.24E-02	2.69E-03	0.00	Yes
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	EA<100%	44	9.93E-02	2.70E-01	0.91	EA>100%	3	1.88E+00	1.82E+00	0.97	Yes
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	EA<100%	24	4.45E-01	3.71E-01	0.00	EA>100%	6	9.33E-01	8.51E-01	0.00	Yes
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	EA<100%	51	8.39E-02	1.79E-01	0.62	EA>100%	6	1.33E-01	5.65E-02	0.00	No

TABLE A6-6. EXTERNAL COMBUSTION EXCESS AIR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	Description Excess Air	Size	Average	Standard Deviation	Detect Ratio	
Heater, Ref. Gas	VOC	Xylene (Total)	lbs/MMcf	EA<100%	15	4.16E-02	3.29E-02	0.43	EA>100%	3	1.42E-01	8.14E-02	0.00	Yes

TABLE A6-7. TURBINE DUCT BURNER COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description DB	Size	Average	Standard Deviation	Detect Ratio	Description DB	Size	Average	Standard Deviation	Detect Ratio	
Turbine, Natural Gas	VOC	Benzene	lbs/MMcf	N	6	1.24E-02	5.82E-03	0.00	Y	3	8.71E-03	0.00E+00	0.00	No
Turbine, Natural Gas	VOC	Formaldehyde	lbs/MMcf	N	3	2.09E-02	6.23E-03	0.45	Y	5	3.86E+00	3.28E+00	1.00	No

TABLE A6-8. CHROME PLATING AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Substance	Value Type	First Sample Statistics							Second Sample Statistics							Significant Difference at 95% Confidence		
			Description				Size	Average	Standard Deviation	Detect Ratio	Description				Size	Average		Standard Deviation	Detect Ratio
			WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					
Plating, Anodizing	Chromium (Hex)	mg/amp-hr	Y	N	N	N	7	2.64E-01	3.08E-01	1.00	Y	N	N	N	2	4.16E-02	9.41E-04	0.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	N	Y	Y	N	3	6.21E-02	7.04E-02	1.00	Y	N	N	N	7	3.70E-01	3.89E-01	1.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	N	Y	Y	N	3	6.21E-02	7.04E-02	1.00	Y	N	Y	Y	4	4.14E-03	2.08E-04	0.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	N	Y	Y	N	3	6.21E-02	7.04E-02	1.00	Y	Y	Y	N	2	3.69E-02	6.49E-04	1.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	Y	N	N	N	7	3.70E-01	3.89E-01	1.00	Y	N	Y	Y	4	4.14E-03	2.08E-04	0.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	Y	N	N	N	7	3.70E-01	3.89E-01	1.00	Y	Y	Y	N	2	3.69E-02	6.49E-04	1.00	No
Plating, Anodizing	Chromium (Total)	mg/amp-hr	Y	N	Y	Y	4	4.14E-03	2.08E-04	0.00	Y	Y	Y	N	2	3.69E-02	6.49E-04	1.00	Yes
Plating, Decorative	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	8.50E-05	1.26E-04	1.00	Y	N	N	N	3	2.36E+00	4.09E-02	0.00	Yes
Plating, Decorative	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	2.49E-03	2.47E-04	1.00	Y	N	N	N	3	3.61E+00	2.89E+00	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	15	2.49E-02	1.00E-03	1.00	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	NA
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	N	N	N	21	1.59E-02	8.40E-03	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	N	1	2.49E-02	1.00E-03	1.00	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	N	N	N	21	1.59E-02	8.40E-03	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	N	Y	Y	9	2.70E-03	1.94E-03	1.00	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	N	Y	Y	Y	1	1.36E-02	1.00E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	N	N	N	21	1.59E-02	8.40E-03	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	N	N	15	1.08E-02	1.26E-02	1.00	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	N	N	N	21	1.59E-02	8.40E-03	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.86	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	N	1	1.36E-02	1.00E-03	1.00	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	N	N	N	21	1.59E-02	8.40E-03	0.86	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.86	No

TABLE A6-8. CHROME PLATING AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Substance	Value Type	First Sample Statistics								Second Sample Statistics								Significant Difference at 95% Confidence
			Description				Size	Average	Standard Deviation	Detect Ratio	Description				Size	Average	Standard Deviation	Detect Ratio	
			WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	N	Y	Y	Y	3	1.63E-03	1.24E-03	1.00	Y	Y	Y	Y	9	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	N	21	1.59E-02	8.40E-03	0.88	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Y	N	Y	N	14	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	N	Y	3	4.74E-04	4.57E-05	1.00	Y	Y	Y	Y	9	4.79E-03	3.80E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	N	3	1.62E-02	7.93E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	Y	Y	Y	Y	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	N	Y	Y	10	1.13E-02	1.47E-02	0.88	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	Yes
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	Y	N	N	9	4.79E-03	3.80E-03	1.00	Y	Y	Y	Y	9	4.79E-03	3.80E-03	1.00	No
Plating, Hard	Chromium (Hex)	mg/amp-hr	Y	Y	Y	N	14	6.72E-02	7.89E-02	1.00	Y	Y	Y	Y	6	8.14E-03	8.67E-04	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	N	N	Y	N	1	5.80E-02		1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	N	N	Y	N	18	2.13E-02	1.73E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	N	Y	Y	N	1	3.50E-02		1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.85	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	N	Y	Y	6	4.58E-02	3.13E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	N	Y	N	12	8.47E-03	1.52E-02	0.98	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	N	N	3	1.63E-03	1.24E-03	1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	N	Y	Y	Y	1	3.50E-02		1.00	NA
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.85	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	N	Y	N	6	4.58E-02	3.13E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	N	1	5.80E-02		1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	N	Y	Y	N	1	3.50E-02		1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.56E-03	3.57E-03	1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.85	Yes

TABLE A6-8. CHROME PLATING AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Substance	Value Type	First Sample Statistics							Second Sample Statistics							Significant Difference at 95% Confidence		
			Description				Size	Average	Standard Deviation	Detect Ratio	Description				Size	Average		Standard Deviation	Detect Ratio
			WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	N	Y	N	3	4.58E-03	3.13E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	Y	N	N	9	4.58E-03	3.13E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	Y	Y	N	9	4.58E-03	3.13E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	N	Y	Y	9	4.58E-03	3.57E-03	1.00	Y	Y	Y	Y	9	4.58E-03	3.13E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	N	Y	Y	N	1	3.60E-02		1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Y	N	Y	Y	3	6.13E-03	4.80E-05	0.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Y	N	Y	Y	3	6.13E-03	4.80E-05	0.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	N	N	18	2.13E-02	1.73E-02	1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	N	Y	N	8	4.58E-02	3.13E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	N	1	3.50E-02		1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	N	Y	N	8	4.58E-02	3.13E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	N	Y	Y	Y	3	3.75E-02	4.54E-02	1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	Y	N	Y	N	8	4.58E-02	3.13E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	Y	Y	N	Y	12	8.47E-03	1.52E-02	0.98	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	Y	Y	N	Y	9	1.17E-02	8.54E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	N	21	2.89E-02	1.97E-02	0.65	Y	Y	Y	Y	23	7.14E-02	7.45E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Y	N	Y	N	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	N	Y	3	6.13E-03	4.80E-05	0.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	Y	N	8	4.58E-02	3.13E-02	1.00	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	Y	N	8	4.58E-02	3.13E-02	1.00	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	Y	Y	Y	Y	23	7.14E-02	7.45E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	N	Y	Y	12	8.47E-03	1.52E-02	0.98	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	Yes
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	Y	N	N	9	1.17E-02	8.54E-03	1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	No
Plating, Hard	Chromium (Total)	mg/amp-hr	Y	Y	Y	N	23	7.14E-02	7.45E-02	1.00	Y	Y	Y	Y	6	1.05E-02	1.82E-03	1.00	No

TABLE A6-8. CHROME PLATING AIR POLLUTION CONTROL SYSTEM COMPARISON.

Major Group	Substance	Value Type	First Sample Statistics								Second Sample Statistics								Significant Difference at 95% Confidence
			Description				Size	Average	Standard Deviation	Detect Ratio	Description				Size	Average	Standard Deviation	Detect Ratio	
			WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					WS (Y/N)	CFS (Y/N)	ME (Y/N)	Filter (Y/N)					
Plating, Hard/Anodizing	Chromium (Hex)	mg/amp-hr	Y	N	N	N	8	3.08E-02	1.90E-02	1.00	Y	N	Y	N	3	1.20E-02	5.31E-04	1.00	No
Plating, Hard/Anodizing	Chromium (Total)	mg/amp-hr	Y	N	N	N	8	3.09E-02	1.93E-02	1.00	Y	N	Y	N	3	5.98E-03	2.87E-04	1.00	Yes

TABLE A6-9. RICE SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Capacity	Size	Average	Standard Deviation	Detect Ratio	Description Capacity	Size	Average	Standard Deviation	Detect Ratio	
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	<650Hp	12	2.49E-03	5.76E-03	0.97	>650Hp	12	2.14E-03	2.92E-03	0.22	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	<650Hp	12	3.10E-03	5.00E-03	0.98	>650Hp	12	2.42E-03	2.68E-03	0.31	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	<650Hp	12	6.98E-04	8.60E-04	0.90	>650Hp	12	2.12E-03	2.80E-03	0.21	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	<650Hp	12	2.44E-04	1.59E-04	0.71	>650Hp	12	1.09E-03	2.11E-03	0.13	Yes
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	<650Hp	12	7.98E-05	1.22E-04	0.05	>650Hp	12	1.89E-03	3.02E-03	0.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	<650Hp	9	1.93E-04	6.78E-05	0.33	>650Hp	9	2.24E-03	3.34E-03	0.00	No
ICE, Diesel	PAH	Benzo(b+k)fluoranthene	lbs/Mgal	<650Hp	3	1.44E-06	2.72E-08	0.00	>650Hp	3	2.86E-06	1.15E-07	0.00	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	<650Hp	12	1.07E-04	1.08E-04	0.34	>650Hp	12	1.78E-03	2.97E-03	0.05	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	<650Hp	9	1.11E-04	1.28E-04	0.14	>650Hp	9	2.25E-03	3.34E-03	0.00	No
ICE, Diesel	PAH	Chrysene	lbs/Mgal	<650Hp	12	1.53E-04	1.00E-04	0.54	>650Hp	12	1.81E-03	2.98E-03	0.07	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	<650Hp	12	9.69E-05	1.13E-04	0.15	>650Hp	12	1.77E-03	2.97E-03	0.04	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	<650Hp	12	1.12E-03	8.24E-04	0.94	>650Hp	12	2.16E-03	2.77E-03	0.22	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	<650Hp	12	4.44E-03	3.82E-03	0.98	>650Hp	12	1.10E-02	1.52E-02	0.95	No
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	<650Hp	12	9.63E-05	1.12E-04	0.18	>650Hp	12	1.75E-03	2.98E-03	0.03	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	<650Hp	12	4.20E-02	5.97E-02	1.00	>650Hp	12	3.93E-02	3.38E-02	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	<650Hp	12	8.13E-03	7.87E-03	1.00	>650Hp	12	2.14E-02	2.73E-02	1.00	No
ICE, Diesel	PAH	Pyrene	lbs/Mgal	<650Hp	12	7.27E-04	4.44E-04	0.90	>650Hp	12	4.41E-03	2.70E-03	0.75	Yes
ICE, Diesel	VOC	Acetaldehyde	lbs/Mgal	<650Hp	6	7.59E-02	7.94E-02	1.00	>650Hp	3	6.48E-02	5.78E-03	1.00	No
ICE, Diesel	VOC	Acrolein	lbs/Mgal	<650Hp	6	4.21E-03	3.49E-03	0.38	>650Hp	3	1.07E-02	1.17E-02	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	<650Hp	6	8.51E-02	1.74E-02	1.00	>650Hp	9	1.84E-01	1.12E-01	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	<650Hp	12	6.24E-02	9.60E-02	1.00	>650Hp	12	6.28E-01	9.22E-01	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	<650Hp	6	2.82E-01	1.17E-01	1.00	>650Hp	6	4.18E-01	1.42E-01	1.00	No
ICE, Diesel	VOC	Toluene	lbs/Mgal	<650Hp	6	3.67E-02	1.40E-03	1.00	>650Hp	6	7.00E-02	1.02E-02	1.00	Yes
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	<650Hp	3	2.68E-02	1.03E-03	1.00	>650Hp	6	2.55E-02	1.54E-02	1.00	No
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	<650Hp	6	1.33E-03	1.06E-03	1.00	>650Hp	6	1.51E-04	5.09E-05	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	<650Hp	6	1.10E-02	4.40E-03	1.00	>650Hp	6	5.25E-04	1.25E-04	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	<650Hp	6	1.08E-03	9.03E-04	1.00	>650Hp	6	1.19E-04	3.91E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	<650Hp	6	1.86E-04	1.22E-04	1.00	>650Hp	6	5.88E-05	3.32E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	<650Hp	6	7.61E-05	4.87E-05	0.94	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	<650Hp	6	2.82E-04	3.36E-04	0.97	>650Hp	6	4.09E-05	2.32E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	<650Hp	6	1.49E-04	1.03E-04	1.00	>650Hp	6	7.54E-06	6.05E-06	0.92	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	<650Hp	6	3.16E-04	4.04E-04	0.98	>650Hp	6	7.83E-06	3.54E-06	0.93	No
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	<650Hp	6	2.03E-04	1.28E-04	1.00	>650Hp	6	1.43E-05	7.20E-06	0.96	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	<650Hp	6	1.17E-05	2.82E-06	1.00	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	<650Hp	6	6.23E-04	4.30E-04	1.00	>650Hp	6	2.91E-04	1.46E-04	1.00	No
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	<650Hp	6	3.69E-03	3.75E-03	0.94	>650Hp	6	4.38E-04	2.53E-04	1.00	No
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	<650Hp	6	1.44E-04	1.02E-04	1.00	>650Hp	6	7.17E-06	3.12E-06	0.96	Yes
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	<650Hp	6	9.92E-02	6.26E-02	1.00	>650Hp	6	2.51E-02	4.56E-03	1.00	Yes

TABLE A6-9. RICE SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Capacity	Size	Average	Standard Deviation	Detect Ratio	Description Capacity	Size	Average	Standard Deviation	Detect Ratio	
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	<650Hp	6	3.98E-03	3.60E-03	1.00	>650Hp	6	1.85E-03	6.89E-04	1.00	No
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	<650Hp	6	9.57E-04	1.03E-03	1.00	>650Hp	6	1.87E-04	9.30E-05	1.00	No
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	<650Hp	3	1.16E-02	3.13E-03	1.00	<650Hp	2	6.90E-02	2.88E-02	0.89	Yes
ICE, Natural Gas	VOC	1,3-Butadiene	lbs/MMcf	<650Hp	3	1.04E-01	3.92E-04	1.00	<650Hp	6	3.67E-01	6.37E-02	1.00	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	<650Hp	21	3.11E+00	2.67E+00	1.00	>650Hp	6	5.29E-01	1.04E+00	0.98	Yes
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	<650Hp	29	1.21E+00	1.31E+00	1.00	>650Hp	6	5.90E-02	5.20E-02	0.46	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	<650Hp	31	1.24E+00	2.40E+00	1.00	>650Hp	9	2.43E-01	4.78E-02	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	<650Hp	42	1.62E+01	1.69E+01	1.00	>650Hp	18	4.93E+00	7.25E+00	0.94	Yes
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	<650Hp	19	1.80E+01	2.01E+01	0.98	>650Hp	6	5.38E+00	3.30E+00	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	<650Hp	19	5.85E-01	7.01E-01	1.00	>650Hp	9	2.22E-01	1.12E-01	1.00	No
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	<650Hp	3	6.02E-02	1.86E-02	1.00	>650Hp	9	4.74E-01	3.49E-01	0.91	No

TABLE A6-10. OIL FIRED ASPHALT PRODUCTION CONTRACTOR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Contractor	Size	Average	Standard Deviation	Detect Ratio	Description Contractor	Size	Average	Standard Deviation	Detect Ratio	
Asphalt Prod., Oil	Metals	Arsenic	lbs/ton production	A	5	4.11E-06	7.38E-07	0.21	B	3	2.37E-06	1.60E-06	1.00	No
Asphalt Prod., Oil	Metals	Beryllium	lbs/ton production	A	5	3.83E-07	6.96E-08	0.00	B	3	4.16E-07	2.80E-08	0.00	No
Asphalt Prod., Oil	Metals	Cadmium	lbs/ton production	A	5	7.72E-07	1.81E-07	0.00	B	3	7.67E-07	9.69E-07	0.82	No
Asphalt Prod., Oil	Metals	Chromium (Hex)	lbs/ton production	A	5	6.25E-07	1.33E-07	0.00	B	3	1.04E-07	3.14E-08	1.00	Yes
Asphalt Prod., Oil	Metals	Chromium (Total)	lbs/ton production	A	5	1.13E-05	8.61E-06	1.00	B	3	9.04E-06	7.40E-06	1.00	No
Asphalt Prod., Oil	Metals	Copper	lbs/ton production	A	5	7.89E-06	2.84E-06	1.00	B	3	6.01E-06	2.98E-06	1.00	No
Asphalt Prod., Oil	Metals	Lead	lbs/ton production	A	5	3.74E-08	2.24E-08	1.00	B	3	1.41E-08	6.50E-07	1.00	No
Asphalt Prod., Oil	Metals	Manganese	lbs/ton production	A	5	2.09E-05	2.24E-05	1.00	B	3	1.40E-05	7.79E-06	1.00	Yes
Asphalt Prod., Oil	Metals	Mercury	lbs/ton production	A	5	3.67E-06	3.32E-06	1.00	B	3	7.02E-06	5.71E-06	1.00	No
Asphalt Prod., Oil	Metals	Nickel	lbs/ton production	A	5	1.98E-04	2.55E-04	1.00	B	3	8.42E-06	2.63E-06	1.00	No
Asphalt Prod., Oil	Metals	Selenium	lbs/ton production	A	5	7.04E-06	1.34E-06	0.21	B	3	2.08E-07	1.40E-08	0.00	Yes
Asphalt Prod., Oil	Metals	Zinc	lbs/ton production	A	5	1.62E-04	1.43E-04	1.00	B	3	2.62E-05	8.55E-06	1.00	No
Asphalt Prod., Oil	PAH	Acenaphthene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	3.08E-07	8.20E-08	1.00	No
Asphalt Prod., Oil	PAH	Acenaphthylene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	5.26E-07	2.35E-07	1.00	No
Asphalt Prod., Oil	PAH	Anthracene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	5.74E-08	1.78E-08	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(a)anthracene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	1.11E-08	2.14E-09	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(a)pyrene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	1.84E-09	1.84E-09	0.72	Yes
Asphalt Prod., Oil	PAH	Benzo(b)fluoranthene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	2.10E-09	2.45E-10	1.00	Yes
Asphalt Prod., Oil	PAH	Benzo(g,h,i)perylene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	1.20E-09	2.59E-10	0.75	Yes
Asphalt Prod., Oil	PAH	Benzo(k)fluoranthene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Chrysene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Dibenz(a,h)anthracene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Fluoranthene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	3.57E-08	9.68E-09	1.00	Yes
Asphalt Prod., Oil	PAH	Fluorene	lbs/ton production	A	5	3.17E-06	3.24E-06	1.00	B	3	6.58E-07	2.07E-07	1.00	No
Asphalt Prod., Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	8.17E-10	7.87E-11	0.00	Yes
Asphalt Prod., Oil	PAH	Naphthalene	lbs/ton production	A	5	2.38E-04	2.50E-04	1.00	B	3	3.08E-05	2.70E-06	1.00	No
Asphalt Prod., Oil	PAH	Phenanthrene	lbs/ton production	A	5	2.73E-06	2.52E-06	1.00	B	3	6.64E-07	2.18E-07	1.00	No
Asphalt Prod., Oil	PAH	Pyrene	lbs/ton production	A	5	3.52E-07	1.88E-07	0.00	B	3	5.62E-08	2.23E-08	1.00	Yes
Asphalt Prod., Oil	VOC	Benzene	lbs/ton production	A	5	5.00E-04	9.26E-05	1.00	B	3	5.80E-05	1.11E-05	1.00	Yes
Asphalt Prod., Oil	VOC	Formaldehyde	lbs/ton production	A	5	5.44E-04	4.15E-04	1.00	B	3	1.38E-04	2.29E-05	1.00	No

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	AGRICULTURAL WASTE	3	4.48E-10	4.17E-11	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	5.79E-11	1.61E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	AGRICULTURAL WASTE	3	4.46E-10	4.17E-11	0.00	SAW MILL WOOD WASTE	3	2.89E-11	1.03E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	AGRICULTURAL WASTE	3	4.46E-10	4.17E-11	0.00	URBAN WOOD WASTE	3	3.99E-11	8.81E-12	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.79E-11	1.61E-11	0.00	SAW MILL WOOD WASTE	3	2.89E-11	1.03E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.79E-11	1.61E-11	0.00	URBAN WOOD WASTE	3	3.99E-11	8.81E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	SAW MILL WOOD WASTE	3	2.89E-11	1.03E-11	0.00	URBAN WOOD WASTE	3	3.99E-11	8.81E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:4D Total	lbs/ton	AGRICULTURAL WASTE	3	2.16E-07	2.34E-07	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.58E-09	1.49E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:4D Total	lbs/ton	AGRICULTURAL WASTE	3	2.16E-07	2.34E-07	1.00	URBAN WOOD WASTE	3	1.79E-09	6.48E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:4D Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.58E-09	1.49E-09	1.00	URBAN WOOD WASTE	3	1.79E-09	6.48E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	AGRICULTURAL WASTE	3	8.69E-11	3.47E-11	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	8.69E-11	3.47E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	AGRICULTURAL WASTE	3	8.69E-11	3.47E-11	0.00	SAW MILL WOOD WASTE	3	3.28E-11	1.14E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	AGRICULTURAL WASTE	3	8.69E-11	3.47E-11	0.00	URBAN WOOD WASTE	3	6.10E-11	2.48E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	8.69E-11	3.47E-11	0.00	SAW MILL WOOD WASTE	3	3.28E-11	1.14E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	8.69E-11	3.47E-11	0.00	URBAN WOOD WASTE	3	6.10E-11	2.48E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	SAW MILL WOOD WASTE	3	3.28E-11	1.14E-11	0.00	URBAN WOOD WASTE	3	6.10E-11	2.48E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:5D Total	lbs/ton	AGRICULTURAL WASTE	3	5.85E-08	5.84E-08	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.07E-09	8.65E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D Total	lbs/ton	AGRICULTURAL WASTE	3	5.85E-08	5.84E-08	1.00	URBAN WOOD WASTE	3	1.54E-09	6.31E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:5D Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.07E-09	8.65E-10	1.00	URBAN WOOD WASTE	3	1.54E-09	6.31E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	AGRICULTURAL WASTE	3	1.22E-09	4.69E-10	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	9.07E-11	1.38E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	AGRICULTURAL WASTE	3	1.22E-09	4.69E-10	0.00	SAW MILL WOOD WASTE	3	4.36E-11	4.86E-12	0.29	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	AGRICULTURAL WASTE	3	1.22E-09	4.69E-10	0.00	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	9.07E-11	1.38E-11	0.00	SAW MILL WOOD WASTE	3	4.36E-11	4.86E-12	0.29	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	9.07E-11	1.38E-11	0.00	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	SAW MILL WOOD WASTE	3	4.36E-11	4.86E-12	0.29	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	AGRICULTURAL WASTE	3	1.27E-09	4.45E-10	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	7.94E-11	1.46E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	AGRICULTURAL WASTE	3	1.27E-09	4.45E-10	0.00	SAW MILL WOOD WASTE	3	6.38E-11	2.75E-11	0.50	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	AGRICULTURAL WASTE	3	1.27E-09	4.45E-10	0.00	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.94E-11	1.46E-11	0.00	SAW MILL WOOD WASTE	3	6.38E-11	2.75E-11	0.50	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.94E-11	1.46E-11	0.00	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	SAW MILL WOOD WASTE	3	6.38E-11	2.75E-11	0.50	URBAN WOOD WASTE	3	8.95E-11	1.03E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	AGRICULTURAL WASTE	3	1.15E-09	5.30E-10	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	7.19E-11	1.50E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	AGRICULTURAL WASTE	3	1.15E-09	5.30E-10	0.00	SAW MILL WOOD WASTE	3	4.77E-11	8.28E-12	0.40	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	AGRICULTURAL WASTE	3	1.15E-09	5.30E-10	0.00	URBAN WOOD WASTE	3	8.09E-11	1.01E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.19E-11	1.50E-11	0.00	SAW MILL WOOD WASTE	3	4.77E-11	8.28E-12	0.40	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.19E-11	1.50E-11	0.00	URBAN WOOD WASTE	3	8.09E-11	1.01E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	SAW MILL WOOD WASTE	3	4.77E-11	8.28E-12	0.40	URBAN WOOD WASTE	3	8.09E-11	1.01E-11	0.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D Total	lbs/ton	AGRICULTURAL WASTE	3	2.64E-08	1.33E-08	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	7.55E-10	2.81E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D Total	lbs/ton	AGRICULTURAL WASTE	3	2.64E-08	1.33E-08	1.00	URBAN WOOD WASTE	3	9.50E-10	3.82E-10	0.72	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:6D Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.55E-10	2.81E-10	1.00	URBAN WOOD WASTE	3	9.50E-10	3.82E-10	0.72	No
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	AGRICULTURAL WASTE	3	8.41E-09	2.08E-09	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.19E-10	1.73E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	AGRICULTURAL WASTE	3	8.41E-09	2.08E-09	1.00	SAW MILL WOOD WASTE	3	6.90E-10	2.02E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	AGRICULTURAL WASTE	3	8.41E-09	2.08E-09	1.00	URBAN WOOD WASTE	3	1.08E-10	2.89E-11	0.58	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.19E-10	1.73E-10	1.00	SAW MILL WOOD WASTE	3	6.90E-10	2.02E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.19E-10	1.73E-10	1.00	URBAN WOOD WASTE	3	1.08E-10	2.89E-11	0.58	No
FBC, Biomass	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	SAW MILL WOOD WASTE	3	6.90E-10	2.02E-10	1.00	URBAN WOOD WASTE	3	1.08E-10	2.89E-11	0.58	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D Total	lbs/ton	AGRICULTURAL WASTE	3	1.81E-09	4.65E-09	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.87E-10	1.87E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:7D Total	lbs/ton	AGRICULTURAL WASTE	3	1.81E-09	4.65E-09	1.00	URBAN WOOD WASTE	3	5.51E-09	9.31E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:7D Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.87E-10	1.87E-10	1.00	URBAN WOOD WASTE	3	5.51E-09	9.31E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	AGRICULTURAL WASTE	3	6.01E-09	1.41E-09	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.12E-10	1.63E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	AGRICULTURAL WASTE	3	6.01E-09	1.41E-09	1.00	SAW MILL WOOD WASTE	3	6.69E-09	2.53E-09	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	AGRICULTURAL WASTE	3	6.01E-09	1.41E-09	1.00	URBAN WOOD WASTE	3	3.32E-10	1.46E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.12E-10	1.63E-10	1.00	SAW MILL WOOD WASTE	3	6.69E-09	2.53E-09	1.00	Yes
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.12E-10	1.63E-10	1.00	URBAN WOOD WASTE	3	3.32E-10	1.46E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Dioxin:8D	lbs/ton	SAW MILL WOOD WASTE	3	6.69E-09	2.53E-09	1.00	URBAN WOOD WASTE	3	3.32E-10	1.46E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	AGRICULTURAL WASTE	3	3.20E-09	2.68E-09	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.00E-10	7.71E-11	1.00	No

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	AGRICULTURAL WASTE	3	3.20E-09	2.68E-09	1.00	SAW MILL WOOD WASTE	3	1.29E-10	5.25E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	AGRICULTURAL WASTE	3	3.20E-09	2.68E-09	1.00	URBAN WOOD WASTE	3	1.57E-10	5.09E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.00E-10	7.71E-11	1.00	SAW MILL WOOD WASTE	3	1.29E-10	5.25E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.00E-10	7.71E-11	1.00	URBAN WOOD WASTE	3	1.57E-10	5.09E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F 2378	lbs/ton	SAW MILL WOOD WASTE	3	1.29E-10	5.25E-11	1.00	URBAN WOOD WASTE	3	1.57E-10	5.09E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F Total	lbs/ton	AGRICULTURAL WASTE	3	3.08E-07	3.20E-07	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	6.58E-09	2.00E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F Total	lbs/ton	AGRICULTURAL WASTE	3	3.08E-07	3.20E-07	1.00	URBAN WOOD WASTE	3	4.46E-09	1.72E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:4F Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.58E-09	2.00E-09	1.00	URBAN WOOD WASTE	3	4.46E-09	1.72E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	AGRICULTURAL WASTE	3	1.28E-10	5.49E-11	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.28E-10	5.49E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	AGRICULTURAL WASTE	3	1.28E-10	5.49E-11	1.00	SAW MILL WOOD WASTE	3	6.27E-11	2.28E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	AGRICULTURAL WASTE	3	1.28E-10	5.49E-11	1.00	URBAN WOOD WASTE	3	1.19E-10	5.88E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.28E-10	5.49E-11	1.00	SAW MILL WOOD WASTE	3	6.27E-11	2.28E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.28E-10	5.49E-11	1.00	URBAN WOOD WASTE	3	1.19E-10	5.88E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 12378	lbs/ton	SAW MILL WOOD WASTE	3	6.27E-11	2.28E-11	1.00	URBAN WOOD WASTE	3	1.19E-10	5.88E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	AGRICULTURAL WASTE	3	1.63E-10	5.55E-11	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.63E-10	5.55E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	AGRICULTURAL WASTE	3	1.63E-10	5.55E-11	1.00	SAW MILL WOOD WASTE	3	1.03E-10	2.69E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	AGRICULTURAL WASTE	3	1.63E-10	5.55E-11	1.00	URBAN WOOD WASTE	3	1.60E-10	6.86E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.63E-10	5.55E-11	1.00	SAW MILL WOOD WASTE	3	1.03E-10	2.69E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.63E-10	5.55E-11	1.00	URBAN WOOD WASTE	3	1.60E-10	6.86E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F 23478	lbs/ton	SAW MILL WOOD WASTE	3	1.03E-10	2.69E-11	1.00	URBAN WOOD WASTE	3	1.60E-10	6.86E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F Total	lbs/ton	AGRICULTURAL WASTE	3	6.58E-08	8.09E-08	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.78E-09	7.74E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F Total	lbs/ton	AGRICULTURAL WASTE	3	6.58E-08	8.09E-08	1.00	URBAN WOOD WASTE	3	1.40E-09	6.82E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:5F Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.79E-09	7.74E-10	1.00	URBAN WOOD WASTE	3	1.40E-09	6.82E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	AGRICULTURAL WASTE	3	5.88E-11	1.21E-11	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	5.88E-11	1.21E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	AGRICULTURAL WASTE	3	5.88E-11	1.21E-11	1.00	SAW MILL WOOD WASTE	3	7.59E-11	3.95E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	AGRICULTURAL WASTE	3	5.88E-11	1.21E-11	1.00	URBAN WOOD WASTE	3	9.08E-11	3.96E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.88E-11	1.21E-11	1.00	SAW MILL WOOD WASTE	3	7.59E-11	3.95E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.88E-11	1.21E-11	1.00	URBAN WOOD WASTE	3	9.08E-11	3.96E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123478	lbs/ton	SAW MILL WOOD WASTE	3	7.59E-11	3.95E-11	1.00	URBAN WOOD WASTE	3	9.08E-11	3.96E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	AGRICULTURAL WASTE	3	1.68E-10	3.91E-10	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.98E-11	1.82E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	AGRICULTURAL WASTE	3	1.68E-10	3.91E-10	1.00	SAW MILL WOOD WASTE	3	1.12E-10	5.11E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	AGRICULTURAL WASTE	3	1.68E-10	3.91E-10	1.00	URBAN WOOD WASTE	3	8.18E-11	4.93E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.98E-11	1.82E-11	1.00	SAW MILL WOOD WASTE	3	1.12E-10	5.11E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.98E-11	1.82E-11	1.00	URBAN WOOD WASTE	3	8.18E-11	4.93E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123678	lbs/ton	SAW MILL WOOD WASTE	3	1.12E-10	5.11E-11	0.70	URBAN WOOD WASTE	3	8.18E-11	4.93E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	AGRICULTURAL WASTE	3	6.51E-10	5.42E-10	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.35E-11	6.50E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	AGRICULTURAL WASTE	3	6.51E-10	5.42E-10	0.00	SAW MILL WOOD WASTE	3	2.77E-11	2.63E-11	0.70	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	AGRICULTURAL WASTE	3	6.51E-10	5.42E-10	0.00	URBAN WOOD WASTE	3	4.60E-11	6.23E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.35E-11	6.50E-12	0.00	SAW MILL WOOD WASTE	3	2.77E-11	2.63E-11	0.70	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.35E-11	6.50E-12	0.00	URBAN WOOD WASTE	3	4.60E-11	6.23E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 123789	lbs/ton	SAW MILL WOOD WASTE	3	2.77E-11	2.63E-11	0.70	URBAN WOOD WASTE	3	4.60E-11	6.23E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	AGRICULTURAL WASTE	3	1.76E-09	1.40E-10	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.17E-11	1.14E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	AGRICULTURAL WASTE	3	1.76E-09	1.40E-10	1.00	SAW MILL WOOD WASTE	3	3.02E-10	2.69E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	AGRICULTURAL WASTE	3	1.76E-09	1.40E-10	1.00	URBAN WOOD WASTE	3	5.41E-11	1.78E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.17E-11	1.14E-11	1.00	SAW MILL WOOD WASTE	3	3.02E-10	2.69E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.17E-11	1.14E-11	1.00	URBAN WOOD WASTE	3	5.41E-11	1.78E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F 234678	lbs/ton	SAW MILL WOOD WASTE	3	3.02E-10	2.69E-10	1.00	URBAN WOOD WASTE	3	5.41E-11	1.78E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:6F Total	lbs/ton	AGRICULTURAL WASTE	3	2.88E-08	1.28E-08	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.78E-09	9.78E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F Total	lbs/ton	AGRICULTURAL WASTE	3	2.88E-08	1.28E-08	1.00	URBAN WOOD WASTE	3	8.03E-10	5.38E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:6F Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.78E-09	9.78E-11	1.00	URBAN WOOD WASTE	3	8.03E-10	5.38E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	AGRICULTURAL WASTE	3	7.32E-09	1.09E-09	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-10	2.11E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	AGRICULTURAL WASTE	3	7.32E-09	1.09E-09	1.00	SAW MILL WOOD WASTE	3	1.37E-09	1.44E-09	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	AGRICULTURAL WASTE	3	7.32E-09	1.09E-09	1.00	URBAN WOOD WASTE	3	3.41E-10	3.58E-10	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-10	2.11E-11	1.00	SAW MILL WOOD WASTE	3	1.37E-09	1.44E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-10	2.11E-11	1.00	URBAN WOOD WASTE	3	3.41E-10	3.58E-10	1.00	No

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	Dioxin/Furan	Furan:7F 1234678	lbs/ton	SAW MILL WOOD WASTE	3	1.37E-09	1.44E-09	1.00	URBAN WOOD WASTE	3	3.41E-10	3.68E-10	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	AGRICULTURAL WASTE	3	7.43E-10	5.89E-10	0.63	AGRICULTURAL/URBAN WOOD WASTE	3	4.72E-11	6.83E-12	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	AGRICULTURAL WASTE	3	7.43E-10	5.89E-10	0.63	SAW MILL WOOD WASTE	3	8.97E-11	9.71E-11	0.92	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	AGRICULTURAL WASTE	3	7.43E-10	5.89E-10	0.63	URBAN WOOD WASTE	3	4.98E-11	3.43E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.72E-11	6.83E-12	0.00	SAW MILL WOOD WASTE	3	8.97E-11	9.71E-11	0.92	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.72E-11	6.83E-12	0.00	URBAN WOOD WASTE	3	4.98E-11	3.43E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F 1234789	lbs/ton	SAW MILL WOOD WASTE	3	8.97E-11	9.71E-11	0.92	URBAN WOOD WASTE	3	4.98E-11	3.43E-11	0.00	No
FBC, Biomass	Dioxin/Furan	Furan:7F Total	lbs/ton	AGRICULTURAL WASTE	3	7.43E-10	5.89E-10	0.63	AGRICULTURAL/URBAN WOOD WASTE	3	1.33E-10	2.98E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:7F Total	lbs/ton	AGRICULTURAL WASTE	3	7.43E-10	5.89E-10	0.63	URBAN WOOD WASTE	3	1.16E-10	6.92E-11	1.00	Yes
FBC, Biomass	Dioxin/Furan	Furan:7F Total	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.33E-10	2.98E-11	1.00	URBAN WOOD WASTE	3	1.16E-10	6.92E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	AGRICULTURAL WASTE	3	5.24E-09	3.44E-09	0.81	AGRICULTURAL/URBAN WOOD WASTE	3	1.86E-10	3.04E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	AGRICULTURAL WASTE	3	5.24E-09	3.44E-09	0.81	SAW MILL WOOD WASTE	3	1.81E-09	1.85E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	AGRICULTURAL WASTE	3	5.24E-09	3.44E-09	0.81	URBAN WOOD WASTE	3	2.05E-10	8.21E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.86E-10	3.04E-11	1.00	SAW MILL WOOD WASTE	3	1.81E-09	1.85E-09	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.86E-10	3.04E-11	1.00	URBAN WOOD WASTE	3	2.05E-10	8.21E-11	1.00	No
FBC, Biomass	Dioxin/Furan	Furan:8F	lbs/ton	SAW MILL WOOD WASTE	3	1.81E-09	1.85E-09	1.00	URBAN WOOD WASTE	3	2.05E-10	8.21E-11	1.00	No
FBC, Biomass	Halogens	HCl	lbs/ton	AGRICULTURAL WASTE	3	7.21E-02	3.33E-02	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.14E-04	8.43E-05	1.00	Yes
FBC, Biomass	Halogens	HCl	lbs/ton	AGRICULTURAL WASTE	3	7.21E-02	3.33E-02	1.00	URBAN WOOD WASTE	3	1.55E-04	1.53E-04	1.00	Yes
FBC, Biomass	Halogens	HCl	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.14E-04	6.43E-05	1.00	URBAN WOOD WASTE	3	1.55E-04	1.53E-04	1.00	No
FBC, Biomass	Metals	Arsenic	lbs/ton	AGRICULTURAL WASTE	3	1.57E-05	2.35E-05	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.74E-05	1.21E-05	1.00	No
FBC, Biomass	Metals	Arsenic	lbs/ton	AGRICULTURAL WASTE	3	1.57E-05	2.35E-05	0.00	URBAN WOOD WASTE	3	6.08E-06	4.76E-06	1.00	No
FBC, Biomass	Metals	Arsenic	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.74E-05	1.21E-05	1.00	URBAN WOOD WASTE	3	6.08E-06	4.76E-06	1.00	Yes
FBC, Biomass	Metals	Beryllium	lbs/ton	AGRICULTURAL WASTE	3	2.16E-06	1.02E-07	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.85E-07	1.10E-07	0.77	Yes
FBC, Biomass	Metals	Beryllium	lbs/ton	AGRICULTURAL WASTE	3	2.16E-06	1.02E-07	0.00	URBAN WOOD WASTE	3	2.76E-07	1.08E-07	0.00	Yes
FBC, Biomass	Metals	Beryllium	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.85E-07	1.10E-07	0.77	URBAN WOOD WASTE	3	2.76E-07	1.08E-07	0.00	No
FBC, Biomass	Metals	Cadmium	lbs/ton	AGRICULTURAL WASTE	3	8.87E-05	1.17E-04	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	5.35E-06	5.25E-06	1.00	No
FBC, Biomass	Metals	Cadmium	lbs/ton	AGRICULTURAL WASTE	3	8.87E-05	1.17E-04	0.00	URBAN WOOD WASTE	3	5.29E-06	3.99E-06	1.00	No
FBC, Biomass	Metals	Cadmium	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.35E-06	5.25E-06	1.00	URBAN WOOD WASTE	3	5.29E-06	3.99E-06	1.00	No
FBC, Biomass	Metals	Chromium (Hex)	lbs/ton	AGRICULTURAL WASTE	3	4.28E-05	6.16E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	9.58E-07	4.68E-08	0.00	Yes
FBC, Biomass	Metals	Chromium (Hex)	lbs/ton	AGRICULTURAL WASTE	3	4.28E-05	6.16E-06	0.00	URBAN WOOD WASTE	3	1.02E-06	1.54E-08	0.00	Yes
FBC, Biomass	Metals	Chromium (Hex)	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	9.58E-07	4.68E-08	0.00	URBAN WOOD WASTE	3	1.02E-06	1.54E-08	0.00	No
FBC, Biomass	Metals	Chromium (Total)	lbs/ton	AGRICULTURAL WASTE	3	2.88E-06	1.35E-06	0.52	AGRICULTURAL/URBAN WOOD WASTE	3	4.07E-05	2.04E-05	1.00	Yes
FBC, Biomass	Metals	Chromium (Total)	lbs/ton	AGRICULTURAL WASTE	3	2.88E-06	1.35E-06	0.52	URBAN WOOD WASTE	3	3.85E-05	2.88E-05	1.00	Yes
FBC, Biomass	Metals	Chromium (Total)	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.07E-05	2.04E-05	1.00	URBAN WOOD WASTE	3	3.85E-05	2.88E-05	1.00	Yes
FBC, Biomass	Metals	Copper	lbs/ton	AGRICULTURAL WASTE	3	6.15E-05	2.11E-05	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	6.13E-05	1.64E-05	1.00	No
FBC, Biomass	Metals	Copper	lbs/ton	AGRICULTURAL WASTE	3	6.15E-05	2.11E-05	1.00	URBAN WOOD WASTE	3	3.80E-05	6.42E-06	1.00	No
FBC, Biomass	Metals	Copper	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.13E-05	1.64E-05	1.00	URBAN WOOD WASTE	3	3.60E-05	6.42E-06	1.00	No
FBC, Biomass	Metals	Lead	lbs/ton	AGRICULTURAL WASTE	3	6.54E-05	3.40E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	8.78E-05	7.38E-05	1.00	No
FBC, Biomass	Metals	Lead	lbs/ton	AGRICULTURAL WASTE	3	6.54E-05	3.40E-06	0.00	URBAN WOOD WASTE	3	4.04E-05	3.32E-05	1.00	No
FBC, Biomass	Metals	Lead	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	8.78E-05	7.38E-05	1.00	URBAN WOOD WASTE	3	4.04E-05	3.32E-05	1.00	No
FBC, Biomass	Metals	Manganese	lbs/ton	AGRICULTURAL WASTE	3	2.88E-04	3.84E-04	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	7.65E-04	6.80E-04	1.00	No
FBC, Biomass	Metals	Manganese	lbs/ton	AGRICULTURAL WASTE	3	2.88E-04	3.84E-04	1.00	URBAN WOOD WASTE	3	1.64E-04	2.29E-04	1.00	No
FBC, Biomass	Metals	Manganese	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	7.65E-04	6.80E-04	1.00	URBAN WOOD WASTE	3	1.64E-04	2.29E-04	1.00	No
FBC, Biomass	Metals	Mercury	lbs/ton	AGRICULTURAL WASTE	3	1.92E-04	1.13E-04	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	9.41E-06	7.72E-06	0.65	Yes
FBC, Biomass	Metals	Mercury	lbs/ton	AGRICULTURAL WASTE	3	1.92E-04	1.13E-04	1.00	URBAN WOOD WASTE	3	3.89E-04	3.16E-04	1.00	No
FBC, Biomass	Metals	Mercury	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	9.41E-06	7.72E-06	0.65	URBAN WOOD WASTE	3	3.89E-04	3.16E-04	1.00	No
FBC, Biomass	Metals	Nickel	lbs/ton	AGRICULTURAL WASTE	3	4.50E-05	9.88E-07	0.34	AGRICULTURAL/URBAN WOOD WASTE	3	3.58E-05	3.37E-05	1.00	No
FBC, Biomass	Metals	Nickel	lbs/ton	AGRICULTURAL WASTE	3	4.50E-05	9.88E-07	0.34	URBAN WOOD WASTE	3	8.51E-06	5.99E-06	1.00	Yes
FBC, Biomass	Metals	Nickel	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.58E-05	3.37E-05	1.00	URBAN WOOD WASTE	3	8.51E-06	5.99E-06	1.00	No
FBC, Biomass	Metals	Selenium	lbs/ton	AGRICULTURAL WASTE	3	1.90E-05	7.71E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	9.78E-06	7.68E-06	1.00	No
FBC, Biomass	Metals	Selenium	lbs/ton	AGRICULTURAL WASTE	3	1.90E-05	7.71E-06	0.00	URBAN WOOD WASTE	3	6.29E-06	3.52E-06	1.00	No
FBC, Biomass	Metals	Selenium	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	9.78E-06	7.66E-06	1.00	URBAN WOOD WASTE	3	6.29E-06	3.52E-06	1.00	No
FBC, Biomass	Metals	Zinc	lbs/ton	AGRICULTURAL WASTE	3	3.38E-04	2.26E-04	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.47E-04	2.97E-04	1.00	No
FBC, Biomass	Metals	Zinc	lbs/ton	AGRICULTURAL WASTE	3	3.38E-04	2.26E-04	1.00	URBAN WOOD WASTE	3	1.74E-04	1.42E-04	1.00	No
FBC, Biomass	Metals	Zinc	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.47E-04	2.97E-04	1.00	URBAN WOOD WASTE	3	1.74E-04	1.42E-04	1.00	No

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	PAH	Acenaphthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	5.62E-07	3.17E-07	1.00	Yes
FBC, Biomass	PAH	Acenaphthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	7.04E-07	3.53E-07	1.00	Yes
FBC, Biomass	PAH	Acenaphthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	6.96E-06	1.20E-06	1.00	No
FBC, Biomass	PAH	Acenaphthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.62E-07	3.17E-07	1.00	SAW MILL WOOD WASTE	3	7.04E-07	3.53E-07	1.00	No
FBC, Biomass	PAH	Acenaphthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.62E-07	3.17E-07	1.00	URBAN WOOD WASTE	3	6.96E-06	1.20E-06	1.00	No
FBC, Biomass	PAH	Acenaphthene	lbs/ton	SAW MILL WOOD WASTE	3	7.04E-07	3.53E-07	1.00	URBAN WOOD WASTE	3	6.96E-06	1.20E-06	1.00	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	AGRICULTURAL WASTE	3	9.47E-05	9.77E-05	0.95	AGRICULTURAL/URBAN WOOD WASTE	3	5.14E-07	3.49E-07	1.00	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	AGRICULTURAL WASTE	3	9.47E-05	9.77E-05	0.95	SAW MILL WOOD WASTE	3	2.67E-05	1.31E-05	1.00	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	AGRICULTURAL WASTE	3	9.47E-05	9.77E-05	0.95	URBAN WOOD WASTE	3	1.62E-07	1.97E-07	1.00	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.14E-07	3.49E-07	1.00	SAW MILL WOOD WASTE	3	2.67E-05	1.31E-05	1.00	Yes
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	5.14E-07	3.49E-07	1.00	URBAN WOOD WASTE	3	1.62E-07	1.97E-07	1.00	No
FBC, Biomass	PAH	Acenaphthylene	lbs/ton	SAW MILL WOOD WASTE	3	2.67E-05	1.31E-05	1.00	URBAN WOOD WASTE	3	1.62E-07	1.97E-07	1.00	Yes
FBC, Biomass	PAH	Anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	6.80E-07	3.13E-07	1.00	Yes
FBC, Biomass	PAH	Anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	6.88E-07	1.92E-07	1.00	Yes
FBC, Biomass	PAH	Anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	2.92E-07	4.03E-07	1.00	Yes
FBC, Biomass	PAH	Anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.80E-07	3.13E-07	1.00	SAW MILL WOOD WASTE	3	6.88E-07	1.92E-07	1.00	No
FBC, Biomass	PAH	Anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.80E-07	3.13E-07	1.00	URBAN WOOD WASTE	3	2.92E-07	4.03E-07	1.00	No
FBC, Biomass	PAH	Anthracene	lbs/ton	SAW MILL WOOD WASTE	3	6.88E-07	1.92E-07	1.00	URBAN WOOD WASTE	3	2.92E-07	4.03E-07	1.00	No
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-07	3.62E-08	1.00	Yes
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	2.05E-08	4.18E-09	0.74	Yes
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	3.86E-08	8.74E-09	0.25	Yes
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-07	3.62E-08	1.00	SAW MILL WOOD WASTE	3	2.05E-08	4.18E-09	0.74	Yes
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.21E-07	3.62E-08	1.00	URBAN WOOD WASTE	3	3.86E-08	8.74E-09	0.25	Yes
FBC, Biomass	PAH	Benzo(a)anthracene	lbs/ton	SAW MILL WOOD WASTE	3	2.05E-08	4.18E-09	0.74	URBAN WOOD WASTE	3	3.86E-08	8.74E-09	0.25	Yes
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.70E-08	1.45E-08	0.19	Yes
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	Yes
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.70E-08	1.45E-08	0.19	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	No
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.70E-08	1.45E-08	0.19	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Benzo(a)pyrene	lbs/ton	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.48E-08	8.33E-09	1.00	Yes
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	1.25E-07	1.66E-08	1.00	Yes
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.48E-08	8.33E-09	1.00	SAW MILL WOOD WASTE	3	1.25E-07	1.66E-08	1.00	Yes
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.48E-08	8.33E-09	1.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Benzo(b)fluoranthene	lbs/ton	SAW MILL WOOD WASTE	3	1.25E-07	1.66E-08	1.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	5.94E-08	3.59E-08	1.00	Yes
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	SAW MILL WOOD WASTE	3	5.94E-08	3.59E-08	1.00	No
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Benzo(g,h,i)perylene	lbs/ton	SAW MILL WOOD WASTE	3	5.94E-08	3.59E-08	1.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	3.00E-08	9.68E-09	1.00	Yes
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	SAW MILL WOOD WASTE	3	3.00E-08	9.68E-09	1.00	No
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Benzo(k)fluoranthene	lbs/ton	SAW MILL WOOD WASTE	3	3.00E-08	9.68E-09	1.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Chrysene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	Yes
FBC, Biomass	PAH	Chrysene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	2.35E-07	3.52E-08	1.00	Yes
FBC, Biomass	PAH	Chrysene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Chrysene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	SAW MILL WOOD WASTE	3	2.35E-07	3.52E-08	1.00	Yes
FBC, Biomass	PAH	Chrysene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Chrysene	lbs/ton	SAW MILL WOOD WASTE	3	2.35E-07	3.52E-08	1.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	Yes

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	Yes
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	Yes
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Dibenz(a,h)anthracene	lbs/ton	SAW MILL WOOD WASTE	3	1.64E-08	6.23E-10	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	3.15E-08	1.20E-08	1.00	Yes
FBC, Biomass	PAH	Fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	6.73E-08	2.44E-08	1.00	Yes
FBC, Biomass	PAH	Fluoranthene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	1.88E-07	6.62E-08	1.00	Yes
FBC, Biomass	PAH	Fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.15E-08	1.20E-08	1.00	SAW MILL WOOD WASTE	3	6.73E-08	2.44E-08	1.00	No
FBC, Biomass	PAH	Fluoranthene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	3.15E-08	1.20E-08	1.00	URBAN WOOD WASTE	3	1.88E-07	6.62E-08	1.00	Yes
FBC, Biomass	PAH	Fluoranthene	lbs/ton	SAW MILL WOOD WASTE	3	6.73E-08	2.44E-08	1.00	URBAN WOOD WASTE	3	1.88E-07	6.62E-08	1.00	Yes
FBC, Biomass	PAH	Fluorene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.38E-08	1.27E-08	1.00	Yes
FBC, Biomass	PAH	Fluorene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	1.32E-08	6.67E-07	1.00	Yes
FBC, Biomass	PAH	Fluorene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	3.75E-07	2.28E-07	1.00	Yes
FBC, Biomass	PAH	Fluorene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.38E-08	1.27E-08	1.00	SAW MILL WOOD WASTE	3	1.32E-08	6.67E-07	1.00	No
FBC, Biomass	PAH	Fluorene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.38E-08	1.27E-08	1.00	URBAN WOOD WASTE	3	3.75E-07	2.28E-07	1.00	No
FBC, Biomass	PAH	Fluorene	lbs/ton	SAW MILL WOOD WASTE	3	1.32E-08	6.67E-07	1.00	URBAN WOOD WASTE	3	3.75E-07	2.28E-07	1.00	No
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	Yes
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	SAW MILL WOOD WASTE	3	2.47E-08	1.15E-08	0.78	Yes
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.20E-05	3.01E-06	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	Yes
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	SAW MILL WOOD WASTE	3	2.47E-08	1.15E-08	0.78	No
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.41E-08	5.22E-09	0.00	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	SAW MILL WOOD WASTE	3	2.47E-08	1.15E-08	0.78	URBAN WOOD WASTE	3	4.26E-08	1.82E-09	0.00	No
FBC, Biomass	PAH	Naphthalene	lbs/ton	AGRICULTURAL WASTE	3	2.17E-05	2.68E-05	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.17E-05	2.68E-05	1.00	Yes
FBC, Biomass	PAH	Naphthalene	lbs/ton	AGRICULTURAL WASTE	3	2.17E-05	2.68E-05	1.00	SAW MILL WOOD WASTE	3	2.99E-04	9.94E-05	1.00	Yes
FBC, Biomass	PAH	Naphthalene	lbs/ton	AGRICULTURAL WASTE	3	2.17E-05	2.68E-05	1.00	URBAN WOOD WASTE	3	1.00E-05	1.01E-05	1.00	Yes
FBC, Biomass	PAH	Naphthalene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.17E-05	2.68E-05	1.00	SAW MILL WOOD WASTE	3	2.99E-04	9.94E-05	1.00	Yes
FBC, Biomass	PAH	Naphthalene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.17E-05	2.68E-05	1.00	URBAN WOOD WASTE	3	1.00E-05	1.01E-05	1.00	No
FBC, Biomass	PAH	Naphthalene	lbs/ton	SAW MILL WOOD WASTE	3	2.99E-04	9.94E-05	1.00	URBAN WOOD WASTE	3	1.00E-05	1.01E-05	1.00	Yes
FBC, Biomass	PAH	Phenanthrene	lbs/ton	AGRICULTURAL WASTE	3	1.62E-05	6.79E-06	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.62E-05	6.79E-06	1.00	Yes
FBC, Biomass	PAH	Phenanthrene	lbs/ton	AGRICULTURAL WASTE	3	1.62E-05	6.79E-06	1.00	SAW MILL WOOD WASTE	3	1.92E-05	5.38E-06	1.00	Yes
FBC, Biomass	PAH	Phenanthrene	lbs/ton	AGRICULTURAL WASTE	3	1.62E-05	6.79E-06	1.00	URBAN WOOD WASTE	3	7.06E-07	5.32E-07	1.00	Yes
FBC, Biomass	PAH	Phenanthrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.62E-05	6.79E-06	1.00	SAW MILL WOOD WASTE	3	1.92E-05	5.38E-06	1.00	No
FBC, Biomass	PAH	Phenanthrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.62E-05	6.79E-06	1.00	URBAN WOOD WASTE	3	7.06E-07	5.32E-07	1.00	Yes
FBC, Biomass	PAH	Phenanthrene	lbs/ton	SAW MILL WOOD WASTE	3	1.92E-05	5.38E-06	1.00	URBAN WOOD WASTE	3	7.06E-07	5.32E-07	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.24E-06	4.10E-07	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.24E-06	4.10E-07	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.24E-06	4.10E-07	1.00	SAW MILL WOOD WASTE	3	4.78E-08	1.66E-08	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	AGRICULTURAL WASTE	3	1.24E-06	4.10E-07	1.00	URBAN WOOD WASTE	3	1.03E-07	2.93E-08	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.24E-06	4.10E-07	1.00	SAW MILL WOOD WASTE	3	4.78E-08	1.66E-08	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.24E-06	4.10E-07	1.00	URBAN WOOD WASTE	3	1.03E-07	2.93E-08	1.00	Yes
FBC, Biomass	PAH	Pyrene	lbs/ton	SAW MILL WOOD WASTE	3	4.78E-08	1.66E-08	1.00	URBAN WOOD WASTE	3	1.03E-07	2.93E-08	1.00	Yes
FBC, Biomass	PCB	PCB:Decachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.17E-09	1.92E-09	1.00	SAW MILL WOOD WASTE	3	6.47E-10	2.09E-10	0.00	Yes
FBC, Biomass	PCB	PCB:Decachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.17E-09	1.92E-09	1.00	URBAN WOOD WASTE	3	2.95E-09	1.20E-09	0.00	No
FBC, Biomass	PCB	PCB:Decachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	6.47E-10	2.09E-10	0.00	URBAN WOOD WASTE	3	2.95E-09	1.20E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Dichlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.53E-08	4.82E-09	0.00	SAW MILL WOOD WASTE	3	1.53E-08	4.82E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Dichlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.53E-08	4.82E-09	0.00	URBAN WOOD WASTE	3	7.58E-08	6.17E-08	0.00	Yes
FBC, Biomass	PCB	PCB:Dichlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	1.53E-08	4.82E-09	0.00	URBAN WOOD WASTE	3	7.58E-08	6.17E-08	0.00	No
FBC, Biomass	PCB	PCB:Heptachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.85E-08	7.81E-09	1.00	SAW MILL WOOD WASTE	3	7.62E-10	8.58E-11	0.00	Yes
FBC, Biomass	PCB	PCB:Heptachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.85E-08	7.81E-09	1.00	URBAN WOOD WASTE	3	4.37E-09	1.46E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Heptachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	7.62E-10	8.58E-11	0.00	URBAN WOOD WASTE	3	4.37E-09	1.46E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Hexachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.11E-08	1.88E-08	1.00	SAW MILL WOOD WASTE	3	1.32E-09	6.27E-10	0.00	Yes
FBC, Biomass	PCB	PCB:Hexachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.11E-08	1.88E-08	1.00	URBAN WOOD WASTE	3	5.21E-09	2.68E-09	1.00	Yes
FBC, Biomass	PCB	PCB:Hexachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	1.32E-09	6.27E-10	0.00	URBAN WOOD WASTE	3	5.21E-09	2.68E-09	1.00	No
FBC, Biomass	PCB	PCB:Monochlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.40E-07	5.40E-08	1.00	SAW MILL WOOD WASTE	3	2.43E-08	3.07E-09	1.00	Yes
FBC, Biomass	PCB	PCB:Monochlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.40E-07	5.40E-08	1.00	URBAN WOOD WASTE	3	2.22E-07	2.28E-07	1.00	No

TABLE A6-11. FLUIDIZED BED FUEL TYPE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	Description Fuel Type	Size	Average	Standard Deviation	Detect Ratio	
FBC, Biomass	PCB	PCB:Monochlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	2.43E-08	3.07E-09	1.00	URBAN WOOD WASTE	3	2.22E-07	2.28E-07	1.00	No
FBC, Biomass	PCB	PCB:Nonachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.08E-09	1.48E-09	1.00	SAW MILL WOOD WASTE	3	8.25E-10	2.77E-10	0.00	Yes
FBC, Biomass	PCB	PCB:Nonachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.05E-09	1.48E-09	1.00	URBAN WOOD WASTE	3	2.03E-09	1.09E-09	0.00	No
FBC, Biomass	PCB	PCB:Monochlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	8.25E-10	2.77E-10	0.00	URBAN WOOD WASTE	3	2.03E-09	1.09E-09	0.00	No
FBC, Biomass	PCB	PCB:Octachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.41E-08	3.86E-09	0.00	SAW MILL WOOD WASTE	3	1.16E-09	2.65E-10	0.00	Yes
FBC, Biomass	PCB	PCB:Octachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	6.41E-08	3.86E-09	0.00	URBAN WOOD WASTE	3	3.67E-08	6.71E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Octachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	1.16E-09	2.65E-10	0.00	URBAN WOOD WASTE	3	3.67E-08	6.71E-09	0.00	Yes
FBC, Biomass	PCB	PCB:Pentachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.16E-09	2.65E-10	1.00	SAW MILL WOOD WASTE	3	4.61E-09	1.92E-09	1.00	Yes
FBC, Biomass	PCB	PCB:Pentachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.16E-09	2.65E-10	1.00	URBAN WOOD WASTE	3	6.62E-09	4.18E-09	0.82	Yes
FBC, Biomass	PCB	PCB:Pentachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	4.61E-09	1.92E-09	1.00	URBAN WOOD WASTE	3	6.62E-09	4.18E-09	0.82	No
FBC, Biomass	PCB	PCB:Tetrachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.69E-08	4.64E-09	1.00	SAW MILL WOOD WASTE	3	1.69E-08	4.64E-09	1.00	Yes
FBC, Biomass	PCB	PCB:Tetrachlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.69E-08	4.64E-09	1.00	URBAN WOOD WASTE	3	3.79E-08	1.88E-08	1.00	Yes
FBC, Biomass	PCB	PCB:Tetrachlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	1.69E-08	4.64E-09	1.00	URBAN WOOD WASTE	3	3.79E-08	1.88E-08	1.00	No
FBC, Biomass	PCB	PCB:Trichlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.12E-08	2.10E-08	1.00	SAW MILL WOOD WASTE	3	1.63E-08	4.09E-08	1.00	Yes
FBC, Biomass	PCB	PCB:Trichlorinated biphenyls	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	4.12E-08	2.10E-08	1.00	URBAN WOOD WASTE	3	1.94E-07	2.01E-07	1.00	Yes
FBC, Biomass	PCB	PCB:Trichlorinated biphenyls	lbs/ton	SAW MILL WOOD WASTE	3	1.53E-08	4.09E-09	1.00	URBAN WOOD WASTE	3	1.94E-07	2.01E-07	1.00	No
FBC, Biomass	VOC	Acetaldehyde	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.87E-04	1.87E-05	1.00	URBAN WOOD WASTE	3	1.03E-03	7.65E-04	1.00	No
FBC, Biomass	VOC	Acrolein	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.31E-04	1.43E-04	0.75	URBAN WOOD WASTE	3	5.23E-05	2.21E-06	0.00	No
FBC, Biomass	VOC	Benzene	lbs/ton	AGRICULTURAL WASTE	3	1.70E-04	2.19E-04	0.75	AGRICULTURAL/URBAN WOOD WASTE	3	1.34E-04	3.63E-06	0.00	Yes
FBC, Biomass	VOC	Benzene	lbs/ton	AGRICULTURAL WASTE	3	1.70E-04	2.19E-04	0.75	URBAN WOOD WASTE	3	1.49E-04	1.21E-06	0.00	Yes
FBC, Biomass	VOC	Benzene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.34E-04	3.63E-06	0.00	URBAN WOOD WASTE	3	1.49E-04	1.21E-06	0.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	AGRICULTURAL WASTE	3	2.34E-04	4.02E-05	1.00	AGRICULTURAL/URBAN WOOD WASTE	3	2.65E-03	3.73E-04	1.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	AGRICULTURAL WASTE	3	2.34E-04	4.02E-05	1.00	SAW MILL WOOD WASTE	3	3.68E-04	1.35E-04	1.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	AGRICULTURAL WASTE	3	2.34E-04	4.02E-05	1.00	URBAN WOOD WASTE	3	6.04E-04	1.68E-04	1.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.34E-04	4.02E-05	1.00	SAW MILL WOOD WASTE	3	3.68E-04	1.35E-04	1.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	2.34E-04	4.02E-05	1.00	URBAN WOOD WASTE	3	6.04E-04	1.68E-04	1.00	Yes
FBC, Biomass	VOC	Formaldehyde	lbs/ton	SAW MILL WOOD WASTE	3	3.68E-04	1.35E-04	1.00	URBAN WOOD WASTE	3	6.04E-04	1.68E-04	1.00	No
FBC, Biomass	VOC	Toluene	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.28E-04	1.05E-05	0.64	URBAN WOOD WASTE	3	1.70E-04	3.19E-05	0.00	No
FBC, Biomass	VOC	Vinyl Chloride	lbs/ton	AGRICULTURAL WASTE	3	5.43E-04	1.21E-04	0.00	AGRICULTURAL/URBAN WOOD WASTE	3	1.42E-04	3.72E-06	0.00	Yes
FBC, Biomass	VOC	Vinyl Chloride	lbs/ton	AGRICULTURAL WASTE	3	5.43E-04	1.21E-04	0.00	URBAN WOOD WASTE	3	1.57E-04	1.62E-06	0.00	Yes
FBC, Biomass	VOC	Vinyl Chloride	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.42E-04	3.72E-06	0.00	URBAN WOOD WASTE	3	1.57E-04	1.62E-06	0.00	Yes
FBC, Biomass	VOC	Xylene (Total)	lbs/ton	AGRICULTURAL/URBAN WOOD WASTE	3	1.50E-04	8.24E-05	0.68	URBAN WOOD WASTE	3	1.60E-04	1.30E-06	0.00	No

TABLE A6-12. COATING, DRYER, AND INCINERATOR MATERIAL COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Material	Size	Average	Standard Deviation	Detect Ratio	Description Material	Size	Average	Standard Deviation	Detect Ratio	
Coating, Base/Catalyst/Water Mix	Metals	Chromium (Hex)	lbs/gal paint	26% Cr	6	6.63E-04	7.23E-04	1.00	5.25% Cr	6	2.59E-05	1.65E-05	0.78	Yes
Coating, Base/Catalyst/Water Mix	Metals	Chromium (Total)	lbs/gal paint	24% Cr	6	1.02E-04	3.03E-04	1.00	5.25% Cr	6	3.59E-05	3.02E-05	0.81	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	20% Cr	1	5.15E-01		1.00	4% Cr	1	3.62E-01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	20% Cr	1	5.15E-01		1.00	44% Cr	1	6.01E-01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	20% Cr	1	5.15E-01		1.00	68% Cr	1	1.78E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	20% Cr	1	5.15E-01		1.00	79% Cr	1	3.25E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	20% Cr	1	5.15E-01		1.00	8.5% Cr	3	6.67E-02	4.53E-02	1.00	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	4% Cr	1	3.62E-01		1.00	44% Cr	1	6.01E-01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	4% Cr	1	3.62E-01		1.00	68% Cr	1	1.78E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	4% Cr	1	3.62E-01		1.00	79% Cr	1	3.25E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	4% Cr	1	3.62E-01		1.00	8.5% Cr	3	6.67E-02	4.53E-02	1.00	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	44% Cr	1	6.01E-01		1.00	68% Cr	1	1.78E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	44% Cr	1	6.01E-01		1.00	79% Cr	1	3.25E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	44% Cr	1	6.01E-01		1.00	8.5% Cr	3	6.67E-02	4.53E-02	1.00	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	68% Cr	1	1.78E+01		1.00	79% Cr	1	3.25E+01		1.00	NA
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	68% Cr	1	1.78E+01		1.00	8.5% Cr	3	6.67E-02	4.53E-02	1.00	Yes
Coating, Powder	Metals	Chromium (Hex)	lbs/ton powder	79% Cr	1	3.25E+01		1.00	8.5% Cr	3	6.67E-02	4.53E-02	1.00	Yes
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	20% Cr	1	3.71E+00		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	4% Cr	1	3.72E-01		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	44% Cr	1	8.05E-01		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	68% Cr	1	2.84E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	79% Cr	1	7.50E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	0% Cr	1	6.97E-01		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	20% Cr	1	3.71E+00		1.00	4% Cr	1	3.72E-01		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	20% Cr	1	3.71E+00		1.00	44% Cr	1	8.05E-01		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	20% Cr	1	3.71E+00		1.00	68% Cr	1	2.84E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	20% Cr	1	3.71E+00		1.00	79% Cr	1	7.50E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	20% Cr	1	3.71E+00		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	4% Cr	1	3.72E-01		1.00	44% Cr	1	8.05E-01		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	4% Cr	1	3.72E-01		1.00	68% Cr	1	2.84E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	4% Cr	1	3.72E-01		1.00	79% Cr	1	7.50E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	4% Cr	1	3.72E-01		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	44% Cr	1	8.05E-01		1.00	68% Cr	1	2.84E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	44% Cr	1	8.05E-01		1.00	79% Cr	1	7.50E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	44% Cr	1	8.05E-01		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	No
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	68% Cr	1	2.84E+02		1.00	79% Cr	1	7.50E+02		1.00	NA
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	68% Cr	1	2.84E+02		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	Yes
Coating, Powder	Metals	Chromium (Total)	lbs/ton powder	79% Cr	1	7.50E+02		1.00	8.5% Cr	3	7.64E+00	3.38E+00	1.00	Yes
Coating, Powder	Metals	Nickel	lbs/ton powder	0% Cr	1	3.21E+00		1.00	8.5% Cr	3	3.08E+00	7.68E-01	1.00	No
Dryer, Pot ash	Metals	Arsenic	lbs/ton ore	Pot Ash	3	4.86E-03	8.08E-03	1.00	Sulfate of Pot Ash	3	2.40E-03	6.74E-04	1.00	No
Dryer, Pot ash	Metals	Beryllium	lbs/ton ore	Pot Ash	3	1.04E-05	5.10E-06	0.42	Sulfate of Pot Ash	3	2.87E-04	1.22E-04	0.00	Yes
Dryer, Pot ash	Metals	Lead	lbs/ton ore	Pot Ash	3	5.20E-05	2.59E-05	0.42	Sulfate of Pot Ash	3	1.43E-03	6.12E-04	0.00	Yes
Dryer, Pot ash	SVOC	1,2-Dichlorobenzene	lbs/ton ore	Pot Ash	3	1.82E-06	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.25E-06	0.00	Yes
Dryer, Pot ash	SVOC	Ethylbenzene	lbs/ton ore	Pot Ash	3	8.79E-08	5.25E-07	0.00	Sulfate of Pot Ash	3	3.58E-04	6.66E-04	0.93	No
Dryer, Pot ash	VOC	1,1,1-Trichloroethane	lbs/ton ore	Pot Ash	3	6.18E-05	1.04E-04	0.98	Sulfate of Pot Ash	3	6.76E-03	6.26E-03	1.00	No
Dryer, Pot ash	VOC	1,1,2,2-Tetrachloroethane	lbs/ton ore	Pot Ash	3	3.64E-06	0.00E+00	0.00	Sulfate of Pot Ash	3	6.30E-04	6.13E-04	0.96	No
Dryer, Pot ash	VOC	1,1,2-Trichloroethane	lbs/ton ore	Pot Ash	3	1.82E-06	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.25E-06	0.00	Yes
Dryer, Pot ash	VOC	1,1-Dichloroethane	lbs/ton ore	Pot Ash	3	1.82E-06	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.25E-06	0.00	Yes

TABLE A6-12. COATING, DRYER, AND INCINERATOR MATERIAL COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Material	Size	Average	Standard Deviation	Detect Ratio	Description Material	Size	Average	Standard Deviation	Detect Ratio	
Dryer, Pot ash	VOC	1,1-Dichloroethene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	8.43E-05	4.78E-05	0.81	No
Dryer, Pot ash	VOC	1,2-Dichloroethene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	7.24E-05	8.16E-05	0.88	No
Dryer, Pot ash	VOC	1,2-Dichloroethene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	1,2-Dichloropropane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	1.18E-04	9.61E-05	0.58	No
Dryer, Pot ash	VOC	Acetone	lbs/ton ore	Pot Ash	3	3.38E+00	5.73E+00	1.00	Sulfate of Pot Ash	1	4.43E-03		0.00	No
Dryer, Pot ash	VOC	Benzene	lbs/ton ore	Pot Ash	3	1.83E-04	1.18E-04	1.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Bromodichloromethane	lbs/ton ore	Pot Ash	2	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Bromoform	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Bromomethane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Carbon disulfide	lbs/ton ore	Pot Ash	3	2.24E-05	3.87E-05	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Carbon Tetrachloride	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Chlorobenzene	lbs/ton ore	Pot Ash	2	2.73E-08	1.29E-08	1.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Chloroethane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Chloroform	lbs/ton ore	Pot Ash	3	8.79E-08	6.25E-07	0.00	Sulfate of Pot Ash	3	1.10E-04	1.39E-04	0.82	No
Dryer, Pot ash	VOC	Chloromethane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.34E-04	2.61E-04	0.88	No
Dryer, Pot ash	VOC	Dibromochloromethane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Dichloromethane	lbs/ton ore	Pot Ash	3	1.19E-02	1.33E-02	1.00	Sulfate of Pot Ash	3	1.38E-01	1.48E-01	1.00	No
Dryer, Pot ash	VOC	Formaldehyde	lbs/ton ore	Pot Ash	3	8.42E-03	2.66E-03	1.00	Sulfate of Pot Ash	3	2.28E-01	3.73E-01	1.00	Yes
Dryer, Pot ash	VOC	Methyl Ethyl Ketone	lbs/ton ore	Pot Ash	3	1.81E-04	2.08E-04	1.00	Sulfate of Pot Ash	3	1.49E-02	2.19E-02	0.10	No
Dryer, Pot ash	VOC	Styrene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	2	7.38E-04	9.79E-04	0.87	No
Dryer, Pot ash	VOC	Tetrachloroethene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.62E-05	1.67E-05	0.00	Yes
Dryer, Pot ash	VOC	Toluene	lbs/ton ore	Pot Ash	3	8.48E-05	5.95E-05	1.00	Sulfate of Pot Ash	3	3.18E-02	4.21E-02	1.00	Yes
Dryer, Pot ash	VOC	Trichloroethene	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	1.83E-04	1.83E-04	0.73	No
Dryer, Pot ash	VOC	Trichlorofluoromethane	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Vinyl Chloride	lbs/ton ore	Pot Ash	3	1.82E-08	0.00E+00	0.00	Sulfate of Pot Ash	3	3.95E-05	8.26E-06	0.00	Yes
Dryer, Pot ash	VOC	Xylene (Total)	lbs/ton ore	Pot Ash	3	8.73E-05	1.45E-04	0.97	Sulfate of Pot Ash	3	3.00E-03	5.23E-03	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	Animal Bedding	3	5.87E-10	7.49E-10	0.84	Infectious Waste	3	1.00E-09	8.89E-07	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	Animal Bedding	3	5.87E-10	7.49E-10	0.84	Pathological Waste	3	1.18E-09	6.50E-10	0.54	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:4D 2378	lbs/ton	Infectious Waste	3	1.60E-08	6.88E-07	1.00	Pathological Waste	3	1.18E-09	6.50E-10	0.54	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:4D Total	lbs/ton	Animal Bedding	3	2.13E-07	3.83E-07	1.00	Pathological Waste	3	1.40E-07	1.76E-07	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	Animal Bedding	3	2.17E-09	2.80E-09	0.98	Infectious Waste	3	6.63E-08	3.83E-08	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	Animal Bedding	3	2.17E-09	2.80E-09	0.98	Pathological Waste	3	4.64E-09	2.85E-09	0.83	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:5D 12378	lbs/ton	Infectious Waste	3	8.83E-08	3.83E-08	1.00	Pathological Waste	3	4.64E-09	2.85E-09	0.83	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:5D Total	lbs/ton	Animal Bedding	3	5.87E-08	8.54E-08	0.99	Pathological Waste	3	1.34E-07	1.10E-07	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	Animal Bedding	3	1.28E-09	1.29E-09	0.91	Infectious Waste	3	1.38E-05	8.89E-06	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	Animal Bedding	3	1.28E-09	1.29E-09	0.91	Pathological Waste	3	2.48E-09	1.09E-09	0.84	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123478	lbs/ton	Infectious Waste	3	1.38E-05	8.89E-06	1.00	Pathological Waste	3	2.48E-09	1.09E-09	0.84	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	Animal Bedding	3	1.98E-09	2.00E-09	0.98	Infectious Waste	3	3.17E-08	1.91E-08	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	Animal Bedding	3	1.98E-09	2.00E-09	0.98	Pathological Waste	3	4.17E-09	2.72E-09	0.92	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123678	lbs/ton	Infectious Waste	3	3.17E-05	1.91E-05	1.00	Pathological Waste	3	4.17E-09	2.72E-09	0.92	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	Animal Bedding	3	1.27E-09	1.21E-09	0.92	Infectious Waste	3	2.20E-05	1.32E-05	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	Animal Bedding	3	1.27E-09	1.21E-09	0.92	Pathological Waste	3	3.47E-09	1.95E-09	0.88	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D 123789	lbs/ton	Infectious Waste	3	2.20E-05	1.32E-05	1.00	Pathological Waste	3	3.47E-09	1.95E-09	0.88	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:6D Total	lbs/ton	Animal Bedding	3	4.12E-08	4.87E-08	1.00	Pathological Waste	3	9.72E-08	1.90E-08	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	Animal Bedding	3	6.26E-09	6.29E-09	1.00	Infectious Waste	3	8.89E-05	3.31E-05	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	Animal Bedding	3	6.26E-09	6.29E-09	1.00	Pathological Waste	3	1.17E-08	7.38E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:7D 1234678	lbs/ton	Infectious Waste	3	5.69E-05	3.31E-05	1.00	Pathological Waste	3	1.17E-08	7.38E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:7D Total	lbs/ton	Animal Bedding	3	1.60E-08	1.61E-08	1.00	Pathological Waste	3	2.28E-08	1.48E-08	1.00	No

TABLE A6-12. COATING, DRYER, AND INCINERATOR MATERIAL COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Material	Size	Average	Standard Deviation	Detect Ratio	Description Material	Size	Average	Standard Deviation	Detect Ratio	
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:8D	lbs/ton	Animal Bedding	3	9.13E-09	5.68E-09	1.00	Infectious Waste	3	3.26E-08	1.09E-08	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:8D	lbs/ton	Animal Bedding	3	9.13E-09	5.68E-09	1.00	Pathological Waste	3	1.72E-08	1.11E-08	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Dioxin:8D	lbs/ton	Infectious Waste	3	3.26E-08	1.09E-08	1.00	Pathological Waste	3	1.72E-08	1.11E-08	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:4F 2378	lbs/ton	Animal Bedding	3	2.39E-08	3.93E-08	1.00	Infectious Waste	3	2.21E-05	3.81E-05	0.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:4F 2378	lbs/ton	Animal Bedding	3	2.39E-08	3.93E-08	1.00	Pathological Waste	3	3.66E-09	3.22E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:4F 2378	lbs/ton	Infectious Waste	3	2.21E-05	3.81E-05	0.00	Pathological Waste	3	3.66E-09	3.22E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:4F Total	lbs/ton	Animal Bedding	3	1.75E-08	2.93E-08	1.00	Pathological Waste	3	4.47E-07	3.81E-07	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 12378	lbs/ton	Animal Bedding	3	2.77E-08	4.52E-08	1.00	Infectious Waste	3	8.01E-09	7.06E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 12378	lbs/ton	Animal Bedding	3	2.77E-08	4.52E-08	1.00	Pathological Waste	3	8.01E-09	7.06E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 12378	lbs/ton	Infectious Waste	3	2.77E-08	4.52E-08	1.00	Pathological Waste	3	8.01E-09	7.06E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 23478	lbs/ton	Animal Bedding	3	5.01E-08	8.06E-08	1.00	Infectious Waste	3	1.33E-08	1.18E-08	0.91	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 23478	lbs/ton	Animal Bedding	3	5.01E-08	8.06E-08	1.00	Pathological Waste	3	1.33E-08	1.18E-08	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F 23478	lbs/ton	Infectious Waste	3	4.25E-08	9.35E-08	0.99	Pathological Waste	3	1.33E-08	1.18E-08	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:5F Total	lbs/ton	Animal Bedding	3	7.40E-07	1.22E-06	1.00	Pathological Waste	3	1.74E-07	1.40E-07	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123478	lbs/ton	Animal Bedding	3	6.11E-08	1.02E-07	1.00	Infectious Waste	3	7.32E-09	5.54E-09	0.97	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123478	lbs/ton	Animal Bedding	3	6.11E-08	1.02E-07	1.00	Pathological Waste	3	7.32E-09	5.54E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123478	lbs/ton	Infectious Waste	3	6.11E-08	1.02E-07	0.97	Pathological Waste	3	7.32E-09	5.54E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123678	lbs/ton	Animal Bedding	3	5.79E-08	9.45E-08	1.00	Infectious Waste	3	7.62E-09	4.90E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123678	lbs/ton	Animal Bedding	3	5.79E-08	9.45E-08	1.00	Pathological Waste	3	7.62E-09	4.90E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123678	lbs/ton	Infectious Waste	3	2.45E-08	1.16E-08	1.00	Pathological Waste	3	7.62E-09	4.90E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123789	lbs/ton	Animal Bedding	3	6.29E-09	1.01E-08	0.99	Infectious Waste	3	2.38E-07	4.89E-08	0.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123789	lbs/ton	Animal Bedding	3	6.29E-09	1.01E-08	0.99	Pathological Waste	3	3.38E-09	3.38E-09	0.92	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 123789	lbs/ton	Infectious Waste	3	2.38E-07	4.89E-08	0.00	Pathological Waste	3	3.38E-09	3.38E-09	0.92	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 234678	lbs/ton	Animal Bedding	3	3.55E-08	5.51E-08	1.00	Infectious Waste	3	2.38E-07	4.89E-08	0.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 234678	lbs/ton	Animal Bedding	3	3.55E-08	5.51E-08	1.00	Pathological Waste	3	9.81E-09	7.44E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F 234678	lbs/ton	Infectious Waste	3	2.38E-07	4.89E-08	0.00	Pathological Waste	3	9.81E-09	7.44E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:6F Total	lbs/ton	Animal Bedding	3	6.18E-07	1.02E-06	1.00	Pathological Waste	3	8.09E-08	5.41E-08	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234678	lbs/ton	Animal Bedding	3	1.55E-07	2.59E-07	1.00	Infectious Waste	3	1.98E-04	1.22E-04	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234678	lbs/ton	Animal Bedding	3	1.55E-07	2.59E-07	1.00	Pathological Waste	3	1.52E-08	7.15E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234678	lbs/ton	Infectious Waste	3	1.98E-04	1.22E-04	1.00	Pathological Waste	3	1.52E-08	7.15E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234789	lbs/ton	Animal Bedding	3	8.29E-09	1.35E-08	1.00	Infectious Waste	3	1.53E-05	1.08E-05	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234789	lbs/ton	Animal Bedding	3	8.29E-09	1.35E-08	1.00	Pathological Waste	3	4.41E-09	2.31E-09	0.87	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F 1234789	lbs/ton	Infectious Waste	3	1.53E-05	1.08E-05	1.00	Pathological Waste	3	4.41E-09	2.31E-09	0.87	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:7F Total	lbs/ton	Animal Bedding	3	2.12E-07	3.54E-07	1.00	Pathological Waste	3	9.37E-08	2.85E-08	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:8F	lbs/ton	Animal Bedding	3	1.21E-08	2.05E-08	0.99	Infectious Waste	3	7.84E-09	3.70E-09	1.00	Yes
Incinerator, Medical Waste	Dioxin/Furan	Furan:8F	lbs/ton	Animal Bedding	3	1.21E-08	2.05E-08	0.99	Pathological Waste	3	7.84E-09	3.70E-09	1.00	No
Incinerator, Medical Waste	Dioxin/Furan	Furan:8F	lbs/ton	Infectious Waste	3	3.60E-05	2.17E-05	1.00	Pathological Waste	3	7.84E-09	3.70E-09	1.00	Yes
Incinerator, Medical Waste	Halogens	HCl	lbs/ton	Infectious Waste	3	4.29E-01	1.29E-01	1.00	Pathological Waste	3	6.43E-02	2.26E-02	1.00	Yes
Incinerator, Medical Waste	Metals	Chromium (Hex)	lbs/ton	Human Carcasses	2	1.29E-03	3.77E-04	1.00	Infectious Waste	3	1.29E-04	4.47E-05	0.87	Yes
Incinerator, Medical Waste	PAH	Acenaphthene	lbs/ton	Human Carcasses	2	1.85E-03	1.10E-03	0.00	Infectious Waste	3	1.07E-02	8.98E-03	0.92	No
Incinerator, Medical Waste	PAH	Acenaphthylene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	2.78E-01	1.98E-01	1.00	No
Incinerator, Medical Waste	PAH	Anthracene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	9.74E-02	7.07E-02	0.91	No
Incinerator, Medical Waste	PAH	Benzo(a)anthracene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	3.58E-02	2.82E-02	1.00	No
Incinerator, Medical Waste	PAH	Benzo(a)pyrene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	6.26E-03	3.30E-03	0.87	No
Incinerator, Medical Waste	PAH	Benzo(b)fluoranthene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	1.80E-02	1.63E-02	1.00	No
Incinerator, Medical Waste	PAH	Benzo(g,h,i)perylene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	6.81E-03	3.83E-03	0.88	No
Incinerator, Medical Waste	PAH	Benzo(k)fluoranthene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	2.61E-02	2.19E-02	1.00	No
Incinerator, Medical Waste	PAH	Chrysene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	4.89E-02	3.63E-02	1.00	No

TABLE A6-12. COATING, DRYER, AND INCINERATOR MATERIAL COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
				Description Material	Size	Average	Standard Deviation	Detect Ratio	Description Material	Size	Average	Standard Deviation	Detect Ratio	
Incinerator, Medical Waste	PAH	Dibenz(a,h)anthracene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	3.00E-03	5.90E-04	0.00	No
Incinerator, Medical Waste	PAH	Fluoranthene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	1.77E-01	1.05E-01	1.00	No
Incinerator, Medical Waste	PAH	Fluorene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	1.37E-01	1.04E-01	1.00	No
Incinerator, Medical Waste	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	5.89E-03	2.84E-03	0.85	No
Incinerator, Medical Waste	PAH	Naphthalene	lbs/ton	Human Carcasses	2	1.83E-02	9.24E-03	1.00	Infectious Waste	3	3.84E-01	1.72E-01	0.19	No
Incinerator, Medical Waste	PAH	Phenanthrene	lbs/ton	Human Carcasses	2	4.04E-03	2.52E-03	1.00	Infectious Waste	3	3.28E-01	1.88E-01	1.00	No
Incinerator, Medical Waste	PAH	Pyrene	lbs/ton	Human Carcasses	2	1.95E-03	1.10E-03	0.00	Infectious Waste	3	1.81E-01	1.05E-01	1.00	No
Incinerator, Medical Waste	VOC	Formaldehyde	lbs/ton	Animal Carcasses	2	5.58E-02	5.35E-02	1.00	Human Carcasses	2	1.89E-03	1.89E-03	1.00	No

TABLE A8-13. EXTERNAL COMBUSTION BURNER TYPE AND EXCESS AIR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics						Second Sample Statistics						Significant Difference at 95% Confidence
				Description		Size	Average	Standard Deviation	Detect Ratio	Description		Size	Average	Standard Deviation	Detect Ratio	
				Burner Type	Excess Air					Burner Type	Excess Air					
Boiler, Ref. Gas	SVOC	Phenol	lbs/MMcf	CB	EA<100%	6	1.56E-03	1.87E-03	0.76	LNB	EA<100%	6	2.80E-03	2.28E-03	0.90	No
Boiler, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	CB	EA<100%	9	3.03E-03	3.83E-03	1.00	LNB	EA<100%	6	5.39E-03	4.45E-03	1.00	No
Boiler, Ref. Gas	VOC	Benzene	lbs/MMcf	CB	EA<100%	10	2.98E-01	4.58E-01	0.90	LNB	EA<100%	6	5.88E-02	1.28E-02	0.00	No
Boiler, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	CB	EA<100%	9	1.86E-02	1.10E-02	1.00	LNB	EA<100%	6	1.18E-02	7.05E-03	1.00	No
Boiler, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	CB	EA<100%	10	2.55E-01	3.09E-01	0.00	LNB	EA<100%	6	3.05E-01	8.56E-02	0.00	No
Boiler, Ref. Gas	VOC	Toluene	lbs/MMcf	CB	EA<100%	6	1.23E+00	1.88E+00	0.98	LNB	EA<100%	3	6.17E-02	2.11E-02	0.45	No
Heater, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	CB	EA<100%	8	2.34E-06	1.78E-06	1.00	LNB	EA<100%	15	5.69E-06	6.63E-06	0.38	No
Heater, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	CB	EA<100%	8	1.57E-06	6.96E-07	0.68	LNB	EA<100%	14	7.12E-06	1.13E-05	0.15	No
Heater, Ref. Gas	PAH	Anthracene	lbs/MMcf	CB	EA<100%	8	3.03E-06	1.83E-06	0.96	LNB	EA<100%	15	1.09E-05	1.74E-05	0.20	No
Heater, Ref. Gas	PAH	Benzo(a)anthracene	lbs/MMcf	CB	EA<100%	17	5.23E-05	1.18E-04	1.00	LNB	EA<100%	21	5.23E-06	5.46E-06	0.94	No
Heater, Ref. Gas	PAH	Benzo(a)pyrene	lbs/MMcf	CB	EA<100%	17	1.50E-04	4.16E-04	0.99	LNB	EA<100%	21	1.86E-06	2.08E-06	0.30	No
Heater, Ref. Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	CB	EA<100%	17	6.78E-05	1.78E-04	0.99	LNB	EA<100%	21	4.26E-06	4.63E-06	0.93	No
Heater, Ref. Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	CB	EA<100%	8	1.08E-06	1.38E-07	0.00	LNB	EA<100%	15	1.25E-06	5.86E-07	0.11	No
Heater, Ref. Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	CB	EA<100%	17	3.99E-05	1.03E-04	0.97	LNB	EA<100%	21	2.28E-06	2.34E-06	0.63	No
Heater, Ref. Gas	PAH	Chrysene	lbs/MMcf	CB	EA<100%	8	1.18E-06	2.61E-07	0.44	LNB	EA<100%	15	2.90E-06	3.64E-06	0.83	No
Heater, Ref. Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	CB	EA<100%	17	7.56E-06	1.57E-05	0.00	LNB	EA<100%	21	7.62E-06	2.83E-05	0.00	No
Heater, Ref. Gas	PAH	Fluoranthene	lbs/MMcf	CB	EA<100%	8	2.75E-06	8.50E-07	1.00	LNB	EA<100%	15	1.81E-05	1.67E-05	0.69	Yes
Heater, Ref. Gas	PAH	Fluorene	lbs/MMcf	CB	EA<100%	8	1.14E-05	8.03E-06	1.00	LNB	EA<100%	15	2.43E-05	3.11E-05	0.29	No
Heater, Ref. Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	CB	EA<100%	17	1.75E-04	4.83E-04	0.99	LNB	EA<100%	21	2.20E-06	3.19E-06	0.54	No
Heater, Ref. Gas	PAH	Naphthalene	lbs/MMcf	CB	EA<100%	8	3.58E-04	1.97E-04	1.00	LNB	EA<100%	15	7.79E-04	1.34E-03	0.52	No
Heater, Ref. Gas	PAH	Phenanthrene	lbs/MMcf	CB	EA<100%	8	1.43E-06	4.46E-06	1.00	LNB	EA<100%	15	9.38E-06	1.21E-04	0.37	No
Heater, Ref. Gas	PAH	Pyrene	lbs/MMcf	CB	EA<100%	8	2.54E-06	5.79E-07	1.00	LNB	EA<100%	15	1.08E-05	1.04E-05	0.40	Yes
Heater, Ref. Gas	SVOC	Ethylbenzene	lbs/MMcf	CB	EA<100%	9	2.37E-02	3.30E-02	0.88	LNB	EA<100%	12	2.83E-02	2.77E-02	0.00	No
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	CB	EA<100%	6	3.53E-03	2.71E-03	0.95	LNB	EA<100%	15	5.08E-03	6.18E-03	0.91	No
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	CB	EA<100%	6	3.53E-03	2.71E-03	0.95	LNB	EA<100%	3	1.73E-02	8.29E-03	1.00	Yes
Heater, Ref. Gas	SVOC	Phenol	lbs/MMcf	LNB	EA<100%	15	5.08E-03	6.18E-03	0.91	LNB	EA<100%	3	1.73E-02	8.29E-03	1.00	Yes
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	CB	EA<100%	6	2.21E-02	2.00E-02	1.00	LNB	EA<100%	27	4.88E-02	5.18E-02	0.20	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	CB	EA<100%	8	2.21E-02	2.00E-02	1.00	LNB	EA>100%	3	6.52E-03	1.81E-03	1.00	No
Heater, Ref. Gas	VOC	Acetaldehyde	lbs/MMcf	LNB	EA<100%	27	4.86E-02	5.18E-02	0.20	LNB	EA>100%	3	6.52E-03	1.81E-03	1.00	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	CB	EA<100%	15	5.87E-02	8.25E-02	0.06	LNB	EA<100%	27	6.13E-02	8.88E-02	0.06	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	CB	EA<100%	15	5.87E-02	8.25E-02	0.06	LNB	EA>100%	3	1.56E-01	7.97E-03	0.00	No
Heater, Ref. Gas	VOC	Benzene	lbs/MMcf	LNB	EA<100%	27	6.13E-02	6.88E-02	0.06	LNB	EA>100%	3	1.56E-01	7.97E-03	0.00	Yes
Heater, Ref. Gas	VOC	Formaldehyde	lbs/MMcf	CB	EA<100%	6	9.99E-02	1.39E-01	1.00	LNB	EA<100%	27	1.13E-01	3.39E-01	0.80	No
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	CB	EA<100%	6	5.91E-01	3.70E-01	0.00	LNB	EA<100%	18	3.96E-01	3.69E-01	0.00	No
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	CB	EA<100%	6	5.91E-01	3.70E-01	0.00	LNB	EA>100%	3	1.71E-01	8.53E-03	0.00	No
Heater, Ref. Gas	VOC	Hydrogen Sulfide	lbs/MMcf	LNB	EA<100%	18	3.96E-01	3.69E-01	0.00	LNB	EA>100%	3	1.71E-01	8.53E-03	0.00	No
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	CB	EA<100%	15	9.76E-02	1.05E-01	0.52	LNB	EA<100%	24	1.12E-01	2.43E-01	0.66	No
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	CB	EA<100%	15	9.76E-02	1.05E-01	0.52	LNB	EA>100%	3	1.84E-01	9.57E-03	0.00	No
Heater, Ref. Gas	VOC	Toluene	lbs/MMcf	LNB	EA<100%	24	1.12E-01	2.43E-01	0.66	LNB	EA>100%	3	1.84E-01	9.57E-03	0.00	No
Heater, Ref. Gas	VOC	Xylene (Total)	lbs/MMcf	CB	EA<100%	9	3.29E-02	4.09E-02	0.91	LNB	EA<100%	6	5.46E-02	4.37E-03	0.00	No
SG, Natural/CVR Gas	PAH	Acenaphthene	lbs/MMcf	CB	EA<100%	3	1.38E-06	9.82E-07	0.90	LNB	EA<100%	3	7.01E-07	5.56E-08	0.36	No
SG, Natural/CVR Gas	PAH	Acenaphthylene	lbs/MMcf	CB	EA<100%	3	4.74E-08	5.08E-08	0.97	LNB	EA<100%	3	6.58E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Anthracene	lbs/MMcf	CB	EA<100%	3	2.04E-08	1.41E-08	0.93	LNB	EA<100%	3	2.14E-08	1.51E-08	1.00	No
SG, Natural/CVR Gas	PAH	Benzo(a)anthracene	lbs/MMcf	CB	EA<100%	3	1.13E-08	2.46E-08	0.00	LNB	EA<100%	3	1.32E-08	7.61E-07	0.83	No
SG, Natural/CVR Gas	PAH	Benzo(a)pyrene	lbs/MMcf	CB	EA<100%	3	7.14E-07	5.34E-07	0.62	LNB	EA<100%	3	6.58E-07	2.32E-08	0.00	No

TABLE A8-13. EXTERNAL COMBUSTION BURNER TYPE AND EXCESS AIR COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence		
				Description		Size	Average	Standard Deviation	Detect Ratio	Description		Size	Average		Standard Deviation	Detect Ratio
				Burner Type	Excess Air					Burner Type	Excess Air					
SG, Natural/CVR Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	CB	EA<100%	3	3.35E-06	1.93E-06	1.00	LNB	EA<100%	3	6.68E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	CB	EA<100%	3	1.30E-06	7.71E-07	0.88	LNB	EA<100%	3	6.68E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	CB	EA<100%	3	9.84E-07	5.11E-07	0.88	LNB	EA<100%	3	6.68E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Chrysene	lbs/MMcf	CB	EA<100%	3	1.86E-06	4.06E-08	0.00	LNB	EA<100%	3	1.26E-06	7.95E-07	0.82	No
SG, Natural/CVR Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	CB	EA<100%	3	4.02E-07	8.80E-09	0.00	LNB	EA<100%	3	6.68E-07	2.32E-08	0.00	Yes
SG, Natural/CVR Gas	PAH	Fluoranthene	lbs/MMcf	CB	EA<100%	3	6.03E-06	3.93E-06	1.00	LNB	EA<100%	3	1.29E-06	4.76E-07	1.00	No
SG, Natural/CVR Gas	PAH	Fluorene	lbs/MMcf	CB	EA<100%	3	9.08E-06	8.02E-06	1.00	LNB	EA<100%	3	2.18E-06	5.44E-07	1.00	No
SG, Natural/CVR Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	CB	EA<100%	3	1.87E-06	1.09E-06	0.92	LNB	EA<100%	3	6.68E-07	2.32E-08	0.00	No
SG, Natural/CVR Gas	PAH	Naphthalene	lbs/MMcf	CB	EA<100%	3	2.11E-04	1.12E-04	1.00	LNB	EA<100%	3	1.66E-04	1.46E-05	1.00	Yes
SG, Natural/CVR Gas	PAH	Phenanthrene	lbs/MMcf	CB	EA<100%	3	2.16E-05	1.34E-05	1.00	LNB	EA<100%	3	1.11E-05	3.63E-06	1.00	No
SG, Natural/CVR Gas	PAH	Pyrene	lbs/MMcf	CB	EA<100%	3	1.02E-05	7.40E-06	1.00	LNB	EA<100%	3	1.82E-06	1.06E-06	1.00	No
SG, Natural/CVR Gas	SVOC	Ethylbenzene	lbs/MMcf	CB	EA<100%	3	7.32E-03	6.84E-05	0.00	LNB	EA<100%	3	1.11E-02	7.47E-03	0.89	No
SG, Natural/CVR Gas	VOC	Benzene	lbs/MMcf	CB	EA<100%	3	6.14E-03	5.74E-05	0.00	LNB	EA<100%	3	2.64E-03	8.68E-05	0.00	Yes
SG, Natural/CVR Gas	VOC	Toluene	lbs/MMcf	CB	EA<100%	3	2.68E-02	4.63E-03	1.00	LNB	EA<100%	3	1.75E-02	4.71E-03	1.00	No
SG, Natural/CVR Gas	VOC	Xylene (Total)	lbs/MMcf	CB	EA<100%	3	1.46E-02	1.37E-04	0.00	LNB	EA<100%	3	2.16E-02	1.62E-02	1.00	No

TABLE A6-14. RICE STROKES PER CYCLE AND OXYGEN COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics						Second Sample Statistics						Significant Difference at 95% Confidence
				Description		Size	Average	Standard Deviation	Detect Ratio	Description		Size	Average	Standard Deviation	Detect Ratio	
				Strokes	Oxygen					Strokes	Oxygen					
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	4S	Lean	9	3.40E-04	3.05E-04	1.00	4S	Rich	3	1.94E-03	1.26E-03	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	4S	Lean	9	2.88E-03	3.87E-03	1.00	4S	Rich	3	1.21E-02	1.72E-02	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	4S	Lean	9	1.65E-04	9.21E-05	1.00	4S	Rich	3	1.14E-03	1.02E-03	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	4S	Lean	9	6.51E-05	2.94E-05	1.00	4S	Rich	3	1.14E-03	1.02E-03	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	4S	Lean	9	1.36E-05	1.79E-05	0.66	4S	Rich	3	1.01E-04	1.18E-04	1.00	Yes
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	4S	Lean	9	1.36E-04	2.98E-04	0.96	4S	Rich	3	2.37E-04	5.53E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	4S	Lean	9	3.93E-05	8.27E-05	0.99	4S	Rich	3	1.01E-04	1.24E-04	1.00	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	4S	Lean	9	1.82E-04	3.69E-04	0.98	4S	Rich	3	1.03E-04	2.07E-05	1.00	No
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	4S	Lean	9	4.17E-05	4.35E-05	0.99	4S	Rich	3	1.10E-04	7.74E-05	1.00	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	4S	Lean	9	5.44E-06	4.60E-06	0.67	4S	Rich	3	1.25E-05	1.72E-05	1.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	4S	Lean	9	2.77E-04	1.26E-04	1.00	4S	Rich	3	1.01E-04	1.02E-04	1.00	Yes
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	4S	Lean	9	4.44E-04	2.14E-04	0.65	4S	Rich	3	1.11E-03	1.09E-03	1.00	Yes
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	4S	Lean	9	4.47E-05	9.47E-05	1.00	4S	Rich	3	1.69E-04	3.43E-05	1.00	No
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	4S	Lean	9	5.74E-02	6.59E-02	1.00	4S	Rich	3	7.65E-02	1.58E-02	1.00	No
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	4S	Lean	9	1.53E-03	7.46E-04	1.00	4S	Rich	3	7.07E-03	1.05E-03	1.00	Yes
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	4S	Lean	9	1.66E-04	8.39E-05	1.00	4S	Rich	3	7.71E-04	7.49E-04	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	Lean	3	6.46E-02	0.00E+00	0.00	4S	Lean	6	7.11E-02	3.58E-02	1.00	No
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	Lean	3	6.46E-02	0.00E+00	0.00	4S	Rich	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	4S	Lean	6	7.11E-02	3.58E-02	1.00	4S	Rich	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	VOC	1,3-Butadiene	lbs/MMcf	4S	Lean	6	3.67E-01	6.37E-02	1.00	4S	Rich	3	1.04E-01	3.92E-04	1.00	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	4S	Lean	21	3.00E+00	2.75E+00	1.00	4S	Rich	6	8.83E-01	9.05E-01	1.00	No
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	4S	Lean	20	1.16E+00	1.45E+00	0.99	4S	Rich	9	6.47E-01	4.57E-01	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	Lean	3	2.95E-01	3.65E-02	1.00	4S	Lean	20	9.09E-01	6.62E-01	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	Lean	3	2.95E-01	3.65E-02	1.00	4S	Rich	17	1.26E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	4S	Lean	20	9.09E-01	6.62E-01	1.00	4S	Rich	17	1.26E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	Lean	9	5.15E+00	7.50E+00	0.91	4S	Lean	30	2.16E+01	1.60E+01	1.00	Yes
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	Lean	9	5.15E+00	7.50E+00	0.91	4S	Rich	21	1.69E+00	3.57E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	4S	Lean	30	2.16E+01	1.60E+01	1.00	4S	Rich	21	1.69E+00	3.57E+00	1.00	Yes
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	4S	Lean	20	1.47E+01	1.81E+01	0.97	4S	Rich	5	1.60E+01	2.15E+01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	Lean	3	1.89E-01	1.28E-01	1.00	4S	Lean	20	3.80E-01	1.53E-01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	Lean	3	1.89E-01	1.28E-01	1.00	4S	Rich	5	1.07E+00	1.32E+00	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	4S	Lean	20	3.60E-01	1.53E-01	1.00	4S	Rich	5	1.07E+00	1.32E+00	1.00	Yes
ICE, Natural Gas	VOC	Xylene (m,p)	lbs/MMcf	4S	Lean	14	8.63E-02	3.99E-02	1.00	4S	Rich	2	2.21E-01	1.73E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (o)	lbs/MMcf	4S	Lean	14	4.94E-02	1.95E-02	0.95	4S	Rich	2	2.17E-01	7.13E-03	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	Lean	3	1.29E-01	0.00E+00	0.00	4S	Lean	6	3.46E-01	2.87E-01	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	Lean	3	1.29E-01	0.00E+00	0.00	4S	Rich	3	6.02E-02	1.86E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	4S	Lean	6	6.46E-01	2.97E-01	1.00	4S	Rich	3	6.02E-02	1.86E-02	1.00	Yes

TABLE A6-15. RICE STROKES PER CYCLE AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics						Second Sample Statistics						Significant Difference at 95% Confidence
				Description		Size	Average	Standard Deviation	Detect Ratio	Description		Size	Average	Standard Deviation	Detect Ratio	
				Strokes	Capacity					Strokes	Capacity					
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	4S	<650Hp	6	1.33E-03	1.05E-03	1.00	4S	>650Hp	6	1.51E-04	5.09E-05	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	4S	<650Hp	6	1.10E-02	2.40E-03	1.00	4S	>650Hp	6	5.25E-04	1.25E-04	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	4S	<650Hp	6	1.01E-03	1.01E-02	1.00	4S	>650Hp	6	1.19E-04	3.91E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	4S	<650Hp	6	1.08E-03	1.22E-02	1.00	4S	>650Hp	6	5.88E-06	3.32E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	4S	<650Hp	6	2.41E-03	4.62E-03	1.00	4S	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	4S	<650Hp	6	2.82E-04	3.38E-04	0.97	4S	>650Hp	6	4.09E-06	2.32E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	4S	<650Hp	6	1.39E-04	1.03E-03	1.00	4S	>650Hp	6	7.54E-06	6.05E-06	0.92	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	4S	<650Hp	6	3.18E-04	4.04E-04	0.98	4S	>650Hp	6	7.83E-06	3.54E-06	0.93	No
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	4S	<650Hp	6	2.03E-03	1.28E-04	1.00	4S	>650Hp	6	1.43E-05	7.20E-06	0.96	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	4S	<650Hp	6	1.07E-03	2.12E-03	1.00	4S	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	4S	<650Hp	6	6.23E-04	4.30E-04	1.00	4S	>650Hp	6	2.91E-04	1.46E-04	1.00	No
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	4S	<650Hp	6	3.69E-03	3.75E-03	0.94	4S	>650Hp	6	4.36E-04	2.53E-04	1.00	No
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	4S	<650Hp	6	1.24E-03	1.02E-03	1.00	4S	>650Hp	6	7.17E-06	3.12E-06	0.96	Yes
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	4S	<650Hp	6	9.91E-03	1.62E-02	1.00	4S	>650Hp	6	2.51E-02	4.56E-03	1.00	Yes
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	4S	<650Hp	6	3.98E-03	3.60E-03	1.00	4S	>650Hp	6	1.85E-03	6.89E-04	1.00	No
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	4S	<650Hp	6	9.57E-04	1.03E-03	1.00	4S	>650Hp	6	1.87E-04	9.30E-05	1.00	No
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	>650Hp	3	6.46E-02	0.00E+00	0.00	4S	<650Hp	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	>650Hp	3	6.46E-02	0.00E+00	0.00	4S	>650Hp	6	7.11E-02	3.58E-02	1.00	No
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	4S	<650Hp	3	1.16E-02	3.13E-03	1.00	4S	>650Hp	6	7.11E-02	3.58E-02	1.00	Yes
ICE, Natural Gas	VOC	1,3-Butadiene	lbs/MMcf	4S	<650Hp	3	1.04E-01	3.92E-04	1.00	4S	>650Hp	6	3.67E-01	2.17E-02	1.00	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	4S	<650Hp	21	3.11E+00	2.64E+00	1.00	4S	>650Hp	6	5.29E-01	1.04E+00	0.96	Yes
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	4S	<650Hp	23	1.21E+00	1.31E+00	1.00	4S	>650Hp	6	5.90E-02	5.20E-02	0.45	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	>650Hp	3	2.95E-01	3.65E-02	1.00	4S	<650Hp	31	1.24E+00	2.40E+00	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	>650Hp	3	2.95E-01	3.65E-02	1.00	4S	>650Hp	6	2.18E-01	2.66E-02	1.00	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	4S	<650Hp	31	1.24E+00	2.40E+00	1.00	4S	>650Hp	6	2.18E-01	2.66E-02	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	>650Hp	9	5.15E+00	7.50E+00	0.91	4S	<650Hp	42	1.52E+01	1.59E+01	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	>650Hp	9	5.15E+00	7.50E+00	0.91	4S	>650Hp	9	4.71E+00	7.43E+00	0.97	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	4S	<650Hp	42	1.52E+01	1.59E+01	1.00	4S	>650Hp	9	4.71E+00	7.43E+00	0.97	No
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	4S	<650Hp	19	1.80E+01	2.01E+01	0.98	4S	>650Hp	6	5.38E+00	3.30E+00	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	>650Hp	3	1.89E-01	1.28E-01	1.00	4S	<650Hp	19	5.85E-01	7.01E-01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	>650Hp	3	1.89E-01	1.28E-01	1.00	4S	>650Hp	6	2.39E-01	1.12E-01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	4S	<650Hp	19	5.85E-01	7.01E-01	1.00	4S	>650Hp	6	2.39E-01	1.12E-01	1.00	No
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	>650Hp	3	1.29E-01	0.00E+00	0.00	4S	<650Hp	3	6.02E-02	1.86E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	>650Hp	3	1.29E-01	0.00E+00	0.00	4S	>650Hp	6	6.48E-01	2.97E-01	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	4S	<650Hp	3	6.02E-02	1.86E-02	1.00	4S	>650Hp	6	6.48E-01	2.97E-01	1.00	Yes

TABLE A6-16. RICE STROKES PER CYCLE, OXYGEN, AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics							Second Sample Statistics							Significant Difference at 95% Confidence
				Description			Size	Average	Standard Deviation	Detect Ratio	Description			Size	Average	Standard Deviation	Detect Ratio	
				Strokes	Oxygen	Capacity					Strokes	Oxygen	Capacity					
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2<13%	<650Hp	6	4.62E-04	2.53E-04	0.70	4S	O2<13%	>650Hp	3	1.46E-03	1.85E-03	1.00	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2<13%	<650Hp	6	4.62E-04	2.53E-04	0.70	4S	O2>13%	<650Hp	3	4.52E-03	7.95E-03	1.00	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2<13%	<650Hp	6	4.62E-04	2.53E-04	0.70	4S	O2>13%	>650Hp	3	2.37E-03	3.26E-03	0.08	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.46E-03	1.85E-03	1.00	4S	O2>13%	<650Hp	3	4.52E-03	7.95E-03	1.00	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.46E-03	1.85E-03	1.00	4S	O2>13%	>650Hp	3	2.37E-03	3.26E-03	0.08	No
ICE, Diesel	PAH	Acenaphthene	lbs/Mgal	4S	O2>13%	<650Hp	6	4.52E-03	7.95E-03	1.00	4S	O2>13%	>650Hp	3	2.37E-03	3.26E-03	0.08	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2<13%	<650Hp	6	7.96E-04	5.25E-04	0.88	4S	O2<13%	>650Hp	3	1.57E-03	4.17E-04	1.00	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2<13%	<650Hp	6	7.96E-04	5.25E-04	0.88	4S	O2>13%	<650Hp	3	5.40E-03	6.49E-03	1.00	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2<13%	<650Hp	6	7.96E-04	5.25E-04	0.88	4S	O2>13%	>650Hp	3	2.70E-03	3.08E-03	0.17	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.57E-03	4.17E-04	1.00	4S	O2>13%	<650Hp	3	5.40E-03	6.49E-03	1.00	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.57E-03	4.17E-04	1.00	4S	O2>13%	>650Hp	3	2.70E-03	3.08E-03	0.17	No
ICE, Diesel	PAH	Acenaphthylene	lbs/Mgal	4S	O2>13%	<650Hp	6	5.40E-03	6.49E-03	1.00	4S	O2>13%	>650Hp	3	2.70E-03	3.08E-03	0.17	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.25E-04	9.03E-05	0.38	4S	O2<13%	>650Hp	3	2.53E-04	2.86E-05	1.00	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.25E-04	9.03E-05	0.38	4S	O2>13%	<650Hp	3	1.17E-03	1.04E-03	1.00	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.25E-04	9.03E-05	0.38	4S	O2>13%	>650Hp	3	2.74E-03	3.01E-03	0.19	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.53E-04	2.86E-05	1.00	4S	O2>13%	<650Hp	3	1.17E-03	1.04E-03	1.00	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.53E-04	2.86E-05	1.00	4S	O2>13%	>650Hp	3	2.74E-03	3.01E-03	0.19	No
ICE, Diesel	PAH	Anthracene	lbs/Mgal	4S	O2>13%	<650Hp	6	1.17E-03	1.04E-03	1.00	4S	O2>13%	>650Hp	3	2.74E-03	3.01E-03	0.19	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.84E-04	1.06E-04	0.24	4S	O2<13%	>650Hp	3	3.36E-06	1.01E-06	1.00	Yes
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.84E-04	1.06E-04	0.24	4S	O2>13%	<650Hp	3	3.04E-04	1.88E-04	1.00	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.84E-04	1.06E-04	0.24	4S	O2>13%	>650Hp	3	2.63E-03	3.08E-03	0.15	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	3.36E-06	1.01E-06	1.00	4S	O2>13%	<650Hp	3	3.04E-04	1.88E-04	1.00	Yes
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	3.36E-06	1.01E-06	1.00	4S	O2>13%	>650Hp	3	2.63E-03	3.08E-03	0.15	No
ICE, Diesel	PAH	Benzo(a)anthracene	lbs/Mgal	4S	O2>13%	<650Hp	6	3.04E-04	1.88E-04	1.00	4S	O2>13%	>650Hp	3	2.63E-03	3.08E-03	0.15	No
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.58E-04	1.34E-04	0.05	4S	O2<13%	>650Hp	3	6.35E-07	7.02E-09	0.00	No
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.58E-04	1.34E-04	0.05	4S	O2>13%	<650Hp	3	1.84E-06	6.99E-07	0.42	Yes
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.58E-04	1.34E-04	0.05	4S	O2>13%	>650Hp	3	2.25E-03	3.34E-03	0.00	No
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.35E-07	7.02E-09	0.00	4S	O2>13%	<650Hp	3	1.84E-06	6.99E-07	0.42	Yes
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.35E-07	7.02E-09	0.00	4S	O2>13%	>650Hp	3	2.25E-03	3.34E-03	0.00	No
ICE, Diesel	PAH	Benzo(a)pyrene	lbs/Mgal	4S	O2>13%	<650Hp	6	1.84E-06	6.99E-07	0.42	4S	O2>13%	>650Hp	3	2.25E-03	3.34E-03	0.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.17E-04	7.28E-05	0.10	4S	O2<13%	>650Hp	3	7.84E-06	3.89E-07	1.00	Yes
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.17E-04	7.28E-05	0.10	4S	O2>13%	<650Hp	3	1.47E-04	1.40E-05	1.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	6	2.17E-04	7.28E-05	0.10	4S	O2>13%	>650Hp	3	3.38E-03	3.65E-03	0.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	7.84E-06	3.89E-07	1.00	4S	O2>13%	<650Hp	3	1.47E-04	1.40E-05	1.00	Yes
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	7.84E-06	3.89E-07	1.00	4S	O2>13%	>650Hp	3	3.38E-03	3.65E-03	0.00	No
ICE, Diesel	PAH	Benzo(b)fluoranthene	lbs/Mgal	4S	O2>13%	<650Hp	3	1.47E-04	1.40E-05	1.00	4S	O2>13%	>650Hp	3	3.38E-03	3.65E-03	0.00	No
ICE, Diesel	PAH	Benzo(b+k)fluoranthene	lbs/Mgal	4S	O2>13%	<650Hp	3	1.44E-06	2.72E-08	0.00	4S	O2>13%	>650Hp	3	2.86E-06	1.15E-07	0.00	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.78E-04	1.11E-04	0.22	4S	O2<13%	>650Hp	3	4.30E-06	4.49E-07	1.00	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.78E-04	1.11E-04	0.22	4S	O2>13%	<650Hp	3	3.52E-05	2.77E-06	1.00	Yes
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2<13%	<650Hp	6	1.78E-04	1.11E-04	0.22	4S	O2>13%	>650Hp	3	2.37E-03	3.25E-03	0.05	No
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2<13%	>650Hp	3	4.30E-06	4.49E-07	1.00	4S	O2>13%	<650Hp	3	3.52E-05	2.77E-06	1.00	No
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2<13%	>650Hp	3	4.30E-06	4.49E-07	1.00	4S	O2>13%	>650Hp	3	2.37E-03	3.25E-03	0.05	No
ICE, Diesel	PAH	Benzo(g,h,i)perylene	lbs/Mgal	4S	O2>13%	<650Hp	6	3.52E-05	2.77E-06	1.00	4S	O2>13%	>650Hp	3	2.37E-03	3.25E-03	0.05	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.55E-04	1.38E-04	0.07	4S	O2<13%	>650Hp	3	1.23E-06	4.17E-07	1.00	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.55E-04	1.38E-04	0.07	4S	O2>13%	<650Hp	3	2.42E-05	8.80E-06	1.00	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.55E-04	1.38E-04	0.07	4S	O2>13%	>650Hp	3	3.37E-03	3.65E-03	0.00	No

TABLE A6-16. RICE STROKES PER CYCLE, OXYGEN, AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics						Second Sample Statistics						Significant Difference at 95% Confidence		
				Description			Size	Average	Standard Deviation	Detect Ratio	Description			Size	Average		Standard Deviation	Detect Ratio
				Strokes	Oxygen	Capacity					Strokes	Oxygen	Capacity					
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.23E-08	4.17E-07	1.00	4S	O2<13%	>650Hp	3	3.37E-03	3.65E-03	1.00	Yes
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.23E-08	4.17E-07	1.00	4S	O2>13%	>650Hp	3	3.37E-03	3.65E-03	0.00	No
ICE, Diesel	PAH	Benzo(k)fluoranthene	lbs/Mgal	4S	O2>13%	<650Hp	3	2.42E-05	8.80E-06	1.00	4S	O2>13%	>650Hp	3	3.37E-03	3.65E-03	0.00	No
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	4S	O2>13%	<650Hp	3	8.13E-05	9.09E-06	1.00	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	4S	O2>13%	>650Hp	3	2.40E-03	3.23E-03	0.07	No
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	4S	O2>13%	>650Hp	3	2.40E-03	3.23E-03	0.07	Yes
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.64E-05	3.24E-06	1.00	4S	O2>13%	>650Hp	3	2.40E-03	3.23E-03	0.07	No
ICE, Diesel	PAH	Chrysene	lbs/Mgal	4S	O2>13%	<650Hp	3	6.13E-05	9.09E-06	1.00	4S	O2>13%	>650Hp	3	2.40E-03	3.23E-03	0.07	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.64E-04	1.27E-04	0.00	4S	O2<13%	>650Hp	3	5.36E-07	7.02E-09	0.00	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.64E-04	1.27E-04	0.00	4S	O2>13%	<650Hp	3	3.00E-05	3.16E-05	0.99	Yes
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.64E-04	1.27E-04	0.00	4S	O2>13%	>650Hp	3	2.36E-03	3.26E-03	0.04	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.36E-07	7.02E-09	0.00	4S	O2>13%	<650Hp	3	3.00E-05	3.16E-05	0.99	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.36E-07	7.02E-09	0.00	4S	O2>13%	>650Hp	3	2.36E-03	3.26E-03	0.04	No
ICE, Diesel	PAH	Dibenz(a,h)anthracene	lbs/Mgal	4S	O2>13%	<650Hp	3	3.00E-05	3.16E-05	0.99	4S	O2>13%	>650Hp	3	2.36E-03	3.26E-03	0.04	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	4.18E-04	1.52E-04	0.67	4S	O2<13%	>650Hp	3	2.89E-04	3.71E-05	1.00	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	4.18E-04	1.52E-04	0.67	4S	O2>13%	<650Hp	3	2.78E-03	2.97E-03	0.20	Yes
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2<13%	<650Hp	3	4.18E-04	1.52E-04	0.67	4S	O2>13%	>650Hp	3	2.78E-03	2.97E-03	0.20	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.89E-04	3.71E-05	1.00	4S	O2>13%	<650Hp	3	2.78E-03	2.97E-03	0.20	Yes
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.89E-04	3.71E-05	1.00	4S	O2>13%	>650Hp	3	2.78E-03	2.97E-03	0.20	No
ICE, Diesel	PAH	Fluoranthene	lbs/Mgal	4S	O2>13%	<650Hp	3	1.81E-03	5.51E-04	1.00	4S	O2>13%	>650Hp	3	2.78E-03	2.97E-03	0.20	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.02E-03	8.15E-04	0.86	4S	O2<13%	>650Hp	3	1.02E-03	1.86E-04	1.00	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.02E-03	8.15E-04	0.86	4S	O2>13%	<650Hp	3	1.44E-02	1.83E-02	0.95	Yes
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.02E-03	8.15E-04	0.86	4S	O2>13%	>650Hp	3	1.44E-02	1.83E-02	0.95	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.02E-03	1.86E-04	1.00	4S	O2>13%	<650Hp	3	1.44E-02	1.83E-02	0.95	Yes
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.02E-03	1.86E-04	1.00	4S	O2>13%	>650Hp	3	1.44E-02	1.83E-02	0.95	No
ICE, Diesel	PAH	Fluorene	lbs/Mgal	4S	O2>13%	<650Hp	3	7.86E-03	1.84E-03	1.00	4S	O2>13%	>650Hp	3	1.44E-02	1.83E-02	0.95	No
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.68E-04	1.22E-04	0.08	4S	O2<13%	>650Hp	3	9.07E-07	1.51E-07	1.00	No
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.68E-04	1.22E-04	0.08	4S	O2>13%	<650Hp	3	2.42E-05	1.60E-05	1.00	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.68E-04	1.22E-04	0.08	4S	O2>13%	>650Hp	3	2.34E-03	3.27E-03	0.03	No
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	9.07E-07	1.51E-07	1.00	4S	O2>13%	<650Hp	3	2.34E-03	3.27E-03	0.03	Yes
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	9.07E-07	1.51E-07	1.00	4S	O2>13%	>650Hp	3	2.34E-03	3.27E-03	0.03	No
ICE, Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	4S	O2>13%	<650Hp	3	2.42E-05	1.60E-05	1.00	4S	O2>13%	>650Hp	3	2.34E-03	3.27E-03	0.03	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.04E-02	8.26E-03	1.00	4S	O2<13%	>650Hp	3	2.83E-02	3.19E-03	1.00	Yes
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.04E-02	8.26E-03	1.00	4S	O2>13%	<650Hp	3	7.35E-02	7.33E-02	1.00	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.04E-02	8.26E-03	1.00	4S	O2>13%	>650Hp	3	4.30E-02	3.90E-02	1.00	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.83E-02	3.19E-03	1.00	4S	O2>13%	<650Hp	3	7.35E-02	7.33E-02	1.00	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2<13%	>650Hp	3	2.83E-02	3.19E-03	1.00	4S	O2>13%	>650Hp	3	4.30E-02	3.90E-02	1.00	No
ICE, Diesel	PAH	Naphthalene	lbs/Mgal	4S	O2>13%	<650Hp	3	7.35E-02	7.33E-02	1.00	4S	O2>13%	>650Hp	3	4.30E-02	3.90E-02	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.98E-03	2.90E-03	1.00	4S	O2<13%	>650Hp	3	5.88E-03	6.05E-04	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.98E-03	2.90E-03	1.00	4S	O2>13%	<650Hp	3	1.33E-02	8.00E-03	1.00	Yes
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.98E-03	2.90E-03	1.00	4S	O2>13%	>650Hp	3	2.88E-02	3.01E-02	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.88E-03	6.05E-04	1.00	4S	O2>13%	<650Hp	3	1.33E-02	8.00E-03	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2<13%	>650Hp	3	5.88E-03	6.05E-04	1.00	4S	O2>13%	>650Hp	3	2.88E-02	3.01E-02	1.00	No
ICE, Diesel	PAH	Phenanthrene	lbs/Mgal	4S	O2>13%	<650Hp	3	1.33E-02	8.00E-03	1.00	4S	O2>13%	>650Hp	3	2.88E-02	3.01E-02	1.00	No
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.98E-04	1.24E-04	0.00	4S	O2<13%	>650Hp	3	1.94E-04	4.28E-05	1.00	Yes

TABLE A6-16. RICE STROKES PER CYCLE, OXYGEN, AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics							Second Sample Statistics							Significant Difference at 95% Confidence
				Description			Size	Average	Standard Deviation	Detect Ratio	Description			Size	Average	Standard Deviation	Detect Ratio	
				Strokes	Oxygen	Capacity					Strokes	Oxygen	Capacity					
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2<13%	<650Hp	6	3.96E-04	1.29E-04	0.65	4S	O2<13%	<650Hp	6	1.06E-03	3.25E-04	1.00	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2<13%	<650Hp	6	3.96E-04	1.29E-04	0.65	4S	O2<13%	<650Hp	6	1.06E-03	3.25E-04	1.00	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.94E-04	4.28E-05	1.00	4S	O2<13%	>650Hp	3	1.94E-04	4.28E-05	1.00	Yes
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2<13%	>650Hp	3	1.94E-04	4.28E-05	1.00	4S	O2>13%	>650Hp	2	5.81E-03	4.63E-03	0.74	No
ICE, Diesel	PAH	Pyrene	lbs/Mgal	4S	O2>13%	<650Hp	6	1.06E-03	3.92E-04	1.00	4S	O2<13%	<650Hp	6	1.06E-03	3.92E-04	1.00	Yes
ICE, Diesel	VOC	Acetaldehyde	lbs/Mgal	4S	O2<13%	<650Hp	3	3.47E-03	2.61E-03	1.00	4S	O2<13%	<650Hp	3	3.47E-03	2.61E-03	1.00	Yes
ICE, Diesel	VOC	Acetaldehyde	lbs/Mgal	4S	O2<13%	<650Hp	3	3.47E-03	2.61E-03	1.00	4S	O2<13%	<650Hp	3	3.47E-03	2.61E-03	1.00	Yes
ICE, Diesel	VOC	Acetaldehyde	lbs/Mgal	4S	O2>13%	<650Hp	3	3.47E-03	2.61E-03	1.00	4S	O2>13%	>650Hp	3	6.48E-02	5.78E-03	1.00	Yes
ICE, Diesel	VOC	Acrolein	lbs/Mgal	4S	O2<13%	<650Hp	3	1.07E-03	6.19E-04	0.56	4S	O2<13%	<650Hp	3	1.07E-03	6.19E-04	0.56	Yes
ICE, Diesel	VOC	Acrolein	lbs/Mgal	4S	O2<13%	<650Hp	3	1.07E-03	6.19E-04	0.56	4S	O2>13%	>650Hp	2	1.87E-02	1.17E-02	1.00	No
ICE, Diesel	VOC	Acrolein	lbs/Mgal	4S	O2>13%	<650Hp	3	7.35E-03	6.42E-04	0.35	4S	O2>13%	>650Hp	3	1.87E-02	1.17E-02	1.00	No
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.01E-01	2.73E-03	1.00	4S	O2<13%	<650Hp	3	1.01E-01	2.73E-03	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.01E-01	2.73E-03	1.00	4S	O2>13%	<650Hp	3	6.94E-02	3.18E-03	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2<13%	<650Hp	3	1.01E-01	2.73E-03	1.00	4S	O2>13%	>650Hp	2	1.04E-01	7.91E-02	1.00	No
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.86E-01	4.33E-02	1.00	4S	O2>13%	<650Hp	3	6.94E-02	3.18E-03	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.86E-01	4.33E-02	1.00	4S	O2>13%	>650Hp	2	1.04E-01	7.91E-02	1.00	Yes
ICE, Diesel	VOC	Benzene	lbs/Mgal	4S	O2>13%	<650Hp	3	6.94E-02	3.18E-03	1.00	4S	O2>13%	>650Hp	2	1.04E-01	7.91E-02	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2<13%	<650Hp	6	2.05E-02	1.65E-02	1.00	4S	O2<13%	<650Hp	6	2.05E-02	1.65E-02	1.00	Yes
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2<13%	<650Hp	6	2.05E-02	1.65E-02	1.00	4S	O2>13%	<650Hp	6	1.04E-01	1.26E-01	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2<13%	<650Hp	6	2.05E-02	1.65E-02	1.00	4S	O2>13%	>650Hp	2	7.86E-01	1.03E+00	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2<13%	>650Hp	3	1.46E-01	3.83E-02	1.00	4S	O2>13%	<650Hp	6	1.04E-01	1.26E-01	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2<13%	>650Hp	3	1.46E-01	3.83E-02	1.00	4S	O2>13%	>650Hp	2	7.86E-01	1.03E+00	1.00	No
ICE, Diesel	VOC	Formaldehyde	lbs/Mgal	4S	O2>13%	<650Hp	6	1.04E-01	1.26E-01	1.00	4S	O2>13%	>650Hp	2	7.86E-01	1.03E+00	1.00	No
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.85E-01	3.10E-02	1.00	4S	O2<13%	<650Hp	3	2.97E-01	4.54E-02	1.00	No
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.85E-01	3.10E-02	1.00	4S	O2>13%	<650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.85E-01	3.10E-02	1.00	4S	O2>13%	>650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.85E-01	3.10E-02	1.00	4S	O2>13%	>650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.97E-01	4.54E-02	1.00	4S	O2>13%	<650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2<13%	<650Hp	3	2.97E-01	4.54E-02	1.00	4S	O2>13%	>650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Propylene	lbs/Mgal	4S	O2>13%	<650Hp	3	1.78E-01	3.54E-02	1.00	4S	O2>13%	>650Hp	3	1.78E-01	3.54E-02	1.00	Yes
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.74E-02	1.22E-03	1.00	4S	O2<13%	<650Hp	3	3.60E-02	1.38E-03	1.00	Yes
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.74E-02	1.22E-03	1.00	4S	O2>13%	<650Hp	3	3.60E-02	1.38E-03	1.00	No
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2<13%	<650Hp	3	3.74E-02	1.22E-03	1.00	4S	O2>13%	>650Hp	3	7.41E-02	1.48E-03	1.00	Yes
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2<13%	>650Hp	3	8.50E-02	2.38E-02	1.00	4S	O2>13%	<650Hp	3	3.60E-02	1.38E-03	1.00	Yes
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2<13%	>650Hp	3	8.50E-02	2.38E-02	1.00	4S	O2>13%	>650Hp	3	7.41E-02	1.48E-03	1.00	No
ICE, Diesel	VOC	Toluene	lbs/Mgal	4S	O2>13%	<650Hp	3	3.60E-02	1.38E-03	1.00	4S	O2>13%	>650Hp	3	7.41E-02	1.48E-03	1.00	Yes
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	4S	O2<13%	<650Hp	3	2.68E-02	1.03E-03	1.00	4S	O2<13%	<650Hp	3	1.51E-02	6.93E-03	1.00	Yes
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	4S	O2<13%	<650Hp	3	2.68E-02	1.03E-03	1.00	4S	O2>13%	<650Hp	3	3.59E-02	1.48E-02	1.00	No
ICE, Diesel	VOC	Xylene (Total)	lbs/Mgal	4S	O2<13%	>650Hp	3	1.51E-02	6.93E-03	1.00	4S	O2>13%	>650Hp	3	3.59E-02	1.48E-02	1.00	No
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	4S	Lean	<650Hp	3	7.17E-04	2.14E-04	1.00	4S	Lean	>650Hp	6	1.51E-04	5.09E-06	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	4S	Lean	<650Hp	3	7.17E-04	2.14E-04	1.00	4S	Rich	<650Hp	3	1.94E-03	1.26E-03	1.00	No
ICE, Natural Gas	PAH	Acenaphthene	lbs/MMcf	4S	Lean	>650Hp	6	1.51E-04	5.09E-06	1.00	4S	Rich	<650Hp	3	1.94E-03	1.26E-03	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	4S	Lean	<650Hp	3	7.59E-03	3.15E-03	1.00	4S	Lean	>650Hp	6	5.25E-04	1.25E-04	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	4S	Lean	<650Hp	3	7.59E-03	3.15E-03	1.00	4S	Rich	<650Hp	3	1.45E-02	1.74E-03	1.00	Yes
ICE, Natural Gas	PAH	Acenaphthylene	lbs/MMcf	4S	Lean	>650Hp	6	5.25E-04	1.25E-04	1.00	4S	Rich	<650Hp	3	1.45E-02	1.74E-03	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	4S	Lean	<650Hp	3	2.56E-04	1.06E-04	1.00	4S	Lean	>650Hp	6	1.19E-04	3.91E-05	1.00	Yes
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	4S	Lean	<650Hp	3	2.56E-04	1.06E-04	1.00	4S	Rich	<650Hp	3	1.19E-04	3.91E-05	1.00	Yes

TABLE A6-16. RICE STROKES PER CYCLE, OXYGEN, AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics						Second Sample Statistics						Significant Difference at 95% Confidence		
				Description			Size	Average	Standard Deviation	Detect Ratio	Description			Size	Average		Standard Deviation	Detect Ratio
				Strokes	Oxygen	Capacity					Strokes	Oxygen	Capacity					
ICE, Natural Gas	PAH	Anthracene	lbs/MMcf	4S	Lean	>650Hp	6	1.19E-04	3.91E-05	1.00	4S	Rich	<650Hp	6	1.84E-05	3.32E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	4S	Lean	<650Hp	3	7.78E-05	1.84E-05	1.00	4S	Lean	>650Hp	6	5.88E-05	3.32E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	4S	Lean	<650Hp	3	7.78E-05	1.84E-05	1.00	4S	Rich	<650Hp	3	2.94E-04	1.08E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)anthracene	lbs/MMcf	4S	Lean	>650Hp	6	5.88E-05	3.32E-05	1.00	4S	Rich	<650Hp	3	2.94E-04	1.08E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	4S	Lean	<650Hp	3	3.65E-05	1.42E-05	0.76	4S	Lean	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	4S	Lean	<650Hp	3	3.65E-05	1.42E-05	0.76	4S	Rich	<650Hp	3	1.18E-04	1.18E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(a)pyrene	lbs/MMcf	4S	Lean	>650Hp	6	2.70E-06	9.68E-07	0.00	4S	Rich	<650Hp	3	1.18E-04	1.18E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	3.27E-04	5.22E-04	0.95	4S	Lean	>650Hp	6	4.09E-05	2.32E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	3.27E-04	5.22E-04	0.95	4S	Rich	<650Hp	3	2.37E-04	5.53E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(b)fluoranthene	lbs/MMcf	4S	Lean	>650Hp	6	4.09E-05	2.32E-05	1.00	4S	Rich	<650Hp	3	2.37E-04	5.53E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	4S	Lean	<650Hp	3	1.03E-04	1.36E-04	1.00	4S	Lean	>650Hp	6	7.54E-06	6.05E-06	0.92	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	4S	Lean	<650Hp	3	1.03E-04	1.36E-04	1.00	4S	Rich	<650Hp	3	1.95E-04	4.48E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(g,h,i)perylene	lbs/MMcf	4S	Lean	>650Hp	6	7.54E-06	6.05E-06	0.92	4S	Rich	<650Hp	3	1.95E-04	4.48E-05	1.00	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	5.30E-04	5.21E-04	0.98	4S	Lean	>650Hp	6	7.83E-06	3.54E-06	0.93	Yes
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	5.30E-04	5.21E-04	0.98	4S	Rich	<650Hp	3	1.03E-04	2.07E-05	1.00	No
ICE, Natural Gas	PAH	Benzo(k)fluoranthene	lbs/MMcf	4S	Lean	>650Hp	6	7.83E-06	3.54E-06	0.93	4S	Rich	<650Hp	3	1.03E-04	2.07E-05	1.00	Yes
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	4S	Lean	<650Hp	3	9.84E-05	2.83E-05	1.00	4S	Lean	>650Hp	6	1.43E-05	7.20E-06	0.96	Yes
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	4S	Lean	<650Hp	3	9.84E-05	2.83E-05	1.00	4S	Rich	<650Hp	3	3.10E-04	7.71E-05	1.00	Yes
ICE, Natural Gas	PAH	Chrysene	lbs/MMcf	4S	Lean	>650Hp	6	1.43E-05	7.20E-06	0.96	4S	Rich	<650Hp	3	3.10E-04	7.71E-05	1.00	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	4S	Lean	<650Hp	3	1.09E-05	3.86E-06	1.00	4S	Lean	>650Hp	6	2.70E-06	9.68E-07	0.00	Yes
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	4S	Lean	<650Hp	3	1.09E-05	3.86E-06	1.00	4S	Rich	<650Hp	3	1.25E-05	1.72E-06	1.00	No
ICE, Natural Gas	PAH	Dibenz(a,h)anthracene	lbs/MMcf	4S	Lean	>650Hp	6	2.70E-06	9.68E-07	0.00	4S	Rich	<650Hp	3	1.25E-05	1.72E-06	1.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	2.50E-04	9.05E-05	1.00	4S	Lean	>650Hp	6	2.91E-04	1.48E-04	1.00	No
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	4S	Lean	<650Hp	3	2.50E-04	9.05E-05	1.00	4S	Rich	<650Hp	3	9.84E-04	1.94E-04	1.00	Yes
ICE, Natural Gas	PAH	Fluoranthene	lbs/MMcf	4S	Lean	>650Hp	6	2.91E-04	1.48E-04	1.00	4S	Rich	<650Hp	3	9.84E-04	1.94E-04	1.00	Yes
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	4S	Lean	<650Hp	3	4.60E-04	1.50E-04	0.00	4S	Lean	>650Hp	6	4.38E-04	2.53E-04	1.00	No
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	4S	Lean	<650Hp	3	4.60E-04	1.50E-04	0.00	4S	Rich	<650Hp	3	6.91E-03	1.99E-03	1.00	Yes
ICE, Natural Gas	PAH	Fluorene	lbs/MMcf	4S	Lean	>650Hp	6	4.38E-04	2.53E-04	1.00	4S	Rich	<650Hp	3	6.91E-03	1.99E-03	1.00	Yes
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	4S	Lean	<650Hp	3	1.20E-04	1.52E-04	1.00	4S	Lean	>650Hp	6	7.17E-06	3.12E-06	0.96	No
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	4S	Lean	<650Hp	3	1.20E-04	1.52E-04	1.00	4S	Rich	<650Hp	3	1.89E-04	3.43E-05	1.00	No
ICE, Natural Gas	PAH	Indeno(1,2,3-cd)pyrene	lbs/MMcf	4S	Lean	>650Hp	6	7.17E-06	3.12E-06	0.96	4S	Rich	<650Hp	3	1.89E-04	3.43E-05	1.00	Yes
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	4S	Lean	<650Hp	3	1.22E-01	8.93E-02	1.00	4S	Lean	>650Hp	6	2.51E-02	4.56E-03	1.00	Yes
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	4S	Lean	<650Hp	3	1.22E-01	8.93E-02	1.00	4S	Rich	<650Hp	3	7.65E-02	1.58E-02	1.00	No
ICE, Natural Gas	PAH	Naphthalene	lbs/MMcf	4S	Lean	>650Hp	6	2.51E-02	4.56E-03	1.00	4S	Rich	<650Hp	3	7.65E-02	1.58E-02	1.00	Yes
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	4S	Lean	<650Hp	3	8.93E-04	3.36E-04	1.00	4S	Lean	>650Hp	6	1.85E-03	6.89E-04	1.00	No
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	4S	Lean	<650Hp	3	8.93E-04	3.36E-04	1.00	4S	Rich	<650Hp	3	7.07E-03	1.92E-03	1.00	Yes
ICE, Natural Gas	PAH	Phenanthrene	lbs/MMcf	4S	Lean	>650Hp	6	1.85E-03	6.89E-04	1.00	4S	Rich	<650Hp	3	7.07E-03	1.92E-03	1.00	Yes
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	4S	Lean	<650Hp	3	1.23E-04	5.07E-05	1.00	4S	Lean	>650Hp	6	1.87E-04	9.30E-05	1.00	No
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	4S	Lean	<650Hp	3	1.23E-04	5.07E-05	1.00	4S	Rich	<650Hp	3	1.79E-03	7.53E-04	1.00	Yes
ICE, Natural Gas	PAH	Pyrene	lbs/MMcf	4S	Lean	>650Hp	6	1.87E-04	9.30E-05	1.00	4S	Rich	<650Hp	3	1.79E-03	7.53E-04	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	Lean	>650Hp	3	6.46E-02	0.00E+00	0.00	4S	Lean	>650Hp	6	7.11E-02	3.58E-02	1.00	No
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	2S	Lean	>650Hp	3	6.46E-02	0.00E+00	0.00	4S	Rich	<650Hp	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	SVOC	Ethylbenzene	lbs/MMcf	4S	Lean	>650Hp	6	7.11E-02	3.58E-02	1.00	4S	Rich	<650Hp	3	1.16E-02	3.13E-03	1.00	Yes
ICE, Natural Gas	VOC	1,3-Butadiene	lbs/MMcf	4S	Lean	>650Hp	6	3.87E-01	6.37E-02	1.00	4S	Rich	<650Hp	3	1.04E-01	3.92E-04	1.00	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	4S	Lean	<650Hp	15	3.99E+00	2.59E+00	1.00	4S	Lean	>650Hp	6	5.29E-01	1.04E+00	0.96	Yes
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	4S	Lean	<650Hp	15	3.99E+00	2.59E+00	1.00	4S	Rich	<650Hp	6	8.83E-01	9.05E-01	1.00	Yes

TABLE A6-16. RICE STROKES PER CYCLE, OXYGEN, AND SIZE COMPARISON.

Major Group	Category	Substance	EF Unit	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence				
				Description			Size	Average	Standard Deviation	Detect Ratio	Description				Size	Average	Standard Deviation	Detect Ratio
				Strokes	Oxygen	Capacity					Strokes	Oxygen	Capacity					
ICE, Natural Gas	VOC	Acetaldehyde	lbs/MMcf	4S	Lean	>650Hp	6	5.29E-01	1.04E+00	0.96	4S	Rich	<650Hp	6	8.83E-01	9.05E-01	1.00	No
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	4S	Lean	<650Hp	14	1.83E+00	1.60E+00	1.00	4S	Lean	>650Hp	6	5.90E-02	5.20E-02	0.46	Yes
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	4S	Lean	<650Hp	14	1.83E+00	1.60E+00	1.00	4S	Rich	<650Hp	9	5.47E-01	4.57E-01	1.00	Yes
ICE, Natural Gas	VOC	Acrolein	lbs/MMcf	4S	Lean	>650Hp	6	5.90E-02	5.20E-02	0.46	4S	Rich	<650Hp	9	5.47E-01	4.57E-01	1.00	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	Lean	>650Hp	3	2.95E-01	3.65E-02	1.00	4S	Lean	<650Hp	14	1.21E+00	5.70E-01	1.00	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	Lean	<650Hp	14	1.21E+00	5.70E-01	1.00	4S	Lean	>650Hp	6	2.18E-01	2.66E-02	1.00	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	2S	Lean	>650Hp	3	2.95E-01	3.65E-02	1.00	4S	Rich	<650Hp	17	1.28E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	4S	Lean	<650Hp	14	1.21E+00	5.70E-01	1.00	4S	Lean	>650Hp	6	2.18E-01	2.66E-02	1.00	Yes
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	4S	Lean	<650Hp	14	1.21E+00	5.70E-01	1.00	4S	Rich	<650Hp	17	1.28E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Benzene	lbs/MMcf	4S	Lean	>650Hp	6	2.18E-01	2.66E-02	1.00	4S	Rich	<650Hp	17	1.28E+00	3.24E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	Lean	>650Hp	9	5.15E+00	7.50E+00	0.91	4S	Lean	<650Hp	21	1.69E+00	3.57E+00	1.00	Yes
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	Lean	>650Hp	9	5.15E+00	7.50E+00	0.91	4S	Lean	>650Hp	9	4.71E+00	7.43E+00	0.97	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	2S	Lean	>650Hp	9	5.15E+00	7.50E+00	0.91	4S	Rich	<650Hp	21	1.69E+00	3.57E+00	1.00	No
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	4S	Lean	<650Hp	21	1.69E+00	3.57E+00	1.00	4S	Lean	>650Hp	9	4.71E+00	7.43E+00	0.97	Yes
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	4S	Lean	<650Hp	21	1.69E+00	3.57E+00	1.00	4S	Rich	<650Hp	21	1.69E+00	3.57E+00	1.00	Yes
ICE, Natural Gas	VOC	Formaldehyde	lbs/MMcf	4S	Lean	>650Hp	9	4.71E+00	7.43E+00	0.97	4S	Rich	<650Hp	21	1.69E+00	3.57E+00	1.00	No
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	4S	Lean	<650Hp	14	1.87E+01	2.04E+01	0.97	4S	Lean	>650Hp	6	6.38E+00	3.30E+00	1.00	No
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	4S	Lean	<650Hp	14	1.87E+01	2.04E+01	0.97	4S	Rich	<650Hp	5	1.60E+01	2.15E+01	1.00	No
ICE, Natural Gas	VOC	Propylene	lbs/MMcf	4S	Lean	>650Hp	6	5.38E+00	3.30E+00	1.00	4S	Rich	<650Hp	5	1.60E+01	2.15E+01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	Lean	>650Hp	3	1.89E-01	1.28E-01	1.00	4S	Lean	<650Hp	14	4.12E-01	1.40E-01	1.00	Yes
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	Lean	>650Hp	3	1.89E-01	1.28E-01	1.00	4S	Lean	>650Hp	6	2.39E-01	1.12E-01	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	2S	Lean	>650Hp	3	1.89E-01	1.28E-01	1.00	4S	Rich	<650Hp	5	1.07E+00	1.32E+00	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	4S	Lean	<650Hp	14	4.12E-01	1.40E-01	1.00	4S	Lean	>650Hp	6	2.39E-01	1.12E-01	1.00	Yes
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	4S	Lean	<650Hp	14	4.12E-01	1.40E-01	1.00	4S	Rich	<650Hp	5	1.07E+00	1.32E+00	1.00	No
ICE, Natural Gas	VOC	Toluene	lbs/MMcf	4S	Lean	>650Hp	6	2.39E-01	1.12E-01	1.00	4S	Rich	<650Hp	5	1.07E+00	1.32E+00	1.00	No
ICE, Natural Gas	VOC	Xylene (m,p)	lbs/MMcf	4S	Lean	<650Hp	14	8.63E-02	3.99E-02	1.00	4S	Rich	<650Hp	2	4.41E-01	1.73E-01	1.00	Yes
ICE, Natural Gas	VOC	Xylene (o)	lbs/MMcf	4S	Lean	<650Hp	14	4.94E-02	1.95E-02	0.95	4S	Rich	<650Hp	2	2.17E-01	7.49E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	Lean	>650Hp	3	1.29E-01	0.00E+00	0.00	4S	Lean	<650Hp	6	6.46E-01	2.97E-01	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	2S	Lean	>650Hp	3	1.29E-01	0.00E+00	0.00	4S	Rich	<650Hp	3	6.02E-02	1.88E-02	1.00	Yes
ICE, Natural Gas	VOC	Xylene (Total)	lbs/MMcf	4S	Lean	>650Hp	6	6.46E-01	2.97E-01	1.00	4S	Rich	<650Hp	3	6.02E-02	1.88E-02	1.00	Yes

ATTACHMENT 7. EMISSION FACTOR GROUP COMPARISON (t-statistics)

Major Group	Category	Substance	EF Unit	Value Type	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
					Description Sub Group	Size	Average	Standard Deviation	Detect Ratio	Description Sub Group	Size	Average	Standard Deviation	Detect Ratio	
Asphalt Prod., Diesel	Metals	Arsenic	lbs/ton production	EF	1	3	2.73E-07	3.93E-09	0.00	2	3	6.60E-08	4.74E-08	1.00	Yes
Asphalt Prod., Diesel	Metals	Arsenic	lbs/ton production	EF	1	3	2.73E-07	3.93E-09	0.00	3	1	8.02E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Arsenic	lbs/ton production	EF	2	3	6.60E-08	4.74E-08	1.00	3	1	8.02E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Beryllium	lbs/ton production	EF	1	3	6.45E-07	7.65E-09	0.00	2	3	1.50E-07	1.42E-08	0.00	Yes
Asphalt Prod., Diesel	Metals	Beryllium	lbs/ton production	EF	1	3	6.45E-07	7.65E-09	0.00	3	1	4.01E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Beryllium	lbs/ton production	EF	2	3	1.50E-07	1.42E-08	0.00	3	1	4.01E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Cadmium	lbs/ton production	EF	1	1	1.62E-06		1.00	2	3	1.38E-07	3.92E-08	0.78	Yes
Asphalt Prod., Diesel	Metals	Cadmium	lbs/ton production	EF	1	1	1.62E-06		1.00	3	1	4.41E-05		1.00	NA
Asphalt Prod., Diesel	Metals	Cadmium	lbs/ton production	EF	2	3	1.38E-07	3.92E-08	0.78	3	1	4.41E-05		1.00	Yes
Asphalt Prod., Diesel	Metals	Chromium (Hex)	lbs/ton production	EF	1	3	8.18E-07	1.19E-07	1.00	2	3	8.56E-08	3.14E-08	1.00	Yes
Asphalt Prod., Diesel	Metals	Chromium (Total)	lbs/ton production	EF	1	3	1.96E-08	1.27E-08	1.00	2	3	5.23E-07	3.40E-07	1.00	No
Asphalt Prod., Diesel	Metals	Chromium (Total)	lbs/ton production	EF	1	3	1.96E-08	1.27E-08	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Chromium (Total)	lbs/ton production	EF	2	3	6.23E-07	3.40E-07	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Copper	lbs/ton production	EF	1	2	1.50E-06	2.22E-07	1.00	2	3	1.12E-08	3.15E-07	1.00	No
Asphalt Prod., Diesel	Metals	Copper	lbs/ton production	EF	1	2	1.50E-06	2.22E-07	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Copper	lbs/ton production	EF	2	3	1.12E-08	3.15E-07	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Lead	lbs/ton production	EF	1	3	2.01E-06	6.58E-07	1.00	2	3	2.27E-08	1.54E-08	1.00	No
Asphalt Prod., Diesel	Metals	Lead	lbs/ton production	EF	1	3	2.01E-06	6.58E-07	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Lead	lbs/ton production	EF	2	3	2.27E-06	1.54E-08	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Manganese	lbs/ton production	EF	1	3	1.24E-05	4.38E-08	1.00	2	3	9.11E-07	1.82E-07	1.00	Yes
Asphalt Prod., Diesel	Metals	Manganese	lbs/ton production	EF	1	3	1.24E-05	4.38E-08	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Manganese	lbs/ton production	EF	2	3	9.11E-07	1.82E-07	1.00	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Mercury	lbs/ton production	EF	1	3	4.88E-08	2.84E-08	0.62	2	3	7.06E-07	7.92E-08	0.00	Yes
Asphalt Prod., Diesel	Metals	Mercury	lbs/ton production	EF	1	3	4.88E-08	2.84E-08	0.62	3	1	8.02E-08		1.00	Yes
Asphalt Prod., Diesel	Metals	Mercury	lbs/ton production	EF	2	3	7.06E-07	7.92E-08	0.00	3	1	8.02E-08		1.00	No
Asphalt Prod., Diesel	Metals	Nickel	lbs/ton production	EF	1	3	2.73E-08	3.93E-08	0.00	2	3	5.35E-07	2.00E-07	1.00	Yes
Asphalt Prod., Diesel	Metals	Nickel	lbs/ton production	EF	1	3	2.73E-08	3.93E-08	0.00	3	1	3.81E-04		0.00	Yes
Asphalt Prod., Diesel	Metals	Nickel	lbs/ton production	EF	2	3	5.35E-07	2.00E-07	1.00	3	1	3.81E-04		0.00	Yes
Asphalt Prod., Diesel	Metals	Selenium	lbs/ton production	EF	1	3	2.73E-07	3.93E-09	0.00	2	3	1.16E-06	6.08E-07	0.50	Yes
Asphalt Prod., Diesel	Metals	Selenium	lbs/ton production	EF	1	3	2.73E-07	3.93E-09	0.00	3	1	8.02E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Selenium	lbs/ton production	EF	2	3	1.16E-06	6.08E-07	0.50	3	1	8.02E-08		0.00	Yes
Asphalt Prod., Diesel	Metals	Zinc	lbs/ton production	EF	1	3	1.82E-05	5.62E-08	1.00	2	3	6.71E-08	6.28E-08	1.00	No
Asphalt Prod., Diesel	Metals	Zinc	lbs/ton production	EF	1	3	1.82E-05	5.62E-08	1.00	3	1	4.02E-03		1.00	Yes
Asphalt Prod., Diesel	Metals	Zinc	lbs/ton production	EF	2	3	6.71E-08	6.28E-08	1.00	3	1	4.02E-03		1.00	Yes
Asphalt Prod., Diesel	PAH	Acenaphthene	lbs/ton production	EF	1	3	4.80E-07	4.21E-07	1.00	2	3	2.11E-08	1.08E-08	1.00	No
Asphalt Prod., Diesel	PAH	Acenaphthylene	lbs/ton production	EF	1	3	3.36E-07	2.72E-07	1.00	2	3	2.04E-08	1.89E-08	1.00	No
Asphalt Prod., Diesel	PAH	Anthracene	lbs/ton production	EF	1	3	3.21E-08	7.68E-09	1.00	2	3	1.88E-08	7.54E-09	1.00	No
Asphalt Prod., Diesel	PAH	Benzo(a)anthracene	lbs/ton production	EF	1	3	6.12E-08	2.41E-08	1.00	2	3	6.41E-09	2.56E-09	1.00	Yes
Asphalt Prod., Diesel	PAH	Benzo(a)pyrene	lbs/ton production	EF	1	3	2.73E-07	3.93E-09	1.00	2	3	3.13E-10	6.29E-11	1.00	Yes
Asphalt Prod., Diesel	PAH	Benzo(b)fluoranthene	lbs/ton production	EF	1	3	1.39E-08	9.49E-09	1.00	2	3	4.39E-09	6.44E-09	1.00	No
Asphalt Prod., Diesel	PAH	Benzo(g,h,i)perylene	lbs/ton production	EF	1	3	1.90E-09	8.70E-10	0.23	2	3	6.03E-10	3.10E-11	1.00	Yes
Asphalt Prod., Diesel	PAH	Benzo(k)fluoranthene	lbs/ton production	EF	1	3	5.13E-09	2.90E-09	1.00	2	3	1.13E-09	1.31E-09	1.00	No
Asphalt Prod., Diesel	PAH	Chrysene	lbs/ton production	EF	1	3	2.70E-08	1.33E-08	1.00	2	3	1.25E-09	3.87E-10	1.00	Yes
Asphalt Prod., Diesel	PAH	Dibenz(a,h)anthracene	lbs/ton production	EF	1	3	1.76E-09	8.74E-10	0.00	2	3	1.90E-10	1.08E-10	0.00	Yes
Asphalt Prod., Diesel	PAH	Fluoranthene	lbs/ton production	EF	1	3	2.17E-07	1.43E-08	1.00	2	3	8.67E-08	3.88E-08	1.00	Yes
Asphalt Prod., Diesel	PAH	Fluorene	lbs/ton production	EF	1	3	8.63E-07	3.02E-07	1.00	2	3	2.78E-07	1.92E-07	1.00	Yes
Asphalt Prod., Diesel	PAH	Indeno(1,2,3-cd)pyrene	lbs/ton production	EF	1	3	2.04E-09	8.19E-10	0.28	2	3	3.00E-10	6.03E-12	1.00	Yes
Asphalt Prod., Diesel	PAH	Naphthalene	lbs/ton production	EF	1	3	4.75E-05	2.78E-05	1.00	2	3	1.08E-05	4.70E-06	1.00	No
Asphalt Prod., Diesel	PAH	Phenanthrene	lbs/ton production	EF	1	3	6.27E-07	2.36E-07	1.00	2	3	7.23E-07	3.10E-07	1.00	No

ATTACHMENT 7. EMISSION FACTOR GROUP COMPARISON (t-statistics)

Major Group	Category	Substance	EF Unit	Value Type	First Sample Statistics					Second Sample Statistics					Significant Difference at 95% Confidence
					Description Sub Group	Size	Average	Standard Deviation	Detect Ratio	Description Sub Group	Size	Average	Standard Deviation	Detect Ratio	
Asphalt Prod., Diesel	PAH	Pyrene	lbs/ton production	EF	1	3	1.88E-07	5.21E-09	1.00	2	3	5.99E-08	2.58E-08	1.00	Yes
Asphalt Prod., Diesel	VOC	Benzene	lbs/ton production	EF	1	3	1.04E-03	4.65E-05	1.00	2	3	1.04E-03	4.65E-05	0.00	Yes
Asphalt Prod., Diesel	VOC	Benzene	lbs/ton production	EF	1	3	1.04E-03	4.65E-05	1.00	3	1	3.05E-04		1.00	Yes
Asphalt Prod., Diesel	VOC	Benzene	lbs/ton production	EF	2	3	1.04E-03	4.65E-05	0.00	3	1	3.05E-04		1.00	Yes
Asphalt Prod., Diesel	VOC	Formaldehyde	lbs/ton production	EF	1	3	1.32E-04	5.94E-05	1.00	2	3	2.43E-04	7.74E-05	1.00	No
Boiler, Fuel Oil	Metals	Arsenic	lbs/Mgal	EF	1	9	1.08E-03	5.51E-04	1.00	2	24	5.89E-04	8.40E-04	0.63	No
Boiler, Fuel Oil	Metals	Beryllium	lbs/Mgal	EF	1	9	1.48E-05	1.60E-05	0.82	2	23	4.20E-04	1.03E-03	0.94	No
Boiler, Fuel Oil	Metals	Cadmium	lbs/Mgal	EF	1	9	2.23E-04	2.32E-04	1.00	2	22	3.43E-03	1.08E-02	0.85	No
Boiler, Fuel Oil	Metals	Chromium (Hex)	lbs/Mgal	EF	1	9	1.81E-04	1.72E-04	0.80	2	18	3.60E-04	3.83E-04	0.16	No
Boiler, Fuel Oil	Metals	Chromium (Total)	lbs/Mgal	EF	1	9	6.09E-04	2.44E-04	1.00	2	24	1.84E-03	1.97E-03	0.84	No
Boiler, Fuel Oil	Metals	Copper	lbs/Mgal	EF	1	9	1.40E-03	5.60E-04	1.00	2	24	4.37E-03	4.68E-03	1.00	No
Boiler, Fuel Oil	Metals	Lead	lbs/Mgal	EF	1	9	1.81E-03	1.12E-03	1.00	2	24	4.49E-03	1.00E-02	0.87	No
Boiler, Fuel Oil	Metals	Manganese	lbs/Mgal	EF	1	9	1.58E-03	1.37E-03	1.00	2	24	4.38E-02	1.38E-01	1.00	No
Boiler, Fuel Oil	Metals	Mercury	lbs/Mgal	EF	1	9	3.08E-03	1.91E-03	0.00	2	24	1.93E-04	3.12E-04	0.67	Yes
Boiler, Fuel Oil	Metals	Nickel	lbs/Mgal	EF	1	9	9.75E-02	5.45E-02	1.00	2	24	1.30E-01	1.61E-01	0.99	No
Boiler, Fuel Oil	Metals	Selenium	lbs/Mgal	EF	1	9	9.81E-04	6.71E-04	0.87	2	24	3.23E-03	9.22E-03	0.84	No
Boiler, Fuel Oil	Metals	Zinc	lbs/Mgal	EF	1	9	1.41E-02	8.27E-03	1.00	2	24	8.68E-02	2.27E-01	1.00	No
Boiler, Fuel Oil	PAH	Acenaphthene	lbs/Mgal	EF	1	12	3.11E-05	3.67E-05	0.89	2	27	2.30E-05	3.16E-05	0.04	No
Boiler, Fuel Oil	PAH	Acenaphthylene	lbs/Mgal	EF	1	12	1.08E-06	2.09E-07	0.00	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Anthracene	lbs/Mgal	EF	1	12	2.27E-06	1.66E-06	0.90	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Benzo(a)anthracene	lbs/Mgal	EF	1	12	2.08E-06	3.45E-06	0.52	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Benzo(a)pyrene	lbs/Mgal	EF	1	12	1.08E-06	2.09E-07	0.00	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Benzo(b+k)fluoranthene	lbs/Mgal	EF	1	12	1.52E-06	1.52E-06	0.34	2	8	1.60E-06	1.28E-06	0.43	No
Boiler, Fuel Oil	PAH	Benzo(g,h,i)perylene	lbs/Mgal	EF	1	12	1.29E-06	7.46E-07	0.23	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Chrysene	lbs/Mgal	EF	1	12	1.14E-06	2.70E-07	0.12	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Dibenz(a,h)anthracene	lbs/Mgal	EF	1	12	1.10E-06	2.11E-07	0.09	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Fluoranthene	lbs/Mgal	EF	1	12	3.24E-06	4.80E-06	0.87	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Fluorene	lbs/Mgal	EF	1	12	3.75E-06	3.60E-06	0.90	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Indeno(1,2,3-cd)pyrene	lbs/Mgal	EF	1	12	1.26E-06	6.42E-07	0.21	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	PAH	Naphthalene	lbs/Mgal	EF	1	12	3.21E-03	2.85E-03	1.00	2	27	4.95E-03	1.34E-02	1.00	No
Boiler, Fuel Oil	PAH	Phenanthrene	lbs/Mgal	EF	1	12	7.47E-06	7.63E-06	0.97	2	27	4.38E-05	6.87E-05	0.57	No
Boiler, Fuel Oil	PAH	Pyrene	lbs/Mgal	EF	1	12	2.50E-06	3.53E-06	0.78	2	27	3.11E-06	1.19E-06	0.23	Yes
Boiler, Fuel Oil	VOC	Acetaldehyde	lbs/Mgal	EF	1	9	5.33E-03	4.23E-03	0.82	2	9	2.31E-03	2.16E-03	0.22	No
Boiler, Fuel Oil	VOC	Benzene	lbs/Mgal	EF	1	9	3.49E-04	2.54E-05	0.00	2	28	3.32E-02	1.01E-01	0.95	No
Boiler, Fuel Oil	VOC	Formaldehyde	lbs/Mgal	EF	1	9	4.90E-02	5.13E-02	1.00	2	21	5.25E-02	1.21E-01	0.96	No
Boiler, Ref. Gas	Metals	Arsenic	lbs/MMcf	EF	1	3	7.04E-04	4.65E-04	1.00	2	3	3.67E-03	3.05E-03	0.71	No
Boiler, Ref. Gas	Metals	Beryllium	lbs/MMcf	EF	1	2	1.55E-04	2.08E-06	1.00	2	3	2.80E-04	5.35E-05	0.00	No
Boiler, Ref. Gas	Metals	Cadmium	lbs/MMcf	EF	1	3	2.38E-03	5.44E-04	1.00	2	3	6.80E-04	1.38E-04	0.00	Yes
Boiler, Ref. Gas	Metals	Chromium (Hex)	lbs/MMcf	EF	1	3	7.70E-03	3.09E-03	0.00	2	3	2.38E-04	7.18E-05	0.00	Yes
Boiler, Ref. Gas	Metals	Chromium (Total)	lbs/MMcf	EF	1	3	1.28E-02	1.67E-02	1.00	2	3	2.48E-03	8.67E-05	0.34	No
Boiler, Ref. Gas	Metals	Copper	lbs/MMcf	EF	1	2	6.30E-03	1.99E-03	1.00	2	3	5.30E-03	5.18E-03	0.71	No
Boiler, Ref. Gas	Metals	Lead	lbs/MMcf	EF	1	2	2.42E-03	9.38E-05	1.00	2	3	3.01E-03	4.09E-03	0.94	No
Boiler, Ref. Gas	Metals	Manganese	lbs/MMcf	EF	1	2	2.39E-03	1.06E-03	1.00	2	3	1.43E-01	2.19E-01	1.00	No
Boiler, Ref. Gas	Metals	Mercury	lbs/MMcf	EF	1	3	3.23E-04	5.60E-05	0.00	2	3	1.10E-03	2.89E-04	0.00	Yes
Boiler, Ref. Gas	Metals	Nickel	lbs/MMcf	EF	1	2	5.59E-03	2.03E-03	1.00	2	3	1.87E-02	2.80E-02	0.84	No
Boiler, Ref. Gas	Metals	Selenium	lbs/MMcf	EF	1	3	2.06E-03	9.62E-04	0.16	2	3	3.30E-01	3.08E-01	1.00	No
Boiler, Ref. Gas	Metals	Zinc	lbs/MMcf	EF	1	3	3.42E+00	5.51E+00	1.00	2	3	9.89E-02	1.55E-01	1.00	No
Boiler, Ref. Gas	PAH	Acenaphthene	lbs/MMcf	EF	1	3	5.88E-06	5.28E-07	0.37	2	3	1.23E-05	6.63E-06	1.00	No
Boiler, Ref. Gas	PAH	Acenaphthylene	lbs/MMcf	EF	1	3	2.56E-06	5.23E-08	0.00	2	3	1.42E-04	1.19E-04	1.00	No

