

F&A RECEIPT 501659

OCT 19, 2009

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OCT 21 2009

HUMAN CREMATORY
AIR GENERAL PERMIT REGISTRATION FORM

Bureau of Air Monitoring
& Mobile Sources

Part II. Notification to Permitting Office

(Detach and submit to appropriate permitting office; keep copy onsite)

Instructions: To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. (\$100 as of the effective date of this form)

0090223-002

Registration Type

Check one:

INITIAL REGISTRATION - Notification of intent to:

- Construct and operate a proposed new facility.
- Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).

RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to:

- Continue operating the facility after expiration of the current term of air general permit use.
- Continue operating the facility after a change of ownership.
- Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

SEE APPENDUM ATTACHED

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only

If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.

- All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s):
- No air operation permits currently exist for this facility.

General Facility Information

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)

Beach Funeral Home and Cremation Services

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.)

Beach Funeral Home, Inc.

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)

Street Address: 4999 N. Wickham Road

City: Melbourne

County: Brevard

Zip Code: 32940

Facility Start-Up Date (Estimated start-up date of proposed new facility.) (N/A for existing facility) . . .
December 2009

Owner/Authorized Representative

Name and Position Title (Person who, by signing this form below, certifies that the facility is eligible to use this air general permit.)

Print Name and Title: Manuel Vieira, Owner

Owner/Authorized Representative Mailing Address

Organization/Firm: Beach Funeral Home and Cremation Services

Street Address: 4999 N. Wickham Road

City: Melbourne

County: Brevard

Zip Code: 32940

Owner/Authorized Representative Telephone Numbers

Telephone: 321-282-4640

Fax:

Cell phone (optional):

Facility Contact (If different from Owner/Authorized Representative)

Name and Position Title (Plant manager or person to be contacted regarding day-to-day operations at the facility.)

Print Name and Title:

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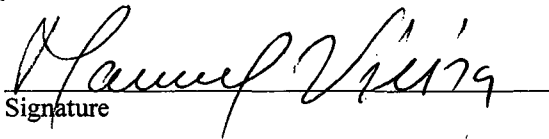
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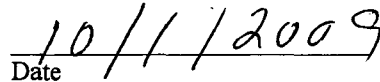
Owner/Authorized Representative Statement

This statement must be signed and dated by the person named above as owner or authorized representative

I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Registration Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the facility addressed in this registration form is eligible for use of this air general permit and that the statements made in this registration form are true, accurate and complete. Further, I agree to operate and maintain the facility described in this registration form so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof.

I will promptly notify the Department of any changes to the information contained in this registration form.


Signature


Date

* SEE ATTACHED ADDENDUM FOR
PAGE 10.

Design Calculations

If this is an initial registration for a proposed new human crematory unit, provide design calculations to confirm a sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees F.

- Manufacturer's design calculations attached. - See Attachment 1 for compliance test report
- Registration is not for proposed new human crematory unit(s).

Description of Facility

Below, or as an attachment to this form, provide a description of all crematory operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Describe all air pollutant-emitting processes and equipment at the facility, and identify any air pollution control measures or equipment used.

Equipment Description

The "Classic" is a multi-chamber unit having an average 150 - 200 lbs/hr fired with natural gas. The primary chamber burner is rated at 500,000 Btu/hr, and the secondary chamber burner is rated at 1,500,000 Btu/hr, for a total of 2,000,000 Btu/hr. Control of air pollution is achieved through the design of the "Classic" crematory, including its ability to operate the secondary chamber between 1600 - 1850 degrees Fahrenheit at a residence time in excess of 1.0 second. The design also includes fully automatic PLC based controls, independent fuel/air systems, preheated combustion air, secondary chamber temperature monitor and recorder, primary burner temperature interlock (prevents primary burner from firing prior to the secondary chamber reaching its set point temperature), UV continuous scanning flame detectors on burners, and an opacity sensor which can temporarily suspend operation of the primary chamber burner. In attachment 2 we have include a copy of the crematory spec.

Emissions Summary

Emission Summary and Calculations - Air pollution control is demonstrated through identical source stack testing. (see Attachment 1). See Attachment 3 for tabular summary of emissions. Criteria pollutant emissions values, except CO and PM are based on emission factors from AP-42, Table 2.1-12. The emission for CO and PM are derived from results of the identical source stack test.

Retention Time

The retention time was measured on an identical unit at 1.19 seconds at 1825F.

** APPENDUM TO PAGE 10 OF
ORIGINAL FORM REC'D F&A Oct 19, 2009*

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Scope of the Application

The scope of this application is to re-register facility number 0090223-001-AG. The IE43 equipment referenced on this permit was never constructed. The facility intent is to construct the equipment below. This is an amendment to the previous submittal.

Equipment Description

The "Classic" is a multi-chamber unit having an average 150 - 200 lbs/hr fired with natural gas. The primary chamber burner is rated at 500,000 Btu/hr, and the secondary chamber burner is rated at 1,500,000 Btu/hr, for a total of 2,000,000 Btu/hr. Control of air pollution is achieved through the design of the "Classic" crematory, including its ability to operate the secondary chamber between 1600 - 1850 degrees Fahrenheit at a residence time in excess of 1.0 second. The design also includes fully automatic PLC based controls, independent fuel/air systems, preheated combustion air, secondary chamber temperature monitor and recorder, primary burner temperature interlock (prevents primary burner from firing prior to the secondary chamber reaching its set point temperature), UV continuous scanning flame detectors on burners, and an opacity sensor which can temporarily suspend operation of the primary chamber burner. In attachment 2 we have include a copy of the crematory spec.

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F&A ORIGINAL RECEIPT DATE
501659 - OCT 19, 2009

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ORIGINAL REGISTRATION
FORM.



Department of Environmental Protection RECEIVED

Division of Air Resource Management

NOV 02 2009

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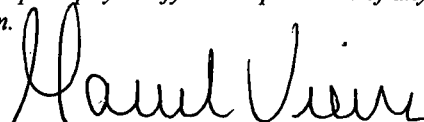
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10/28/2009
Date

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Attachment 1
Compliance Test Report

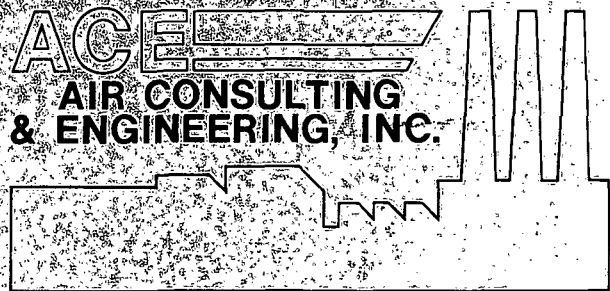
**SOURCE TEST REPORT
FOR
PARTICULATE, CARBON MONOXIDE, AND
VISIBLE EMISSIONS**

CREMATORY OUTLET

**PEAVY FUNERAL HOME
BOUNTSTOWN, FLORIDA**

FDEP PERMIT NUMBER 0130010-001-AC

ACE
**AIR CONSULTING
& ENGINEERING, INC.**



**2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32653
(352) 335-1889 FAX (352) 335-1891**



**SOURCE TEST REPORT
FOR
PARTICULATE, CARBON MONOXIDE, AND
VISIBLE EMISSIONS**

CREMATORY OUTLET

**PEAVY FUNERAL HOME
BOUNTSTOWN, FLORIDA**

FDEP PERMIT NUMBER 0130010-001-AC

MARCH 29, 2007

PREPARED FOR:

**A1 ENVIRONMENTAL CONSULTING SERVICES
435 DOUGLAS AVENUE, SUITE 1505-B
ALTAMONTE SPRINGS, FLORIDA 32714**

PREPARED BY:

**AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889**

542-07-01

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APPENDIX B--FIELD DATA SHEETS

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APPENDIX F--VISIBLE EMISSION DATA

APPENDIX G--RESIDENCE TIME CALCULATION, CREMATORY
TEMPERATURE CHART AND LOAD

APPENDIX H--PROJECT PARTICIPANTS

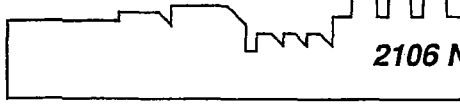
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ACE
AIR CONSULTING
& ENGINEERING, INC.



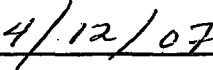
2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32653
(352) 335-1889 FAX (352) 335-1891

REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.



Dagmar Fick, Staff Engineer



Date

1.0 INTRODUCTION

On March 29, 2007, Air Consulting and Engineering, Inc. (ACE) conducted Particulate Matter (PM) and Carbon Monoxide (CO) emissions testing on the outlet stack of the crematory at Peavy Funeral Home in Blountstown, Florida. Mr. Luis Lloréns of A1 Environmental Consulting Services performed the visible emissions test.

United States Environmental Protection Agency (EPA) reference method 5 (PM), EPA Method 10 (CO) and EPA Method 9 (VE) were performed to satisfy conditions of Florida Department of Environmental Protection (FDEP) permit 0130010-001-AC.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Emission results and flue gas parameters for the unit are summarized in Table 1. The unit was in compliance with permit conditions.

PM results averaged 0.0448 grains per dry standard cubic foot (gr/dscf) of flue gas corrected to 7% Oxygen (O_2) (0.0579 gr/dscf @ 12% CO_2), which is within the allowable limit of 0.08 gr/dscf at 7% O_2 . The average residence time result of the Secondary Chamber resulted in 1.29 seconds (see Appendix G for RT calculations).

CO emissions averaged 3.49 ppm at 7% O_2 (4.68 ppm @ 12% CO_2), which is also within the permitted standard of 100 ppm at 7% O_2 .

Visible emissions, performed concurrently with Run 2, averaged 0.0 percent opacity for the highest six-minute period of the one-hour test (see Appendix F for VE data and observer's certification). Emissions are within the allowable limit of 5 percent opacity with a permitted opacity of 20% for 3 minutes per hour.

PM emissions summaries, field data sheets and laboratory data are presented in Appendices A, B and C. CO emission summaries and data logger copies are in Appendix D.

**Table 1. Particulate and Carbon Monoxide Emissions
Crematory Exhaust
Peavy Funeral Home
Blountstown, Florida
March 29, 2007**

Run Number	Time	Flow Rate dscfm	Oxygen %	CO2 %	Particulate Emissions				CO Emissions			Residence Time sec
					gr/dscf	gr/dscf @7% O2	gr/dscf @12% CO2	lbs/hr	ppm	ppm @7% O2	ppm @12% CO2	
1	1220-1323	1545	15.3	3.6	0.0184	0.0453	0.0606	0.243	2.18	5.23	7.20	1.33
2	1418-1520	1475	14.5	4.3	0.0214	0.0462	0.0592	0.271	1.47	3.09	4.05	1.34
3	1559-1703	1485	13.8	4.9	0.0219	0.0428	0.0538	0.279	1.13	2.16	2.78	1.19
Average	—	1502	14.5	4.3	0.0206	0.0448	0.0579	0.264	1.59	3.49	4.68	1.29

concentration @ 7% O2 = concentration x (20.9-7)/(20.9-%O2)

Allowable Emissions

PM = 0.080 gr/dscf @7% O2

CO = 100 ppm @7% O2

3.0 PROCESS DESCRIPTION AND OPERATION

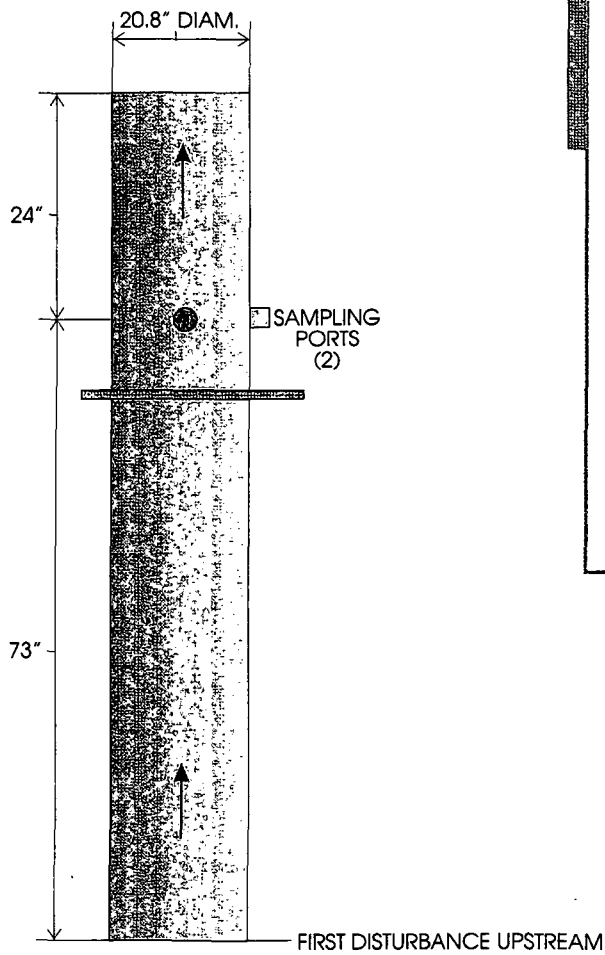
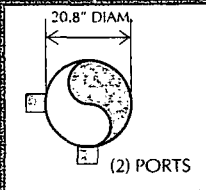
Peavy Funeral Home owns and operates a human crematory, Model "Classic" manufactured by US Cremation Equipment. Both the primary and secondary combustion chambers are fired with natural gas and have a total design heat input of 2.0 MMBTUH. Emissions are controlled by the afterburner. The Secondary Combustion Chamber (SCC) of each crematory volume is 71 cubic feet.

During the compliance test, the incinerator was charged with human remains, weighing 175, 160 and 150 lbs. The Secondary Chamber Residence Time was calculated to be 1.33, 1.34 and 1.19 seconds at 1700 to 1825° F.

Residence time calculations, crematory temperature chart and load are presented in Appendix G.

4.0 SAMPLING POINT LOCATION

The outlet stack schematic and sampling point location are provided in Figure 1. The three crematories are identical.

TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
1	1.0
2	1.4
3	2.5
4	3.7
5	5.2
6	7.4
7	13.4
8	15.6
9	17.1
10	18.3
11	19.4
12	20.4

NOTE: NOT TO SCALE.

SOURCE: AIR CONSULTING & ENGINEERING, INC. (420A1 4/13/07)

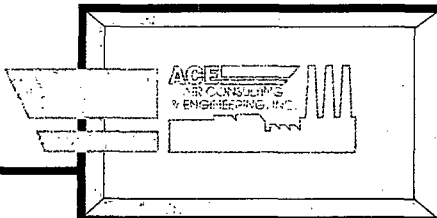


FIGURE 1.
 SAMPLING POINT LOCATION
 CREMATORY EXHAUST
 PEAVY FUNERAL HOME
 BLOUNTSTOWN, FLORIDA

5.0 FIELD AND ANALYTICAL PROCEDURES

5.1 Particulate Matter Sampling and Analysis--EPA Method 5 (Quartz Probe)

Particulate matter samples were collected by the particulate matter emission measurement method specified by the United States Environmental Protection Agency. A schematic diagram of the sampling train used is shown in Figure 2. All particulate matter captured from the nozzle to, and including, the filter was included in the calculation of the emission rate of particulate matter.

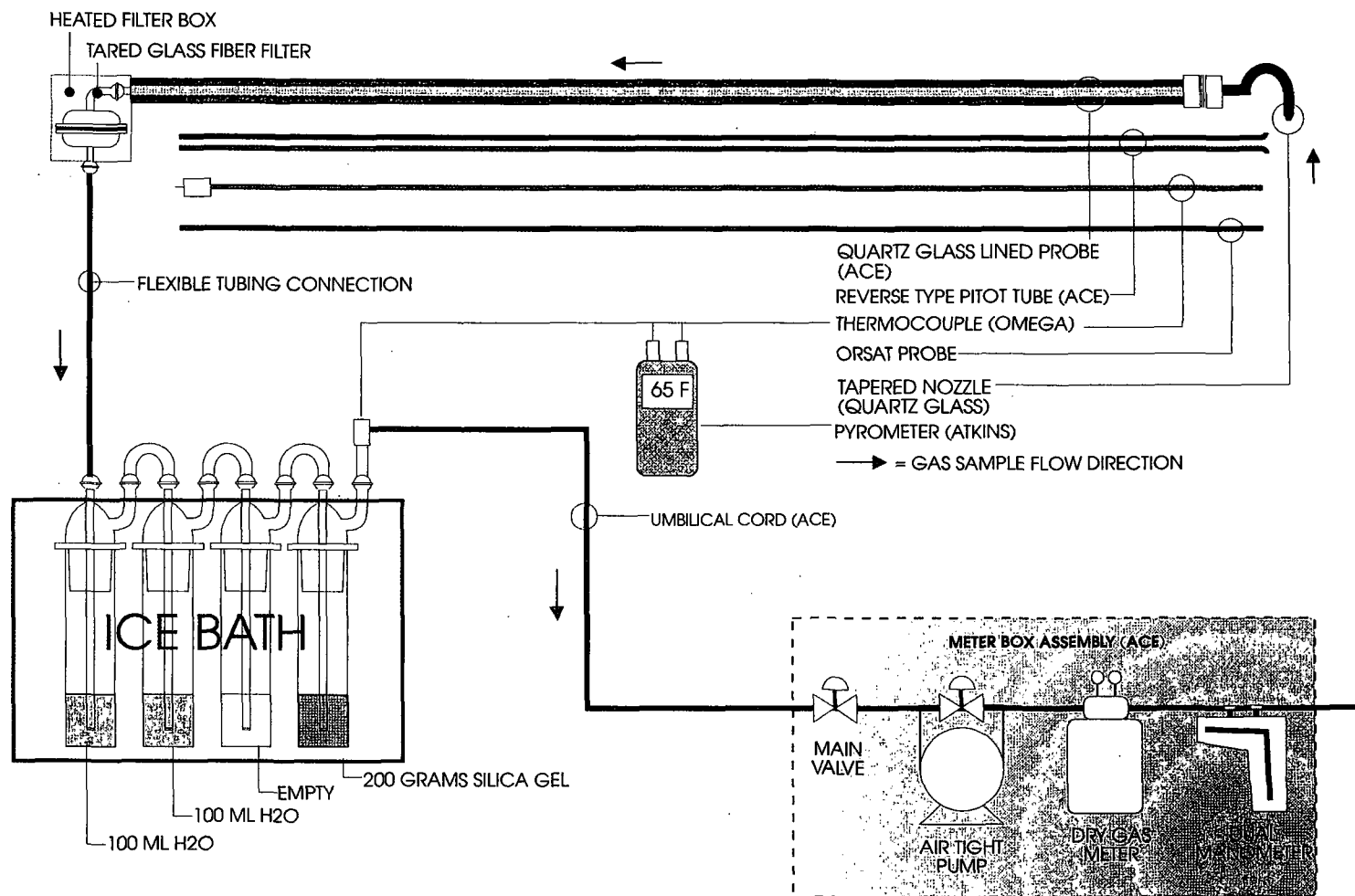
PREPARATION OF EQUIPMENT

1. **FILTERS** - Gelman type "A" filters, or their equivalents, were inspected, numbered, and placed in a drying oven for two hours at 105 degrees C, removed and placed in a standard desiccator containing indicating silica gel, allowed to cool for two hours, and weighed to the nearest 0.1 mg. The filters were then re-desiccated for a minimum of six hours and weighed to a constant weight (less than 0.5 mg change from previous weighing). The average of the two constant weights was used as the tare weight.
2. **NOZZLE, FILTER HOLDER, AND SAMPLING PROBE** - The nozzle, filter holder, and sampling probe were washed vigorously with soapy water and brushes, rinsed with acetone and distilled water, and dried prior to the test program. All openings on the sampling equipment were sealed while in transit to the test site.
3. **IMPINGERS** - The Greenburg-Smith impingers were cleaned with a warm soapy water solution and brushes, rinsed with distilled water and acetone, and dried. The impingers were sealed tightly during transit.

TEST PROCEDURE

Prior to performing the actual particulate matter sample runs, certain stack and stack gas parameters were measured. These preliminary measurements included the average gas temperature, the stack gas velocity head, the stack gas moisture content, and the stack dimensions at the point where the tests were being performed. The stack gas temperature was determined by using a bi-metallic thermocouple and calibrated pyrometer. Velocity head measurements were made with calibrated type "S" pitot tube and an inclined manometer. Velocity head measurements of 0.05 inches H₂O or less were measured utilizing a micromanometer.

The sampling traverse points were selected so that a representative sample could be extracted from the gas stream. The traverse points were located in the center of equal areas, the number of which were dependent upon the distance upstream and downstream from flow disturbances (per EPA Method 1; see Figure 1).



SOURCE: AIR CONSULTING & ENGINEERING, INC. (5QUARTZ) 8/16/95

FIGURE 2.
EPA METHOD 5 SAMPLING SCHEMATIC
(DETERMINATION OF PARTICULATE EMISSIONS
FROM STATIONARY SOURCES-QUARTZ GLASS PROBE)

Each particulate matter test run consisted of sampling for a specific amount of time at each traverse point. The type "S" pitot tube was connected to the sampling probe so that an instantaneous velocity head measurement could be made at each traverse point while making the test run, the stack gas temperature was also measured at each point (per EPA Method 2). Nomographs were used to calculate the isokinetic sampling rate at each traverse point during each test run.

The gases sampled passed through the following components: a stainless steel nozzle and quartz glass probe; a glass fiber filter, two impingers each with 100 ml of distilled water; one impinger dry; one impinger with 200 grams of silica gel; a flexible sample line; an air-tight pump; a dry test meter; and a calibrated orifice. The second impinger had a standard tip, while the first, third, and fourth impingers had modified tips with a 0.5 inch I.D. opening. Sample recovery was accomplished by the following procedures:

1. The pre-tared filter was removed from its holder and placed in Container 1 and sealed. (This is usually performed in the lab.)
2. All sample-exposed surfaces prior to the filter were washed with acetone and placed in Container 2, sealed and the liquid level marked.
3. The volume of water from the first three impingers was measured for the purpose of calculating the moisture in the stack gas and then discarded (per EPA Method 4).
4. The used silica gel from the fourth impinger was transferred to the original tared container and sealed.

LABORATORY ANALYSIS

The three sample containers from each sample run were analyzed according to the following procedures:

1. The filter was dried at 105 degrees C for three hours, desiccated for a minimum of one hour, and weighed to the nearest 0.1 mg. A minimum of two such weighings six hours apart was made to determine constant weight.
2. The acetone from Container 2 was transferred to a tared beaker and evaporated to dryness at ambient temperature and pressure, desiccated for 24 hours, and weighed to the nearest 0.1 mg. A minimum of two such weighings six hours apart were made to determine constant weight.
3. The used silica gel in its tared container was weighed to the nearest 0.1 gram.

The total sample weight included the weight of material collected on the filter plus the weight of material collected in the nozzle, sampling probe and front half of the filter holder.

DATA

The field data sheets, calculation sheets, and nomenclature definitions are included in the appendix of this report.

5.2 CO₂ and O₂ Sampling and Analysis--EPA Method 3

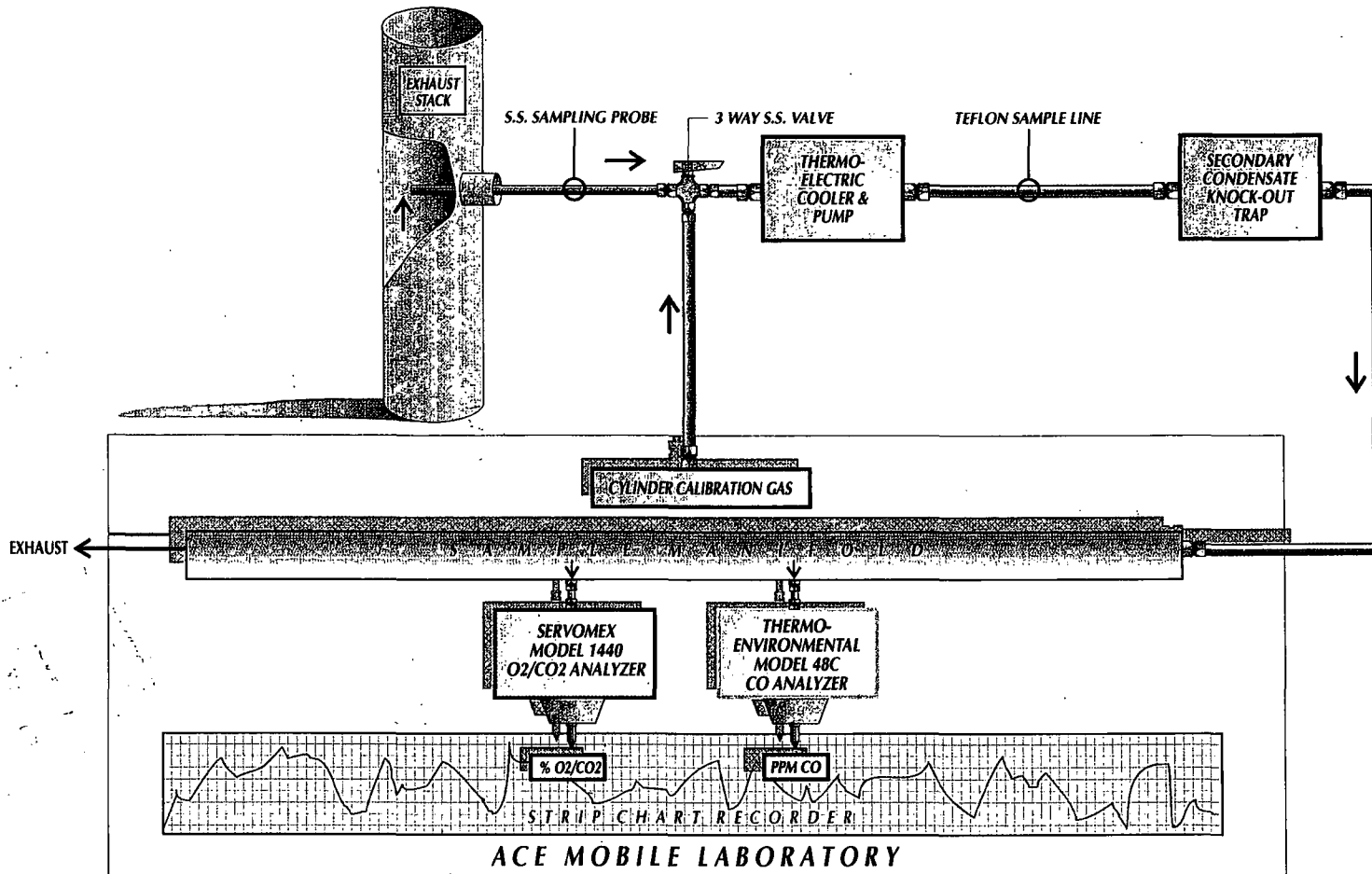
CO₂ and O₂ samples were collected by an integrated bag system. The sampling system consisted of a stainless steel probe, sample line from probe to a condenser, a small vacuum pump with a rotometer, and a TEDLAR bag.

The sampling procedure consists of the following leak-check and sampling techniques. Prior to sampling, the bag was leak-checked at 2 to 4 inches of water. The inlet to the condenser was plugged and a vacuum of 10 inches of Hg was pulled. The outlet of the pump was then plugged and the pump shut off. The vacuum held steady for at least 30 seconds. The sample line was then purged with flue gas and the bag was connected. Sampling was conducted at an appropriate constant rate at the same points and for the same length of time as the particulate sampling. At the conclusion of the run, the pump was shut off and the bag secured.

After leak checking the orsat gas analyzer, the average value for each gas was determined. The gas was measured until two values were obtained that fell within the specified variance of the gas tested. Data were recorded on the field data sheet and the bag was evacuated for the next sample run.

5.3 Determination of Carbon Monoxide Emissions from Stationary Source --EPA Method 10

The sampling system is shown in Figure 3. A sample was drawn from the stack at a rate of approximately 2 SCFH. A stainless steel probe assembly was followed by a three-way stainless steel valve. The sample was pumped through an ice-cooled condensate trap followed by a 3/8" O.D. TEFLON sampling line. Calibration gases were introduced at the sampling interface (the three way valve) through another 3/8" O.D. TEFLON line. The sample pump delivered gases to a manifold system where one flow



SOURCE: AIR CONSULTING & ENGINEERING, INC. (CO/CO₂/O₂ CEM 4/12/07)

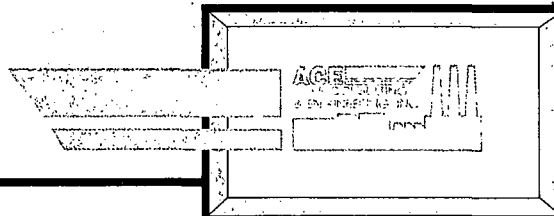


FIGURE 3.
EPA METHODS 3A AND 10 CEM SAMPLING SCHEMATIC
(DETERMINATION OF OXYGEN, CARBON
DIOXIDE, AND CARBON MONOXIDE
EMISSIONS FROM STATIONARY SOURCES)

is divided between a Servomex 1440 O₂/CO₂ analyzer and a Thermo Electron Model 48C CO analyzer (NDIR with gas filter correlation). Excess flow is dumped to ambient. All instrument responses were recorded on strip chart recorders. The sampling system yields O₂, and CO, concentrations on a dry gas basis.

Calibration gases consisted of CO, and O₂ standards in nitrogen. All calibration gases were certified NBS traceable, Protocol 1.

5.4 Visible Emissions Testing--EPA Method 9

The visible emission tests were performed in accordance with EPA Method 9. The observers maintain semi-annual FDEP certification for the performance of visible emission tests and attend the classroom lecture as required.

All procedures listed in Method 9 were followed including observer's position relative to the sun, distance from the stack, and line of sight. These items are noted on the visible emission data sheet. Observations were made at 15-second intervals and recorded to the nearest five percent. The final opacity was determined by calculating the average of the highest consecutive 24 readings of the observation period.

APPENDIX A

**COMPLETE EMISSION DATA
WITH
SAMPLE CALCULATIONS**

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: PEAVY FUNERAL HOME
LOCATION: BLOUNTSTOWN, FLORIDA
SOURCE: INCINERATOR EXHAUST STACK
DATE: 3-29-2007

RUN NUMBER:	1	IMPINGER ml.	32.0
BEGIN TIME (hour : minute):	12:20 PM	SILICA GEL. gms.	4.7
END TIME (hour : minute):	1:23 PM	% O2:	15.26
TOTAL RUN TIME:	60 MINUTES	% CO2:	3.64
BAROMETRIC PRESSURE:	30.14 inches Hg.	"F" FACTOR:	NA
STACK PRESSURE:	30.14 inches Hg.		
NOZZLE DIAMETER:	0.375 INCHES		
METER CORR. FACTOR:	1.009	<u>PARTICULATE DATA</u>	
FINAL METER:	228.452 CUBIC FT.		
INITIAL METER:	197.850 CUBIC FT.		
STACK AREA:	2.357 SQ. FT.	FILTER mg.:	11.6
PITOT Cp:	0.84	WASH mg.:	24.6

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000767	VOLUMETRIC FLOW(ACFM):	4129
AVG. SQ. RT. VEL. HEAD:	0.3255	VOLUMETRIC FLOW(WVSCFM):	88
		VOLUMETRIC FLOW(DSCFM):	1545
AVG. STACK TEMP. (F):	884.8	VOLUMETRIC FLOW(ACFMD):	3907
AVG. METER TEMP. (F):	81.3		
AVG. ORIFICE DIFFERENTIAL:	0.770	<u>PARTICULATE EMISSION DATA:</u>	
METER ACF:	30.602		
METER SCF:	30.388	POUNDS PER HOUR:	0.243
MEASURED SCF MOISTURE:	1.727	POUNDS PER SCF.:	2.63E-06
MEASURED MOISTURE %:	5.38	GRAINS PER SCF.:	0.0184
STACK TEMP. (deg. C):	473.8	GRAINS PER SCF @ 7% O2:	0.0453
VAPOR PRESSURE:	11388.6	GRAINS PER SCF @ 50% E.A.:	0.0427
SATURATION MOISTURE %:	NA	GRAINS PER SCF @ 12% CO2:	0.0606
PERCENT WATER VAPOR:	5.38		
GAS MOLECULAR WT.(dry):	29.19		
GAS MOLECULAR WT.(wet):	28.59		
PERCENT EXCESS AIR:	248.114		
AVERAGE VELOCITY(FPS):	29.2		
MMBTUH(if applicable):	NA		
PERCENT ISOKINETIC:	100.78		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: PEAVY FUNERAL HOME
LOCATION: BLOUNTSTOWN, FLORIDA
SOURCE: INCINERATOR EXHAUST STACK
DATE: 3-29-2007

RUN NUMBER:	2	IMPINGER ml.	40.0
BEGIN TIME (hour : minute):	2:18 PM	SILICA GEL. gms.	4.3
END TIME (hour : minute):	3:20 PM	% O2:	14.45
TOTAL RUN TIME:	60 MINUTES	% CO2:	4.34
BAROMETRIC PRESSURE:	30.14 inches Hg.	"F" FACTOR:	NA
STACK PRESSURE:	30.14 inches Hg.		
NOZZLE DIAMETER:	0.375 INCHES		
METER CORR. FACTOR:	1.009		
FINAL METER:	259.270 CUBIC FT.		
INITIAL METER:	228.650 CUBIC FT.		
STACK AREA:	2.357 SQ. FT.		
PITOT Cp:	0.84		

PARTICULATE DATA

FILTER mg.:	16.6
WASH mg.:	25.5

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000767	VOLUMETRIC FLOW(ACFM):	4031
AVG. SQ. RT. VEL. HEAD:	0.3158	VOLUMETRIC FLOW(WVSCFM):	101
		VOLUMETRIC FLOW(DSCFM):	1475
AVG. STACK TEMP. (F):	899.3	VOLUMETRIC FLOW(ACFMD):	3772
AVG. METER TEMP. (F):	82.6		

PARTICULATE EMISSION DATA:

AVG. ORIFICE DIFFERENTIAL:	0.719		
METER ACF:	30.62		
METER SCF:	30.328	POUNDS PER HOUR:	0.271
MEASURED SCF MOISTURE:	2.085	POUNDS PER SCF.:	3.06E-06
MEASURED MOISTURE %:	6.43	GRAINS PER SCF.:	0.0214
STACK TEMP. (deg. C):	481.8	GRAINS PER SCF @ 7% O2:	0.0462
VAPOR PRESSURE:	11976.5	GRAINS PER SCF @ 50% E.A.:	0.0438
SATURATION MOISTURE %:	NA	GRAINS PER SCF @ 12% CO2:	0.0592
PERCENT WATER VAPOR:	6.43		
GAS MOLECULAR WT. (dry):	29.27		
GAS MOLECULAR WT. (wet):	28.55		
PERCENT EXCESS AIR:	206.740		
AVERAGE VELOCITY(FPS):	28.5		
MMBTUH(if applicable):	NA		
PERCENT ISOKINETIC:	105.32		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: PEAVY FUNERAL HOME
LOCATION: BLOUNTSTOWN, FLORIDA
SOURCE: INCINERATOR EXHAUST STACK
DATE: 3-29-2007

RUN NUMBER:	3	IMPINGER ml.	46.0
BEGIN TIME (hour : minute):	3:59 PM	SILICA GEL. gms.	4.3
END TIME (hour : minute):	5:03 PM	% O2:	13.78
TOTAL RUN TIME:	60 MINUTES	% CO2:	4.89
BAROMETRIC PRESSURE:	30.14 inches Hg.	"F" FACTOR:	NA
STACK PRESSURE:	30.14 inches Hg.		
NOZZLE DIAMETER:	0.375 INCHES		
METER CORR. FACTOR:	1.009		
FINAL METER:	290.253 CUBIC FT.		
INITIAL METER:	259.500 CUBIC FT.		
STACK AREA:	2.357 SQ. FT.		
PITOT Cp:	0.84		

PARTICULATE DATA

FILTER mg.:	32.3
WASH mg.:	10.9

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000767	VOLUMETRIC FLOW(ACFM):	4400
AVG. SQ. RT. VEL. HEAD:	0.3323	VOLUMETRIC FLOW(WVSCFM):	116
		VOLUMETRIC FLOW(DSCFM):	1485
AVG. STACK TEMP. (F):	1001.1	VOLUMETRIC FLOW(ACFMD):	4082
AVG. METER TEMP. (F):	84.1		
AVG. ORIFICE DIFFERENTIAL:	0.767		
METER ACF:	30.753		
METER SCF:	30.382		
MEASURED SCF MOISTURE:	2.368		
MEASURED MOISTURE %:	7.23		
STACK TEMP. (deg. C):	538.4		
VAPOR PRESSURE:	16389.2		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	7.23		
GAS MOLECULAR WT.(dry):	29.33		
GAS MOLECULAR WT.(wet):	28.51		
PERCENT EXCESS AIR:	179.168		
AVERAGE VELOCITY(FPS):	31.1		
MMBTUH(if applicable):	NA		
PERCENT ISOKINETIC:	104.79		

PARTICULATE EMISSION DATA:

POUNDS PER HOUR:	0.279
POUNDS PER SCF.:	3.13E-06
GRAINS PER SCF.:	0.0219
GRAINS PER SCF @ 7% O2:	0.0428
GRAINS PER SCF @ 50% E.A.:	0.0408
GRAINS PER SCF @ 12% CO2:	0.0538

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: PEAVY FUNERAL HOME
 LOCATION: BLOUNTSTOWN, FLORIDA
 SOURCE: INCINERATOR EXHAUST STACK
 DATE: 3-29-2007
 RUN NUMBER: 1 FROM: 12:20 TO: 13:23

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F
1 - 1	20.35	0.20	1.42	865	77
1 - 2	19.40	0.16	1.13	920	77
1 - 3	18.33	0.11	0.78	938	77
1 - 4	17.10	0.11	0.78	936	78
1 - 5	15.59	0.13	0.92	927	79
1 - 6	13.40	0.25	1.77	919	79
1 - 7	7.39	0.11	0.78	900	80
1 - 8	5.20	0.09	0.64	901	80
1 - 9	3.69	0.09	0.64	874	80
1 - 10	2.46	0.10	0.71	760	81
1 - 11	1.39	0.08	0.57	797	81
1 - 12	0.44	0.07	0.50	795	81
2 - 1		0.09	0.64	889	82
2 - 2		0.10	0.71	943	82
2 - 3		0.10	0.71	947	82
2 - 4		0.11	0.78	937	83
2 - 5		0.10	0.71	935	83
2 - 6		0.10	0.71	920	83
2 - 7		0.09	0.64	899	84
2 - 8		0.08	0.57	891	84
2 - 9		0.08	0.57	889	84
2 - 10		0.08	0.57	852	84
2 - 11		0.09	0.64	805	85
2 - 12		0.09	0.64	797	85

AVERAGES: 0.109 0.770 884.83 81.29

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: PEAVY FUNERAL HOME
 LOCATION: BLOUNTSTOWN, FLORIDA
 SOURCE: INCINERATOR EXHAUST STACK
 DATE: 3-29-2007
 RUN NUMBER: 2 FROM: 14:18 TO: 15:20

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F
1 - 1	20.35	0.10	0.72	963	80
1 - 2	19.40	0.09	0.64	958	81
1 - 3	18.33	0.09	0.64	950	81
1 - 4	17.10	0.08	0.57	922	81
1 - 5	15.59	0.08	0.57	906	81
1 - 6	13.40	0.09	0.64	876	81
1 - 7	7.39	0.08	0.57	853	81
1 - 8	5.20	0.08	0.57	863	81
1 - 9	3.69	0.08	0.57	862	82
1 - 10	2.46	0.09	0.64	859	82
1 - 11	1.39	0.09	0.64	859	82
1 - 12	0.44	0.09	0.64	855	83
2 - 1		0.11	0.79	931	83
2 - 2		0.10	0.72	951	83
2 - 3		0.11	0.79	944	83
2 - 4		0.10	0.72	936	83
2 - 5		0.12	0.86	938	84
2 - 6		0.11	0.79	925	84
2 - 7		0.10	0.72	900	84
2 - 8		0.10	0.72	879	84
2 - 9		0.13	0.93	872	84
2 - 10		0.13	0.93	865	85
2 - 11		0.13	0.93	859	85
2 - 12		0.13	0.93	857	85

AVERAGES: 0.100 0.719 899.29 82.63

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: PEAVY FUNERAL HOME
 LOCATION: BLOUNTSTOWN, FLORIDA
 SOURCE: INCINERATOR EXHAUST STACK
 DATE: 3-29-2007
 RUN NUMBER: 3 FROM: 15:59 TO: 17:03

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY "inches" HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP. F	
1 - 1	20.35	0.15	1.04	1.04	1008	82
1 - 2	19.40	0.14	0.97	0.97	1015	82
1 - 3	18.33	0.14	0.97	0.97	1016	82
1 - 4	17.10	0.12	0.83	0.83	1015	82
1 - 5	15.59	0.12	0.83	0.83	1045	83
1 - 6	13.40	0.12	0.83	0.83	1044	83
1 - 7	7.39	0.11	0.76	0.76	1042	83
1 - 8	5.20	0.10	0.69	0.69	1031	83
1 - 9	3.69	0.10	0.69	0.69	1025	84
1 - 10	2.46	0.10	0.69	0.69	1006	84
1 - 11	1.39	0.10	0.69	0.69	1020	84
1 - 12	0.44	0.10	0.69	0.69	1024	84
2 - 1		0.12	0.83	0.83	999	84
2 - 2		0.11	0.76	0.76	986	84
2 - 3		0.11	0.76	0.76	1023	85
2 - 4		0.10	0.69	0.69	998	85
2 - 5		0.11	0.76	0.76	1003	85
2 - 6		0.11	0.76	0.76	985	85
2 - 7		0.10	0.69	0.69	960	85
2 - 8		0.10	0.69	0.69	959	85
2 - 9		0.10	0.69	0.69	956	86
2 - 10		0.10	0.69	0.69	953	86
2 - 11		0.10	0.69	0.69	950	86
2 - 12		0.10	0.69	0.69	963	86

AVERAGES: 0.111 0.767 1001.08 84.08

**AIR CONSULTING and ENGINEERING, INC.
SAMPLE CALCULATIONS**

PEAVY FUNERAL HOME
BLOUNTSTOWN, FLORIDA
INCINERATOR EXHAUST STACK
3-29-2007

RUN NUMBER: 1
NOZZLE AREA SQ.FT.:

$$\begin{aligned} A_n &= \pi \cdot (R_n)^2 = \pi \cdot (D_n/2)^2 = \pi \cdot [(D_n/2)^2] \cdot [(1\text{ft}/12\text{in})^2] \\ &= \pi \cdot (D_n)^2 / (576) = (3.1416) \cdot [(0.375)^2] / (576) \\ &= 0.000767 \end{aligned}$$

METER ACTUAL CU. FEET:

$$\begin{aligned} V_m &= (V_m \text{ final}) - (V_m \text{ initial}) \\ &= (228.452) - (197.85) \\ &= 30.602 \end{aligned}$$

METER STANDARD CU. FEET:

$$\begin{aligned} V_{mstd} &= (K_1) \cdot (V_m) \cdot (Y) \cdot \{ (P_{bar}) + [(D_{Havg}) / (13.6)] \} / \{ (T_{Mavg}) + (460) \} \\ &= (17.64) \cdot (30.602) \cdot (1.0091) \cdot \{ (30.14) + [(0.77) / (13.6)] \} / \{ (81.3) + (460) \} \\ &= 30.388 \end{aligned}$$

MEASURED SCF MOISTURE:

$$\begin{aligned} V_{Wstd} &= (K_2) \cdot (V_{ic}) \\ &= (0.04707) \cdot (32 + 4.7) \\ &= 1.727 \end{aligned}$$

MEASURED % MOISTURE:

$$\begin{aligned} B_{wm\%} &= \{ (V_{Wstd}) / [(V_{mstd}) + (V_{Wstd})] \} \cdot 100\% \\ &= \{ (1.727) / [(30.388) + (1.727)] \} \cdot 100\% \\ &= 5.38\% \end{aligned}$$

STACK TEMP. Deg C

$$\begin{aligned} T_{sc} &= [(T_{Savg}) - 32] \cdot 5/9 \\ &= [(884.8) - 32] \cdot 5/9 \\ &= 473.8 \end{aligned}$$

VAPOR PRESSURE (in Hg):

$$\begin{aligned} P_v &= \{ 2.718E[18.6866 - 0.00244 \cdot (273 + (T_{sc}))] - 4509.47 \} / \{ (273 + (T_{sc})) - 149541 / [(273 + (T_{sc}))^2] \} / 3.375 \\ &= \{ 2.718E[18.688 - 0.00244 \cdot (273 + (473.8))] - 4509.47 \} / \{ (273 + (473.8)) - 149541 / [(273 + (473.8))^2] \} / 3.375 \\ &= 11388.62 \end{aligned}$$

SATURATION MOISTURE %:

$$\begin{aligned} B_{wsat\%} &= \text{NA} \\ &= \text{NA} \\ &= \text{NA} \end{aligned}$$

PERCENT WATER VAPOR:

$$\begin{aligned} B_{wo\%} &= B_{wm\%} \quad \text{IF} \quad B_{wm\%} < B_{wsat\%} \\ B_{wo\%} &= B_{wsat\%} \quad \text{IF} \quad B_{wsat\%} < B_{wm\%} \\ &= 5.38 \end{aligned}$$

GAS MOLECULAR WT.(dry):

$$\begin{aligned} M_d &= [(0.440) \cdot (\%CO_2)] + [(0.320) \cdot (\%O_2)] + \{ (0.280) \cdot [(\%N_2) + (\%CO)] \} \\ &= [(0.440) \cdot (\%CO_2)] + [(0.320) \cdot (\%O_2)] + \{ (0.280) \cdot [(100) - (\%CO_2) - (\%O_2)] \} \\ &= [(0.440) \cdot (3.64)] + [(0.032) \cdot (15.26)] + \{ (0.280) \cdot (81.1) \} \\ &= 29.2 \end{aligned}$$

GAS MOLECULAR WT.(wet):

$$\begin{aligned} M_s &= \{ (M_d) \cdot [1 - (B_{wo\%} / 100)] \} + \{ (18.0) \cdot (B_{wo\%} / 100) \} \\ &= \{ (29.2) \cdot [1 - (0.0538)] \} + \{ (18.0) \cdot (0.0538) \} \\ &= 28.59 \end{aligned}$$

PERCENT EXCESS AIR:

$$\begin{aligned} \%EA &= \{ (\%O_2) / [(0.264) \cdot (\%N_2)] - (\%O_2) \} \cdot (100\%) \\ &= \{ (15.26) / [(0.264) \cdot (81.1)] - (15.26) \} \cdot (100\%) \\ &= 248.11 \end{aligned}$$

AVERAGE VELOCITY(FPS):
$$VS_{avg} = (85.48) * (C_p) * (ASRVH) * \left\{ \frac{[(TS_{avg}) + 460]}{[(M_s) * (P_s)]} \right\}^{E/2}$$

$$= (85.48) * (0.84) * (0.33) * \left\{ \frac{[(884.8) + 460]}{[(28.6) * (30.138)]} \right\}^{E/2}$$

$$= 29.2$$

PERCENT ISOKINETIC:
$$\%Iso = \left\{ \frac{(K_4) * (TS_{avg} + 460) * (VM_{std})}{[(P_s) * (V_s) * (A_n) * (time)^{1 - (Bwo\%/100)}]} \right\} * 100$$

$$= \left\{ \frac{(0.09450) * (884.8 + 460) * (30.388)}{[(30.138) * (29.2) * (0.000767) * (60)^{1 - (5.38/100)}]} \right\} * 100\%$$

$$= 100.8$$

VOLUMETRIC FLOW(ACFM):
$$QS = (VS_{avg}) * (A_s) * (60)$$

$$= (29.2) * (2.357) * (60)$$

$$= 4129.5$$

VOLUMETRIC FLOW(WVSCFM):
$$WVSCFM = (QS) * (17.64) * (Bwo\%/100) * (P_s) / (TS_{avg} + 460)$$

$$= (4129.5) * (17.64) * (5.38/100) * (30.138) / (884.8 + 460)$$

$$= 87.8$$

VOLUMETRIC FLOW(DSCFM):
$$QS_{std} = (QS) * (17.64) * [1 - (Bwo\%/100)] * (P_s) / (TS_{avg} + 460)$$

$$= (4129.5) * (17.64) * [1 - (5.38/100)] * (30.138) / (884.8 + 460)$$

$$= 1544.6$$

PARTICULATE EMISSION DATA:

POUNDS PER HOUR:
$$lb/Hr = (mg) * (QS_{std}) * (60) / [(VM_{std}) * (453600)]$$

$$= (36.2) * (1544.6) * (60) / [(30.388) * (453600)]$$

$$= 0.243$$

POUNDS PER SCF.:
$$lb/SCF = (lb/Hr) / [(60) * (QS_{std})]$$

$$= (0.243) / [(60) * (1544.6)]$$

$$= 0.000003$$

GRAINS PER SCF.:
$$Gr/SCF = (lb/SCF) * (7000)$$

$$= (0.000003) * (7000)$$

$$= 0.018$$

GRAINS PER SCF @ 7% O2:
$$= (Gr/SCF) * (20.9 - 7.0) / [(20.9) - (\%O_2)]$$

$$= (0.018) * (13.9) / [(20.9) - (15.26)]$$

$$= 0.045$$

GRAINS PER SCF @ 50% E.A.:
$$= (Gr/SCF) * [(100) + (\%EA)] / (150)$$

$$= (0.018) * [(100) + (248.11)] / (150)$$

$$= 0.043$$

POUNDS PER MMBTU: NA
NA
NA

AIR CONSULTING and ENGINEERING, INC.
NOMENCLATURE

%CO - Percent Carbon Monoxide.
%CO₂ - Percent Carbon Dioxide.
%EA - Percent excess air.
%Iso - Percent isokenetics.
%N₂ - Percent Nitrogen.
%O₂ - Percent Oxygen.
An - Area of the nozzle, square feet.
As - Stack area, square feet.
ASRVH - Average of the square roots of the velocity heads.
Bwm% - Percent water vapor as measured.
Bwo% - Percent water vapor.
Bwsat% - Percent water vapor at saturation.
C₃H₈ - Propane.
CH₄ - Methane.
CO - Carbon Monoxide
CO - Carbon Monoxide.
CO₂ - Carbon Dioxide
Cp - Pitot coefficient.
Cso₂ - Concentration of Sulfur Dioxide, pounds per dry standard cubic foot.
DHavg - Average meter orifice pressure differential.
Dn - Nozzle diameter.
E - Denotes exponent.
F - Fuel factor, standard cubic feet per million BTU.
Gr/SCF - Grains per dry standard cubic foot.
Hr - Hour.
K1 - A constant = 17.64.
K2 - A constant = 0.04707.
K4 - A constant = 0.09450.
lb - pound.
lb/Hr - pounds per hour.
lb/MMBTU - Pounds per million British Thermal Units.
lb/SCF - Pounds per dry standard cubic foot.
Md - Molecular weight of dry stack gas.
mg - Mass of filter and dried probe wash, milligrams.
MMBTU - million British Thermal Units.
Ms - Molecular weight of wet stack gas.
NO_x - Oxides of Nitrogen.
Pbar - Barometric pressure, inches of Mercury.
Pi - A constant = 3.14159....
PPM - Parts per million.
Ps - Stack pressure, inches Mercury.
Pv - Vapor pressure of water at stack temperature, inches Mercury.
Qs - Volumetric flow rate, actual cubic feet per minute.
QSstd - Volumetric flow rate, dry standard cubic feet per minute.
Rn - Nozzle radius, inches.
SCF - Standard cubic feet.
SO₂ - Sulfur Dioxide.
TMavg - Average meter temperature, degrees Fahrenheit.
TSavg - Average stack temperature, degrees Fahrenheit.
Tsc - Average stack temperature, degrees Celcius.
Vlc - Volume of moisture collected in the impingers and silica gel, milliliters.
Vm - Metered volume, actual cubic feet.
Vm final - Final meter reading, actual cubic feet.
Vm initial - Initial meter reading, actual cubic feet.
VMstd - Metered volume corrected to standard conditions, standard cubic feet.
VOC - Volatile organic compounds.
VSavg - Average stack velocity, feet per second.
VWstd - Standard volume of water vapor, standard cubic feet.
WVSCFM - Volumetric flow rate of water vapor, standard cubic feet per minute.
Y - Meter correction factor.

APPENDIX B

FIELD DATA SHEETS

AIR CONSULTING & ENGINEERING, INC.

PARTICULATE LAB DATA ANALYSIS

CLIENT / SOURCE IDENTIFICATION PEAVEY Funeral Home, Omega Incinerator

BALANCE CHECK:

1ST GROSS WT. - 0.0 0.0 0.5 0.5001 10.0 10.0001 100.0 99.9999 DATE 4-2-07 TIME 0815 %RH 38 TEMP 69 BY: (INIT.) CR
 2ND GROSS WT. - 0.0 0.0 0.5 0.5000 10.0 10.0000 100.0 99.9998 DATE 4-2-07 TIME 1455 %RH 37 TEMP 68 BY: (INIT.) CR

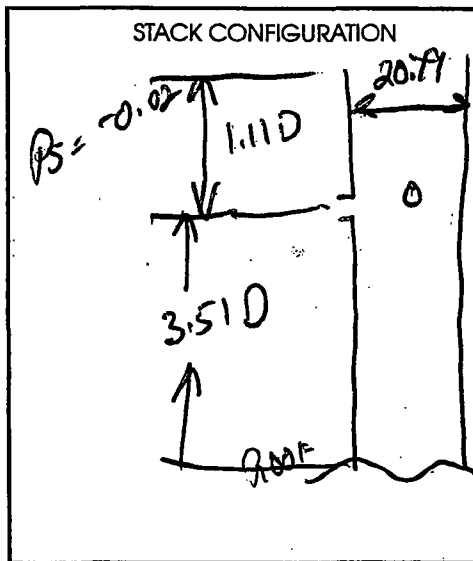
RUN I.D.	FILTER/ CONT. NO.	VOLUME (ml)	1ST GROSS WT. (gm)	2ND GROSS WT. (gm)	AVG. GROSS WT. (gm)	TARE WT. (gm)	SUB NET WT. (gm)	BLANK (gm)	NET WT. (mg)
1	3077	N/A	0.4533	0.4531	0.4532	0.4416	0.0116		11.6
2	3079		0.4592	0.4591	0.4592	0.4426	0.0166		16.6
3	3078	√	0.4725	0.4727	0.4726	0.4403	0.0323		32.3
1	A-8	135	114.9567	114.9564	114.9566	114.9320	0.0246		24.6
2	A-9	165	115.3891	115.3890	115.3891	115.3636	0.0255		25.5
3	A-10	120	114.9598	114.9596	114.9597	114.9488	0.0109		10.9
BLANK	3193	N/A	0.4464	0.4462	0.4463	0.4463	0.0000		0.0
BLANK	A-7	200	116.6020	116.6018	116.6019	116.6011	0.0008		0.8

NOTES:

PLANT Petty Funeral Home
 SOURCE Omega Crematorium
 PLANT LOCATION Blountstown, FL
 TYPE OF SAMPLING TRAIN EPA MS
 TYPE OF SAMPLES P.M.
 DATE 3-29-2007 RUN NUMBER 21
 TIME START 12:20 TIME END 13:23
 SAMPLE TIME 2:5, 24 (MIN/PT) = 60 TOTAL MIN
 ASSUMED MOISTURE(%) 7 FDA 93
 NOMOGRAPH CI 7.08 PITOT CI 0.84
 Pb ("Hg) 30.14 Ps ("Hg) 30.138
 WEATHER Broken TEMP (F) 75
 METER BOX NO. 1 H 1.0297 Y 1.0091
 NOZZLE IDENTIFICATION NO. _____
 NOZZLE CAL 0.375 / 0.375 / 0.376 = 0.375
 STACK DIMENSIONS 20.79
 STACK AREA (FT²) 2.357 EFFECTIVE (FT²) 2.357
 STACK DIAMETERS: (UPSTREAM) 3.51 (DOWNSTREAM) 1.15
 PORT SIZE 4" NIPPLE LENGTH 5"
 STACK HEIGHT (FT) 20 UMBILICAL LENGTH 100 FT
 AGENCY OBSERVER(S) NONE
 TEST COORDINATOR(S) _____
 V. E. OBSERVER LUIS LLORENS



2106 NW 67TH PLACE SUITE 4
 GAINESVILLE, FLORIDA 32663
 (352) 335-1889 - OFFICE / (352) 335-1891 - FAX



REMARKS: Impinger water clear
71 CF AFTER BURNER

TEST ID P.M.-2-3-29-2007

PAGE 1 OF 2

MATERIAL PROCESSING RATE _____

GAS METER READINGS: FINAL 228.452 (FT3)

INITIAL 197.850 (FT3)

NET 30.602 (FT3)

FILTER NO. 3077 IMP. VOL GAIN 32 (ml)

SILICA GEL NO. 401 WT. GAIN 4.7 (ml)

TOTAL CONDENSATE 36.7 (ml)

ORSAT	1	2	3	4	AVG.
%CO ₂					
%O ₂					
%CO					
%N ₂					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____

LEAK CHECKS

PRE 0 CFM 16 ("Hg) POST 0 CFM 7 ("Hg)

METER BOX/PUMP OK GAS SYSTEM - ORSAT BAG -

PITOT TUBE NO. 43 PRE-TEST LEAK CHECK OK

POST TEST (+) 4.5 , 4.5 "H₂O (15 SECONDS)

POST TEST (-) 3.7 , 3.7 "H₂O (15 SECONDS)

PYROMETER NUMBER ACE-1

BOX OPERATOR BELL PROBE HOLDER LANE

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ("H ₂ O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
1			199.60	0.20	1.42	1.42	865	252	69	77	3
2	5	12:25	201.20	0.16	1.13	1.13	920	246	56	77	2
3			202.50	0.11	0.78	0.78	938	244	56	77	2
4	10	30	203.80	0.11	0.78	0.78	936	243	56	78	2
5			205.2	0.13	0.92	0.92	927	238	57	79	3
6	15	35	207.09	0.25	1.77	1.77	919	233	57	79	5



Run #1
3-29-07

TEST ID P.M.-2-3-29-2007

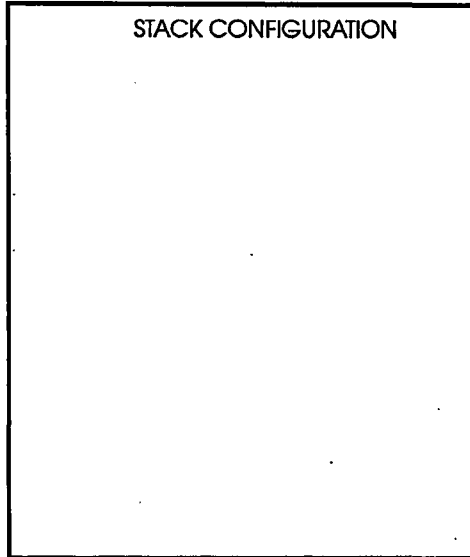
PAGE 2 OF 2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. (H ₂ O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN (HG)
					CALC.	ACTUAL					
1-7			208.45	0.11	0.78	0.78	900	232	57	80	3
8	20	12:40	209.625	0.09	0.64	0.64	901	236	57	80	3
9			210.85	0.09	0.64	0.64	874	242	58	80	3
10	25	45	212.10	0.10	0.71	0.71	760	249	59	81	3
11			213.2	0.08	0.57	0.57	797	253	59	81	3
12	30	50	214.244	0.07	0.50	0.50	795	248	59	81	3
<hr/>											
2-1	12:53		215.4	0.09	0.64	0.64	889	249	64	82	3
2	35	12:58	216.675	0.10	0.71	0.71	943	251	60	82	3
3			217.90	0.10	0.71	0.71	8947	251	60	82	3
4	40	13:03	219.175	0.11	0.78	0.78	937	251	60	83	3
5			220.42	0.10	0.71	0.71	935	251	60	83	3
6	45	08	221.645	0.10	0.71	0.71	920	250	61	83	3
7			222.8	0.09	0.64	0.64	899	249	62	84	3
8	50	13	223.93	0.08	0.57	0.57	891	247	63	84	2
9			225.0	0.08	0.57	0.57	889	247	63	84	2
10	55	18	226.0	0.08	0.57	0.57	852	243	63	84	2
11			227.25	0.09	0.64	0.64	805	245	63	85	2
12	60	23		0.09	0.64	0.64	797	251	64	85	2
			Avg	0.109		0.770	864.88			81.29	

PLANT Park Funeral Home
 SOURCE Omega Cremation
 PLANT LOCATION Blountsman, FL
 TYPE OF SAMPLING TRAIN EPA M5
 TYPE OF SAMPLES P.M.
 DATE 3-29-2007 RUN NUMBER 2
 TIME START 14:18 TIME END 15:20
 SAMPLE TIME 2.5 / 24 (MIN/PT) = 60 TOTAL MIN
 ASSUMED MOISTURE(%) 6 FDA 94
 NOMOGRAPH Cf 7.156 PITOT Cf 0.84
 Pb ("Hg) 30.14 Ps ("Hg) 30.138
 WEATHER Broken TEMP (F) 60
 METER BOX NO. 1 H 1.6297 V 1.0091
 NOZZLE IDENTIFICATION NO. QT2 3/8
 NOZZLE CAL 0.375 / 0.375 / 0.376 = 0.375
 STACK DIMENSIONS 20.79
 STACK AREA (FT2) 2.357 EFFECTIVE (FT2) 2.357
 STACK DIAMETERS:(UPSTREAM) 3.51 (DOWNSTREAM) 1.15
 PORT SIZE 4" NIPPLE LENGTH 5"
 STACK HEIGHT (FT) 20 UMBILICAL LENGTH 100 FT
 AGENCY OBSERVER(S) LANE
 TEST COORDINATOR(S) _____
 V. E. OBSERVER LANE LUIS LLORENS



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REMARKS: Employer under clean

TEST ID P.M.2-3-29-2007
 PAGE 1 OF 2

MATERIAL PROCESSING RATE _____
 GAS METER READINGS: FINAL 259.270 (FT3)
 INITIAL 228.650 (FT3)
 NET 30.620 (FT3)
 FILTER NO. 3079 IMP. VOLGAIN 40 (ml)
 SILICA GEL NO. 538 WT. GAIN 4.3 (ml)
 TOTAL CONDENSATE 44.3 (ml)

ORSAT	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____

LEAK CHECKS

PRE 0 CFM 15 ("Hg) POST 0 CFM 5 ("Hg)
 METER BOX/PUMP OK GAS SYSTEM - ORSAT BAG -
 PITOT TUBE NO. 43 PRE-TEST LEAK CHECK OK
 POST TEST (+) 4.6 / 4.6 "H2O (15 SECONDS)
 POST TEST (-) 3.7 / 3.7 "H2O (15 SECONDS)
 PYROMETER NUMBER ACE-1
 BOX OPERATOR BELL PROBE HOLDER LANE

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
1-1			229.8	0.10	0.72	0.72	963	249	61	80	2
2	5	14:23	231.0	0.09	0.64	0.64	958	250	55	81	2
3			232.2	0.09	0.64	0.64	950	251	52	81	2
4	10	28	233.3	0.08	0.57	0.57	922	253	51	81	2
5			234.5	0.08	0.57	0.57	906	251	51	81	2
6	15	33	235.5	0.09	0.64	0.64	876	250	52	81	2

PLANT Very Funerl Home
 SOURCE Omega Crematory
 PLANT LOCATION Bloomington, FL
 TYPE OF SAMPLING TRAIN EPHMS
 TYPE OF SAMPLES PM
 DATE 3-29-07 RUN NUMBER 3
 TIME START 15:59 TIME END 17:03
 SAMPLE TIME 2.5, 2.4 (MIN/PT) = 60 TOTAL MIN
 ASSUMED MOISTURE(%) 7 FDA 93
 NOMOGRAPH Cf 6.92 PITOT Cf 0.84
 Pb ("Hg) 30.14 Ps ("Hg) 30.138
 WEATHER Broken TEMP (F) 82
 METER BOX NO. 1 H 1.6297 V 1.0091
 NOZZLE IDENTIFICATION NO. QT2 3/8
 NOZZLE CAL 0.375 / 0.375 - 0.376 = 0.375
 STACK DIMENSIONS 20.79
 STACK AREA (FT2) 2.357 EFFECTIVE (FT2) 2.357
 STACK DIAMETERS: (UPSTREAM) 3.51 (DOWNSTREAM) 1.15
 PORT SIZE 4" NIPPLE LENGTH 5"
 STACK HEIGHT (FT) 20 UMBILICAL LENGTH 100FT
 AGENCY OBSERVER(S) NONE
 TEST COORDINATOR(S) _____
 V. E. OBSERVER Louise LUIS LLORENS



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STACK CONFIGURATION

Impinger water clamp

REMARKS: HAVE NO CONTROL OF FILTER BOX TEMP. Ran After Burn @ 1800° From 16:04 to 16:09

TEST ID PM-2-3-27-2007
 PAGE 1 OF 2

MATERIAL PROCESSING RATE _____
 GAS METER READINGS: FINAL 290.253 (FT3)
 INITIAL 259.500 (FT3)
 NET 30.753 (FT3)
 FILTER NO. 3078 IMP. VOL GAIN 46 (ml)
 SILICA GEL NO. 460 WT. GAIN 4.2 (ml)
 TOTAL CONDENSATE 50.2 (ml)

ORSAT	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____
 LEAK CHECKS
 PRE 0 CFM 15 ("Hg) POST 0 CFM 5 ("Hg)
 METER BOX/PUMP OK GAS SYSTEM - ORSAT BAG -
 PITOT TUBE NO. 43 PRE-TEST LEAK CHECK OK
 POST TEST (+) 3.7 , 3.7 "H2O (15 SECONDS)
 POST TEST (-) 4.2 , 4.2 "H2O (15 SECONDS)
 PYROMETER NUMBER ACE-1
 BOX OPERATOR BELL PROBE HOLDER LANE

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
1-1			261.05	0.15	1.04	1.04	1008	265	67	82	3
2	5	16 04	262.6	0.14	0.97	0.97	1015	270	61	82	3
3			264.2	0.14	0.97	0.97	1016	279	58	82	3
4	10	09	266.8	0.12	0.83	0.83	1015	260	60	82	3
5			268.17	0.12	0.83	0.83	1045	260	61	83	3
6	15	14	?	0.12	0.83	0.83	1044	256	60	83	3

289.5



Run 3
3-29-07

TEST ID _____
PAGE 2 OF 2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. (H ₂ O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN (Hg)
					CALC.	ACTUAL					
1-7		19	269.5	0.11	0.76	0.76	1042	248	60	83	3
8	20	16:19	270.8	0.10	0.69	0.69	1031	246	61	83	3
9		24	272.0	0.10	0.69	0.69	1025	243	62	84	3
10	25	16:24	273.2	0.10	0.69	0.69	1006	245	62	84	3
11			274.4	0.10	0.69	0.69	1020	247	63	84	3
12	30	16:29	275.5	0.10	0.69	0.69	1024	249	63	84	3
~~~~~											
2-1	16:33	16	276.85	0.12	0.83	0.83	999	259	69	84	4
2	35	16:38	278.1	0.11	0.76	0.76	986	249	8262	84	3
3			279.35	0.11	0.76	0.76	1023	250	62	85	3
4	40	43	280.5	0.10	0.69	0.69	998	245	62	85	3
5			281.6	0.11	0.76	0.76	1003	248	62	85	3
6	45	48	282.8	0.11	0.76	0.76	985	250	63	85	3
7			284.05	0.10	0.69	0.69	960	247	61	85	4
8	50	53	285.25	0.10	0.69	0.69	959	250	62	85	4
9			286.45	0.10	0.69	0.69	956	250	59	86	4
10	55	58	287.7	0.10	0.69	0.69	953	249	59	86	4
11			288.99	0.10	0.69	0.69	950	248	60	86	4
12	60	03		0.10	0.69	0.69	963	249	60	86	4

**APPENDIX C**

**LABORATORY DATA**

**APPENDIX D**

**CO EMISSION SUMMARY  
AND  
DATA LOGGER COPIES**





AIR CONSULTING AND ENGINEERING, INC.  
2106 NW 67th Place, Suite 4, Gainesville, Florida 32653

Summary of Emissions Test Run Averages

IDLE

BLOUNTSTOWN, FLORIDA

OMEGA CREMATORY OUTLET			PEAVY FUNRAL HOME		BLOUNTSTOWN, FLORIDA							
Date	Start Time	End Time	O2 %V,d	CO2 %V,d	ML CO ppmVd	48H CO ppm	CO@7%O2:O@12%CO2 ppmVd	NA# ppmVd	NA# @15%O2	Comments		
	<b>Instantaneous:</b>		<b>20.48</b>	<b>0.04</b>	<b>1.67</b>	<b>3.44</b>	<b>114.70</b>	<b>0.01</b>	<b>NA#</b>	<b>NA#</b>		
03/29/07	17:11:07	17:11:28	0.03	0.09	28.52	27.72	18.46	0.21	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	9:09:51	9:10:12	20.87	0.04	0.15	1.95	0.10	0.00	0.1003	27.6681	Cal:20.9 O2	
03/29/07	9:14:49	9:15:09	13.94	6.00	0.21	0.75	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:13.94/5.92 O2/CO2	
03/29/07	9:19:23	9:19:44	6.06	14.08	0.16	0.82	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	9:24:09	9:24:39	0.15	0.01	27.85	27.77	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	9:29:29	9:29:50	0.13	0.00	80.54	81.40	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:81.8 CO	
03/29/07	9:32:50	9:33:20	0.02	0.00	28.34	29.29	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	9:37:10	9:37:30	0.02	-0.01	210.60	614.28	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:624 CO	
03/29/07	9:46:43	9:47:18	0.00	0.00	28.79	28.69	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	9:52:31	9:53:01	5.95	13.74	0.44	1.61	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	10:34:08	11:03:08	13.55	4.92	8.19	8.85	17.34	3.53	#DIV/0!	#DIV/0!	RUN 0	
03/29/07	11:09:35	11:10:05	5.97	13.73	0.40	0.80	0.75	0.92	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	11:14:08	11:14:37	0.03	0.10	28.09	28.23	18.80	0.24	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	12:22:07	13:21:07	15.10	3.63	1.86	2.71	6.53	0.82	#DIV/0!	#DIV/0!	RUN 1	
03/29/07	13:26:47	13:27:07	5.97	13.78	0.53	0.31	0.29	0.36	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	13:31:13	13:31:43	0.03	0.09	28.10	27.59	18.37	0.20	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	14:20:02	15:20:02	14.29	4.30	1.59	2.16	4.66	0.76	#DIV/0!	#DIV/0!	RUN 2 PT2	
03/29/07	15:25:11	15:25:41	5.97	13.71	0.21	1.16	1.08	1.33	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	15:31:06	15:31:36	0.03	0.08	28.32	27.54	18.34	0.18	#DIV/0!	#DIV/0!	Cal:27.75 CO	
03/29/07	16:01:03	17:00:03	13.62	4.82	1.30	1.83	3.65	0.72	#DIV/0!	#DIV/0!	RUN 3 PT 2	
03/29/07	17:06:53	17:07:13	5.96	13.68	0.01	0.31	0.29	0.35	#DIV/0!	#DIV/0!	Cal:6.02/14.06 O2/CO2	
03/29/07	17:11:07	17:11:28	0.03	0.09	28.52	27.72	18.46	0.21	#DIV/0!	#DIV/0!	Cal:27.75 CO	

AIR CONSULTING AND ENGINEERING, INC.  
2106 NW 67th Place, Suite 4, Gainesville, Florida 32653

Current: 14:16:58 Countdown NA

Run Interval: 1 minute

Cal Interval: 10 seconds

IDLE

Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

224.43

PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd	@15%O2	
<b>INSTANTANEOUS:</b>	20.48	0.04	1.67	3.44	114.70	0.01	NA#	NA#	
<b>Interval Average:</b>	20.48	0.04	1.67	3.44	114.70	0.01	NA#	NA#	Cal:27.75 CO
<b>Average So Far</b>	0.03	0.09	28.52	27.72	18.46	0.21	#DIV/0!	#DIV/0!	
29-Mar-07 9:09:51	20.87	0.04	0.24	1.59	0.16	0.00	0.16	37.56	Cal:20.9 O2
29-Mar-07 9:10:01	20.88	0.04	0.12	1.61	0.08	0.00	0.08	27.39	Cal:20.9 O2
29-Mar-07 9:10:12	20.87	0.04	0.09	2.66	0.06	0.00	0.06	18.06	Cal:20.9 O2
<b>Average: 9:10:13</b>	<b>20.87</b>	<b>0.04</b>	<b>0.15</b>	<b>1.95</b>	<b>0.10</b>	<b>0.00</b>	<b>0.10</b>	<b>27.67</b>	<b>Cal:20.9 O2</b>
Gas Value: 9:10:13	20.9	NA#	NA#	NA#	NA#	#N/A	#N/A	#N/A	20.9 O2
Diff%ofSpan 9:10:13	-0.11%	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
29-Mar-07 9:14:49	13.95	6.00	0.18	0.36	NA#	NA#	NA#	NA#	Cal:13.94/5.92 O2/CO2
29-Mar-07 9:15:00	13.95	6.00	0.16	1.38	NA#	NA#	NA#	NA#	Cal:13.94/5.92 O2/CO2
29-Mar-07 9:15:09	13.94	6.00	0.28	0.50	NA#	NA#	NA#	NA#	Cal:13.94/5.92 O2/CO2
<b>Average: 9:15:14</b>	<b>13.94</b>	<b>6.00</b>	<b>0.21</b>	<b>0.75</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:13.94/5.92 O2/CO2</b>
Gas Value: 9:15:14	13.94	5.92	0	NA#	NA#	#N/A	#N/A	#N/A	13.94/5.92 O2/CO2
Diff%ofSpan 9:15:14	0.02%	0.39%	0.21%	#N/A	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29-Mar-07 9:19:23	6.06	14.08	0.07	0.68	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2
29-Mar-07 9:19:33	6.06	14.08	0.09	1.40	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2
29-Mar-07 9:19:44	6.06	14.08	0.33	0.38	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2
<b>Average: 9:19:47</b>	<b>6.06</b>	<b>14.08</b>	<b>0.16</b>	<b>0.82</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>
Gas Value: 9:19:47	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2
Diff%ofSpan 9:19:47	0.15%	0.11%	0.16%	#N/A	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29-Mar-07 9:24:09	0.15	0.01	28.65	28.58	NA#	NA#	NA#	NA#	Cal:27.75 CO
29-Mar-07 9:24:19	0.15	0.01	27.71	27.69	NA#	NA#	NA#	NA#	Cal:27.75 CO
29-Mar-07 9:24:30	0.15	0.01	27.57	27.42	NA#	NA#	NA#	NA#	Cal:27.75 CO
29-Mar-07 9:24:39	0.15	0.01	27.47	27.41	NA#	NA#	NA#	NA#	Cal:27.75 CO
<b>Average: 9:24:44</b>	<b>0.15</b>	<b>0.01</b>	<b>27.85</b>	<b>27.77</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>
Gas Value: 9:24:44	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	27.75 CO
Diff%ofSpan 9:24:44	0.60%	#N/A	0.10%	0.00%	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29-Mar-07 9:29:29	0.13	0.00	81.16	81.21	NA#	NA#	NA#	NA#	Cal:81.8 CO
29-Mar-07 9:29:39	0.14	0.00	80.18	81.51	NA#	NA#	NA#	NA#	Cal:81.8 CO
29-Mar-07 9:29:50	0.13	0.00	80.27	81.50	NA#	NA#	NA#	NA#	Cal:81.8 CO
<b>Average: 9:29:53</b>	<b>0.13</b>	<b>0.00</b>	<b>80.54</b>	<b>81.40</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:81.8 CO</b>
Gas Value: 9:29:53	0	NA#	81.8	81.8	NA#	#N/A	#N/A	#N/A	81.8 CO
Diff%ofSpan 9:29:53	0.54%	#N/A	-1.26%	-0.04%	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29-Mar-07 9:32:50	0.02	0.00	28.89	29.29	NA#	NA#	NA#	NA#	Cal:27.75 CO
29-Mar-07 9:33:01	0.02	0.00	28.15	29.30	NA#	NA#	NA#	NA#	Cal:27.75 CO
29-Mar-07 9:33:10	0.02	0.00	28.04	29.29	NA#	NA#	NA#	NA#	Cal:27.75 CO

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	NA#	NA#	Comments	Comment2
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd	ppmVd	@15%O2		
29-Mar-07 9:33:20	0.02	0.00	28.31	29.28	NA#	NA#	NA#	NA#	NA#	Cal:27.75 CO	
<b>Average:</b>	<b>0.02</b>	<b>0.00</b>	<b>28.34</b>	<b>29.29</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>	
Gas Value:	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	#N/A	27.75 CO	
Diff%ofSpan	0.09%	#N/A	0.59%	0.15%	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
29-Mar-07 9:37:10	0.02	-0.01	210.56	615.12	NA#	NA#	NA#	NA#	NA#	Cal:624 CO	
29-Mar-07 9:37:20	0.02	-0.01	210.62	614.33	NA#	NA#	NA#	NA#	NA#	Cal:624 CO	
29-Mar-07 9:37:30	0.02	-0.01	210.62	613.39	NA#	NA#	NA#	NA#	NA#	Cal:624 CO	
<b>Average:</b>	<b>0.02</b>	<b>-0.01</b>	<b>210.60</b>	<b>614.28</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:624 CO</b>	
Gas Value:	0	NA#	624	624	NA#	#N/A	#N/A	#N/A	#N/A	624 CO	
Diff%ofSpan	0.09%	#N/A	-413.40%	-0.97%	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
29-Mar-07 9:46:43	-0.01	0.00	28.86	29.26	NA#	NA#	NA#	NA#	NA#	Cal:27.75 CO	BIAS
29-Mar-07 9:47:16	-0.01	0.00	28.95	28.54	NA#	NA#	NA#	NA#	NA#	Cal:27.75 CO	
29-Mar-07 9:47:17	-0.01	0.00	28.85	28.44	NA#	NA#	NA#	NA#	NA#	Cal:27.75 CO	
29-Mar-07 9:47:18	0.02	0.00	28.50	28.54	NA#	NA#	NA#	NA#	NA#	Cal:27.75 CO	
<b>Average:</b>	<b>0.00</b>	<b>0.00</b>	<b>28.79</b>	<b>28.69</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>	
Gas Value:	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	#N/A	27.75 CO	
Diff%ofSpan	0.00%	#N/A	1.04%	0.09%	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
29-Mar-07 9:52:31	5.95	13.74	0.37	1.60	NA#	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 9:52:41	5.95	13.74	0.41	1.60	NA#	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 9:52:51	5.95	13.75	0.42	1.62	NA#	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 9:53:01	5.95	13.75	0.58	1.62	NA#	NA#	NA#	NA#	NA#	Cal:6.02/14.06 O2/CO2	
<b>Average:</b>	<b>5.95</b>	<b>13.74</b>	<b>0.44</b>	<b>1.61</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>	
Gas Value:	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2	
Diff%ofSpan	-0.27%	-1.58%	0.44%	#N/A	#N/A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
29-Mar-07 10:34:08	12.56	5.55	1.05	2.46	4.10	1.14	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:35:08	12.88	5.38	0.94	2.12	3.66	0.95	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:36:08	12.96	5.26	0.84	2.66	4.72	1.16	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:37:09	13.12	5.13	0.91	2.17	3.90	0.93	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:38:08	13.13	5.15	1.09	2.17	3.85	0.95	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:39:09	13.06	5.18	1.10	2.31	4.10	1.00	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:40:14	13.50	4.87	0.77	2.38	4.49	0.96	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:41:08	13.43	4.90	1.02	2.64	4.91	1.08	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:42:08	13.38	5.00	0.81	2.47	4.59	1.03	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:43:31	13.27	5.06	0.77	2.84	5.17	1.20	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:44:13	13.60	4.84	2.14	3.74	7.14	1.51	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:45:08	13.55	4.90	3.17	4.44	8.41	1.81	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:46:08	13.76	4.79	5.63	6.69	13.19	2.64	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:47:29	13.99	4.70	12.49	13.52	27.21	5.29	NA#	NA#	NA#	RUN 0	
29-Mar-07 10:48:08	14.07	4.58	15.45	16.08	32.72	6.15	NA#	NA#	NA#	RUN 0	

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Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2	
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd	@15%O2		
29-Mar-07 10:49:08	14.11	4.57	14.66	14.38	29.51	5.47 NA#	NA#	RUN 0		
29-Mar-07 10:50:08	14.02	4.63	14.10	14.39	29.11	5.54 NA#	NA#	RUN 0		
29-Mar-07 10:51:43	14.06	4.61	14.41	14.54	29.54	5.59 NA#	NA#	RUN 0		
29-Mar-07 10:52:09	13.91	4.71	16.97	16.18	32.17	6.35 NA#	NA#	RUN 0		
29-Mar-07 10:53:09	13.78	4.87	16.33	15.69	30.70	6.35 NA#	NA#	RUN 0		
29-Mar-07 10:54:09	13.72	4.84	13.79	13.83	26.79	5.58 NA#	NA#	RUN 0		
29-Mar-07 10:55:08	13.87	4.73	15.26	14.85	29.38	5.86 NA#	NA#	RUN 0		
29-Mar-07 10:56:09	13.93	4.69	15.24	15.12	30.16	5.91 NA#	NA#	RUN 0		
29-Mar-07 10:57:08	13.99	4.65	13.25	13.60	27.35	5.27 NA#	NA#	RUN 0		
29-Mar-07 10:58:09	13.91	4.70	13.58	13.41	26.68	5.25 NA#	NA#	RUN 0		
29-Mar-07 10:59:08	13.89	4.71	12.55	12.75	25.30	5.01 NA#	NA#	RUN 0		
29-Mar-07 11:00:09	13.73	4.87	12.76	12.63	24.57	5.11 NA#	NA#	RUN 0		
29-Mar-07 11:01:08	12.75	5.55	5.83	7.01	11.99	3.27 NA#	NA#	RUN 0		
29-Mar-07 11:02:09	12.95	5.37	3.39	3.59	6.29	1.60 NA#	NA#	RUN 0		
29-Mar-07 11:03:08	13.56	4.93	15.26	14.92	28.44	6.10 NA#	NA#	RUN 0		
<b>Average:</b>	<b>11:03:48</b>	<b>13.55</b>	<b>4.92</b>	<b>8.19</b>	<b>8.85</b>	<b>17.34</b>	<b>3.53</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>RUN 0</b>
Maximum	11:03:48	14.11	5.55	16.97	16.18	32.72	6.35	0.00	0.00	RUN 0
Minimum	11:03:48	12.56	4.57	0.77	2.12	3.66	0.93	0.00	0.00	RUN 0
Std Dev	11:03:48	0.45	0.28	6.51	5.79	11.79	2.23	#DIV/0!	#DIV/0!	RUN 0
29-Mar-07 11:09:35	5.97	13.73	0.46	1.14	1.06	1.31 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 11:09:45	5.97	13.73	0.83	0.31	0.29	0.36 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 11:09:55	5.97	13.73	0.31	0.68	0.63	0.78 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 11:10:05	5.97	13.73	0.01	1.08	1.01	1.24 NA#	NA#	Cal:6.02/14.06 O2/CO2		
<b>Average:</b>	<b>11:10:09</b>	<b>5.97</b>	<b>13.73</b>	<b>0.40</b>	<b>0.80</b>	<b>0.75</b>	<b>0.92</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>
Gas Value:	11:10:09	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2
Diff%ofSpan	11:10:09	-0.19%	-1.64%	0.40%	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	
29-Mar-07 11:14:08	0.03	0.11	28.27	29.04	19.34	0.27 NA#	NA#	Cal:27.75 CO		
29-Mar-07 11:14:17	0.03	0.10	28.43	28.90	19.24	0.25 NA#	NA#	Cal:27.75 CO		
29-Mar-07 11:14:27	0.03	0.10	27.40	27.91	18.59	0.23 NA#	NA#	Cal:27.75 CO		
29-Mar-07 11:14:37	0.03	0.09	28.25	27.06	18.02	0.20 NA#	NA#	Cal:27.75 CO		
<b>Average:</b>	<b>11:14:37</b>	<b>0.03</b>	<b>0.10</b>	<b>28.09</b>	<b>28.23</b>	<b>18.80</b>	<b>0.24</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>
Gas Value:	11:14:37	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	27.75 CO
Diff%ofSpan	11:14:37	0.11%	#N/A	0.34%	0.05%	#N/A	#N/A	#DIV/0!	#DIV/0!	
29-Mar-07 12:22:07	14.44	4.09	1.71	2.41	5.18	0.82 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:23:07	14.47	4.08	1.70	2.23	4.85	0.75 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:24:07	14.39	4.11	1.62	2.20	4.69	0.76 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:25:07	14.49	4.05	1.82	2.26	4.90	0.76 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:26:07	14.55	4.02	1.95	1.90	4.24	0.63 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:27:07	14.59	4.00	1.74	2.02	4.50	0.68 NA#	NA#	RUN 1	PT 1	
29-Mar-07 12:28:07	14.55	4.02	1.59	2.34	5.11	0.79 NA#	NA#	RUN 1	PT 1	

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2;O@12%CO2	NA#	NA#	Comments	Comment2
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	@15%O2		
29-Mar-07 12:29:07	14.63	3.98	1.84	2.76	6.14	0.91 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:30:07	14.66	3.97	1.49	2.26	5.11	0.74 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:31:07	14.71	3.93	1.68	2.67	6.04	0.87 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:32:07	14.76	3.90	1.62	2.84	6.44	0.93 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:33:07	14.78	3.87	2.14	2.44	5.53	0.79 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:34:07	14.76	3.87	1.93	2.78	6.31	0.90 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:35:07	14.88	3.79	1.95	3.06	7.10	0.96 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:36:07	14.89	3.79	1.66	2.78	6.47	0.87 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:37:07	14.92	3.77	1.66	2.52	5.91	0.79 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:38:07	14.99	3.73	3.68	3.77	8.88	1.19 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:39:07	15.01	3.69	10.38	12.15	28.65	3.74 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:40:22	15.05	3.67	2.58	3.01	7.08	0.94 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:41:07	15.18	3.55	1.74	2.54	6.22	0.75 NA#	NA#	RUN 1	PT 1
29-Mar-07 12:42:13	15.22	3.57	1.55	2.76	6.78	0.82 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:43:07	15.30	3.51	1.46	2.20	5.46	0.65 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:44:07	15.14	3.60	0.93	2.41	5.87	0.73 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:45:07	15.14	3.60	1.56	3.10	7.55	0.93 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:46:07	15.17	3.60	1.33	3.00	7.32	0.90 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:47:07	15.18	3.57	1.23	2.60	6.29	0.79 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:48:07	15.09	3.65	1.20	2.10	5.03	0.64 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:49:07	15.23	3.54	1.29	2.95	7.21	0.87 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:50:07	15.16	3.60	1.28	2.37	5.77	0.70 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:51:08	15.25	3.53	1.56	2.45	6.16	0.71 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:52:07	15.24	3.53	1.59	2.43	6.01	0.72 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:53:08	15.28	3.50	1.15	1.82	4.49	0.54 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:54:10	15.34	3.47	1.19	2.01	4.98	0.59 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:55:08	15.19	3.56	1.45	1.69	4.13	0.50 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:56:07	15.21	3.50	1.69	2.50	6.18	0.73 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:57:14	15.07	3.68	2.34	2.92	7.02	0.89 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:58:07	15.18	3.56	2.13	3.13	7.64	0.93 NA#	NA#	RUN 1	PT 2
29-Mar-07 12:59:07	15.21	3.54	2.18	2.67	6.55	0.79 NA#	NA#	RUN 1	PT 2
29-Mar-07 13:00:07	15.30	3.49	1.81	2.94	7.38	0.85 NA#	NA#	RUN 1	PT 2
29-Mar-07 13:01:07	15.29	3.49	2.18	2.68	6.68	0.78 NA#	NA#	RUN 1	PT 2
29-Mar-07 13:02:07	15.14	3.57	2.89	3.75	9.05	1.12 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:03:07	15.24	3.53	3.19	3.53	8.79	1.03 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:04:07	15.32	3.47	2.84	3.24	8.11	0.94 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:06:00	15.53	3.29	2.64	2.46	6.38	0.67 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:06:07	14.85	3.76	1.95	2.62	6.03	0.82 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:07:08	15.39	3.42	1.54	2.40	6.09	0.68 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:08:07	15.19	3.53	1.59	2.98	7.35	0.87 NA#	NA#	RUN 1	PT 3
29-Mar-07 13:09:07	15.34	3.45	1.42	2.27	5.75	0.65 NA#	NA#	RUN 1	PT 3

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Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

224.43

PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2		
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd	@15%O2			
29-Mar-07 13:10:07	15.32	3.44	1.60	1.84	4.53	0.54	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:11:07	15.41	3.40	1.57	2.75	7.10	0.77	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:12:07	15.42	3.40	1.56	2.45	6.29	0.69	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:13:07	15.42	3.39	1.21	2.40	6.16	0.67	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:14:07	15.41	3.40	1.20	1.95	4.85	0.56	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:15:07	15.44	3.38	1.47	1.70	4.35	0.48	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:16:07	15.40	3.39	1.55	2.30	5.83	0.66	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:17:07	15.46	3.36	1.44	2.45	6.34	0.68	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:18:07	15.50	3.35	1.05	2.09	5.46	0.57	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:19:07	15.48	3.36	1.25	2.59	6.69	0.72	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:20:07	15.45	3.37	1.15	2.49	6.40	0.70	NA#	NA#	RUN 1	PT 3	
29-Mar-07 13:21:07	15.44	3.37	1.05	2.55	6.53	0.72	NA#	NA#	RUN 1	PT 3	
<b>Average:</b>	<b>13:21:07</b>	<b>15.10</b>	<b>3.63</b>	<b>1.86</b>	<b>2.71</b>	<b>6.53</b>	<b>0.82</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>RUN 1</b>	
Maximum	13:21:07	15.53	4.11	10.38	12.15	28.65	3.74	0.00	0.00	RUN 1	
Minimum	13:21:07	14.39	3.29	0.93	1.69	4.13	0.48	0.00	0.00	RUN 1	
Std Dev	13:21:07	0.31	0.23	1.24	1.32	3.12	0.41	#DIV/0!	#DIV/0!	RUN 1	
29-Mar-07 13:26:17	6.91	12.71	0.46	0.32	0.35	0.35	NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 13:26:28	5.98	13.76	0.76	0.01	0.01	0.01	NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 13:26:37	5.98	13.77	0.57	-0.39	-0.37	-0.45	NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 13:26:47	5.97	13.77	0.36	0.31	0.28	0.35	NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 13:26:57	5.97	13.78	0.53	0.31	0.29	0.36	NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 13:27:07	5.97	13.78	0.71	0.31	0.29	0.36	NA#	NA#	Cal:6.02/14.06 O2/CO2		
<b>Average:</b>	<b>13:27:11</b>	<b>5.97</b>	<b>13.78</b>	<b>0.53</b>	<b>0.31</b>	<b>0.29</b>	<b>0.36</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>	
Gas Value:	13:27:11	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2	
Diff%ofSpan	13:27:11	-0.18%	-1.41%	0.53%	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!		
29-Mar-07 13:31:13	0.03	0.10	27.81	27.36	18.22	0.22	NA#	NA#	Cal:27.75 CO		
29-Mar-07 13:31:23	0.03	0.09	28.39	27.38	18.24	0.21	NA#	NA#	Cal:27.75 CO		
29-Mar-07 13:31:33	0.03	0.08	28.22	27.41	18.26	0.19	NA#	NA#	Cal:27.75 CO		
29-Mar-07 13:31:43	0.03	0.08	27.99	28.20	18.78	0.18	NA#	NA#	Cal:27.75 CO		
<b>Average:</b>	<b>13:31:47</b>	<b>0.03</b>	<b>0.09</b>	<b>28.10</b>	<b>27.59</b>	<b>18.37</b>	<b>0.20</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>	
Gas Value:	13:31:47	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	27.75 CO	
Diff%ofSpan	13:31:47	0.12%	#N/A	0.35%	-0.02%	#N/A	#N/A	#DIV/0!	#DIV/0!		
29-Mar-07 14:20:02	12.31	6.14	3.46	1.93	3.14	0.99	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:21:02	12.62	5.73	1.49	1.34	2.27	0.63	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:22:02	12.84	5.47	1.52	1.11	1.93	0.50	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:23:02	13.06	5.26	1.56	0.89	1.59	0.39	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:24:02	13.25	5.10	1.49	1.61	2.93	0.69	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:25:02	13.40	4.97	1.51	1.82	3.38	0.76	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:26:02	13.54	4.87	1.44	2.36	4.47	0.96	NA#	NA#	RUN 2 PT2		
29-Mar-07 14:27:02	13.68	4.77	1.41	2.37	4.56	0.95	NA#	NA#	RUN 2 PT2		

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Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd @15%O2		
29-Mar-07 14:28:02	13.76	4.74	1.13	2.05	4.03	0.81 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:29:02	13.78	4.71	1.70	1.77	3.49	0.69 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:30:02	13.78	4.69	1.74	2.12	4.16	0.83 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:31:02	13.91	4.61	1.47	1.96	3.92	0.75 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:32:02	13.87	4.64	1.62	1.78	3.51	0.69 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:33:02	13.77	4.69	1.45	2.05	3.93	0.81 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:34:02	13.87	4.62	1.65	1.93	3.87	0.73 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:35:02	13.90	4.59	1.56	1.85	3.71	0.71 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:36:02	13.93	4.57	1.55	1.54	3.00	0.61 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:37:02	13.85	4.64	1.69	1.79	3.42	0.72 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:38:02	13.90	4.61	1.23	2.13	4.22	0.82 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:39:02	13.92	4.59	1.47	1.91	3.70	0.75 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:40:02	13.86	4.62	1.76	1.58	3.15	0.61 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:41:02	14.17	4.45	1.88	2.12	4.42	0.79 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:42:02	13.99	4.55	1.54	2.79	5.65	1.05 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:43:03	13.99	4.56	1.73	2.09	4.27	0.79 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:44:02	14.06	4.49	1.37	2.56	5.25	0.96 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:45:02	14.23	4.35	1.51	2.24	4.62	0.82 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:46:02	14.18	4.40	1.46	2.12	4.37	0.78 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:47:02	14.20	4.40	1.66	2.91	6.05	1.07 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:48:03	14.22	4.39	1.73	2.15	4.57	0.78 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:49:02	13.96	4.54	1.84	2.95	5.88	1.13 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:50:03	14.05	4.49	1.40	2.51	5.11	0.94 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:51:02	13.98	4.54	1.82	2.61	5.27	0.99 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:52:03	14.02	4.49	1.49	2.09	4.18	0.79 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:53:02	13.97	4.53	1.64	2.38	4.75	0.91 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:54:02	14.04	4.47	1.33	2.55	5.23	0.94 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:55:02	14.06	4.45	1.51	2.60	5.31	0.96 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:56:02	14.22	4.32	1.87	2.96	6.16	1.07 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:57:02	14.35	4.23	1.76	1.86	3.98	0.65 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:58:02	14.45	4.15	2.12	2.30	5.09	0.78 NA#	NA#	RUN 2 PT2	
29-Mar-07 14:59:02	14.48	4.12	2.06	2.50	5.41	0.86 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:00:02	14.55	4.08	1.99	2.39	5.22	0.82 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:01:02	14.67	3.99	1.98	2.16	4.78	0.73 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:02:02	14.68	3.97	1.60	1.88	4.29	0.61 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:03:02	14.72	3.96	1.50	1.75	4.00	0.57 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:04:02	14.84	3.88	1.52	2.17	5.04	0.70 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:05:18	14.72	3.96	1.74	1.98	4.42	0.66 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:06:02	14.87	3.84	1.54	2.10	4.88	0.67 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:07:02	14.75	3.89	1.36	2.21	5.05	0.71 NA#	NA#	RUN 2 PT2	
29-Mar-07 15:08:02	14.95	3.78	1.63	2.23	5.17	0.71 NA#	NA#	RUN 2 PT2	

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Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2	
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd @15%O2			
29-Mar-07 15:09:02	15.26	3.61	1.55	1.87	4.61	0.57	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:10:02	15.24	3.56	1.27	2.48	6.12	0.73	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:11:02	15.27	3.54	1.56	2.57	6.40	0.76	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:12:02	15.40	3.45	1.28	2.12	5.48	0.60	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:13:02	15.45	3.40	1.41	2.60	6.68	0.74	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:14:02	15.50	3.37	1.37	2.28	5.89	0.64	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:15:02	15.55	3.33	1.38	2.44	6.42	0.67	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:16:02	15.57	3.31	1.35	2.34	6.26	0.64	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:17:02	15.56	3.31	1.45	2.14	5.60	0.60	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:18:02	15.60	3.29	1.38	2.56	6.76	0.70	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:19:02	15.60	3.28	1.18	2.69	6.99	0.75	NA#	NA#	RUN 2 PT2	
29-Mar-07 15:20:02	15.65	3.25	1.44	2.39	6.41	0.64	NA#	NA#	RUN 2 PT2	
<b>Average:</b>	<b>15:20:02</b>	<b>14.29</b>	<b>4.30</b>	<b>1.59</b>	<b>2.16</b>	<b>4.66</b>	<b>0.76</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>RUN 2 PT2</b>
Maximum	15:20:02	15.65	6.14	3.46	2.96	6.99	1.13	0.00	0.00	RUN 2 PT2
Minimum	15:20:02	12.31	3.25	1.13	0.89	1.59	0.39	0.00	0.00	RUN 2 PT2
Std Dev	15:20:02	0.77	0.62	0.32	0.41	1.20	0.15	#DIV/0!	#DIV/0!	RUN 2 PT2
29-Mar-07 15:25:01	6.89	12.67	0.31	1.71	1.97	1.73	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 15:25:11	5.97	13.70	0.19	1.61	1.50	1.84	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 15:25:21	5.97	13.71	0.11	1.12	1.04	1.28	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 15:25:31	5.97	13.71	0.25	0.84	0.79	0.97	NA#	NA#	Cal:6.02/14.06 O2/CO2	
29-Mar-07 15:25:41	5.97	13.72	0.28	1.08	1.01	1.24	NA#	NA#	Cal:6.02/14.06 O2/CO2	
<b>Average:</b>	<b>15:25:44</b>	<b>5.97</b>	<b>13.71</b>	<b>0.21</b>	<b>1.16</b>	<b>1.08</b>	<b>1.33</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>
Gas Value:	15:25:44	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2
Diff%ofSpan	15:25:44	-0.19%	-1.75%	0.21%	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	
29-Mar-07 15:30:46	0.03	0.10	28.76	27.54	18.34	0.22	NA#	NA#	Cal:27.75 CO	
29-Mar-07 15:30:57	0.03	0.09	28.32	26.73	17.80	0.21	NA#	NA#	Cal:27.75 CO	
29-Mar-07 15:31:06	0.03	0.09	28.57	27.55	18.35	0.20	NA#	NA#	Cal:27.75 CO	
29-Mar-07 15:31:16	0.03	0.08	28.06	27.54	18.35	0.19	NA#	NA#	Cal:27.75 CO	
29-Mar-07 15:31:26	0.03	0.08	28.63	27.55	18.35	0.18	NA#	NA#	Cal:27.75 CO	
29-Mar-07 15:31:36	0.03	0.07	28.00	27.51	18.32	0.17	NA#	NA#	Cal:27.75 CO	
<b>Average:</b>	<b>15:31:37</b>	<b>0.03</b>	<b>0.08</b>	<b>28.32</b>	<b>27.54</b>	<b>18.34</b>	<b>0.18</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>
Gas Value:	15:31:37	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	27.75 CO
Diff%ofSpan	15:31:37	0.12%	#N/A	0.57%	-0.02%	#N/A	#N/A	#DIV/0!	#DIV/0!	
29-Mar-07 16:01:03	12.09	6.10	4.42	1.81	2.87	0.92	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:02:04	12.23	5.88	1.59	1.55	2.49	0.76	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:03:03	12.35	5.76	1.56	1.84	2.99	0.88	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:04:03	12.60	5.59	1.14	2.10	3.51	0.97	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:05:04	12.74	5.51	1.30	0.59	1.00	0.27	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:06:04	12.63	5.57	1.45	0.81	1.35	0.37	NA#	NA#	RUN 3 PT 2	
29-Mar-07 16:07:03	11.69	6.09	0.96	0.51	0.86	0.24	NA#	NA#	RUN 3 PT 2	



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Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

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PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	ppmVd @15%O2		
29-Mar-07 16:08:03	11.48	6.20	1.50	0.78	1.20	0.39	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:09:04	11.52	6.18	0.93	1.08	1.60	0.56	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:10:03	11.80	5.99	1.06	1.75	2.67	0.88	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:11:03	12.00	5.82	1.39	1.59	2.49	0.77	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:12:03	12.17	5.81	1.14	1.94	3.09	0.94	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:13:03	12.29	5.74	0.90	2.39	3.85	1.14	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:14:03	12.51	5.56	1.11	2.19	3.61	1.02	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:15:03	12.69	5.49	1.31	1.76	2.99	0.81	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:16:03	12.73	5.50	0.99	1.74	2.96	0.80	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:17:03	12.82	5.41	1.23	1.71	2.94	0.77	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:18:03	13.24	5.13	1.17	1.52	2.79	0.64	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:19:03	13.62	4.91	1.19	1.90	3.63	0.78	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:20:03	13.43	4.98	0.99	2.46	4.57	1.03	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:21:03	13.33	4.94	1.26	2.52	4.62	1.04	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:24:22	13.44	4.89	1.34	1.61	3.00	0.66	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:24:24	13.44	4.89	1.68	1.62	3.02	0.66	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:24:25	13.75	5.03	1.71	1.47	2.87	0.62	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:25:03	13.80	5.01	1.54	1.54	3.02	0.64	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:26:03	13.89	4.76	1.37	2.52	5.00	1.00	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:27:03	13.93	4.62	1.53	2.05	4.08	0.79	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:28:03	13.92	4.65	1.32	1.52	3.02	0.59	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:29:03	13.58	4.85	1.32	1.70	3.23	0.69	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:30:03	13.63	4.81	1.46	1.51	2.88	0.60	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:31:03	13.75	4.72	1.50	1.67	3.25	0.66	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:32:03	13.75	4.73	1.37	1.90	3.69	0.75	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:33:03	13.76	4.71	1.18	2.00	3.89	0.78	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:34:03	13.77	4.70	1.36	1.57	3.06	0.61	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:35:04	13.62	4.81	1.38	1.84	3.52	0.74	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:36:03	13.47	4.92	1.20	2.16	4.05	0.89	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:37:03	13.41	4.95	1.39	1.77	3.28	0.73	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:38:03	13.51	4.87	1.13	1.89	3.55	0.77	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:39:04	13.60	4.80	1.07	0.88	1.67	0.35	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:40:03	13.78	4.66	0.98	1.23	2.41	0.48	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:41:03	14.22	4.36	1.25	1.59	3.32	0.58	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:42:03	14.43	4.24	1.34	2.14	4.59	0.76	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:43:03	14.43	4.26	1.06	2.52	5.43	0.89	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:44:03	13.94	4.61	1.07	1.70	3.40	0.65	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:45:03	14.03	4.51	1.11	1.78	3.62	0.67	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:46:03	14.25	4.34	1.55	1.76	3.69	0.63	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:47:04	14.88	3.94	1.23	2.26	5.18	0.74	NA#	NA#	RUN 3 PT 2
29-Mar-07 16:48:06	14.66	4.07	1.31	2.13	4.75	0.72	NA#	NA#	RUN 3 PT 2

AIR CONSULTING AND ENGINEERING, INC.  
2106 NW 67th Place, Suite 4, Gainesville, Florida 32653

Instrumental Reference Method On-Line Data  
OMEGA CREMATORY OUTLET

224.43

PEAVY FUNRAL HOME

BLOUNTSTOWN, FLORIDA

Parameter	O2	CO2	ML CO	48H CO	CO@7%O2:O@12%CO2	NA#	NA#	Comments	Comment2	
Units	%V,d	%V,d	ppmVd	ppm	ppmVd	ppmVd	@15%O2			
29-Mar-07 16:49:03	14.72	4.01	1.28	2.32	5.22	0.77 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:50:04	14.87	3.89	0.96	2.39	5.51	0.78 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:51:04	14.92	3.85	1.46	1.58	3.66	0.51 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:52:03	14.96	3.82	1.19	2.48	5.80	0.79 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:53:03	14.98	3.81	1.08	2.37	5.60	0.75 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:54:04	15.01	3.76	0.98	2.28	5.43	0.71 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:55:03	15.15	3.68	1.26	2.24	5.41	0.69 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:56:03	15.20	3.66	0.96	1.95	4.79	0.59 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:57:03	15.21	3.65	1.24	1.98	4.81	0.61 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:58:03	15.24	3.62	1.11	2.80	6.90	0.84 NA#	NA#	RUN 3 PT 2		
29-Mar-07 16:59:03	15.13	3.67	0.81	2.43	5.93	0.74 NA#	NA#	RUN 3 PT 2		
29-Mar-07 17:00:03	15.11	3.64	1.12	2.27	5.45	0.69 NA#	NA#	RUN 3 PT 2		
<b>Average:</b>	<b>17:00:03</b>	<b>13.62</b>	<b>4.82</b>	<b>1.30</b>	<b>1.83</b>	<b>3.65</b>	<b>0.72</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>RUN 3 PT 2</b>
Maximum	17:00:03	15.24	6.20	4.42	2.80	6.90	1.14	0.00	0.00	RUN 3 PT 2
Minimum	17:00:03	11.48	3.62	0.81	0.51	0.86	0.24	0.00	0.00	RUN 3 PT 2
Std Dev	17:00:03	1.05	0.75	0.46	0.49	1.31	0.18	#DIV/0!	#DIV/0!	RUN 3 PT 2
29-Mar-07 17:06:13	6.89	12.65	0.15	0.46	0.67	0.38 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:06:24	5.96	13.67	0.39	-0.90	-0.84	-1.03 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:06:33	5.96	13.67	0.04	-1.15	-1.07	-1.31 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:06:43	5.96	13.67	0.21	-0.24	-0.22	-0.27 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:06:53	5.96	13.68	-0.14	0.32	0.30	0.37 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:07:03	5.96	13.68	0.12	0.30	0.28	0.35 NA#	NA#	Cal:6.02/14.06 O2/CO2		
29-Mar-07 17:07:13	5.96	13.68	0.05	0.29	0.27	0.34 NA#	NA#	Cal:6.02/14.06 O2/CO2		
<b>Average:</b>	<b>17:07:15</b>	<b>5.96</b>	<b>13.68</b>	<b>0.01</b>	<b>0.31</b>	<b>0.29</b>	<b>0.35</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:6.02/14.06 O2/CO2</b>
Gas Value:	17:07:15	6.02	14.06	0	NA#	NA#	#N/A	#N/A	#N/A	6.02/14.06 O2/CO2
Diff%ofSpan	17:07:15	-0.24%	-1.92%	0.01%	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	
29-Mar-07 17:11:07	0.04	0.10	28.59	27.42	18.27	0.23 NA#	NA#	Cal:27.75 CO		
29-Mar-07 17:11:17	0.03	0.09	28.15	28.34	18.88	0.22 NA#	NA#	Cal:27.75 CO		
29-Mar-07 17:11:28	0.03	0.09	28.82	27.38	18.24	0.20 NA#	NA#	Cal:27.75 CO		
<b>Average:</b>	<b>17:11:31</b>	<b>0.03</b>	<b>0.09</b>	<b>28.52</b>	<b>27.72</b>	<b>18.46</b>	<b>0.21</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>Cal:27.75 CO</b>
Gas Value:	17:11:31	0	NA#	27.75	27.75	NA#	#N/A	#N/A	#N/A	27.75 CO
Diff%ofSpan	17:11:31	0.14%	#N/A	0.77%	0.00%	#N/A	#N/A	#DIV/0!	#DIV/0!	

**APPENDIX E**

**QUALITY ASSURANCE**

**DRY GAS METER CALIBRATION STANDARD**

**Air Consulting and Engineering, Inc. (ACE) uses a Precision Scientific model 63123 wet test meter (Serial Number PS 001105) as its dry gas meter calibration standard.**

**The wet test meter has a one cubic foot per revolution capacity and is verified by water displacement annually. The latest verification occurred September 22, 2006**

# AIR CONSULTING AND ENGINEERING, INC.

# WET TEST METER ANNUAL CALIBRATION

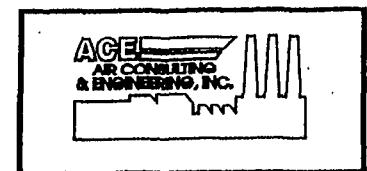
DATE 9-22-06 CALIBRATED BY C. RESHARD WET TEST METER SERIAL NUMBER PSC 01105  
 RANGE OF WET TEST METER FLOW RATE 0-120 (l/min) VOLUME OF TEST FLASK 28.32 (V_s) SATISFACTORY LEAK CHECK?   
 Ambient Temperature of Equilibrate Liquid in Wet Test Meter and Reservoir 60 (Deg. F)

TEST NUMBER	FINAL VOLUME (V _f ), (l)	INITIAL VOLUME (V _i ), (l)	TOTAL VOLUME (V _m ), ^b (l)	FLASK VOLUME (V _s ), (l)	PERCENT ERROR, c %
1	28.29	0.0	28.29	28.32	-0.11
2	28.30	0.0	28.30	28.32	-0.07
3	28.29	0.0	28.29	28.32	-0.11

**CALCULATIONS:**

^b  $V_m = V_f - V_i$

^c % Error =  $100 (V_m - V_s) / V_s = \underline{-0.09}$  (+/- 1%)



WET TEST METER CALIBRATION

<u>TEST #</u>	<u>FINAL V</u> (VF) (L)	<u>INIT V</u> (VI) (L)	<u>TOTAL V</u> (VM) (L)	<u>FLASK V</u> (VS) (L)	<u>% ERROR</u> (+or - 1%)
1	28.29	0	28.29	28.32	-0.11
2	28.30	0	28.30	28.32	-0.07
3	28.29	0	28.29	28.32	-0.11
AVG.	28.29	0	28.29	28.32	-0.09

**CALCULATIONS:**

$$VM = VF - VI$$

$$\% \text{ ERROR} = 100 (VM - VS) / VS \quad (+ \text{ OR } - 1 \%)$$

VF - VOLUME FINAL

VI - VOLUME INITIAL

VM - VOLUME METER

VS - VOLUME FLASK

$$\% \text{ ERROR RANGE} = 28.03 - 28.60$$

# AIR CONSULTING AND ENGINEERING, INC.

# ANNUAL METER CALIBRATION

DATE 1-18-07 CALIBRATED BY C. RESHARD LEAK CHECK 0.00 CFM at 15 ("Hg)

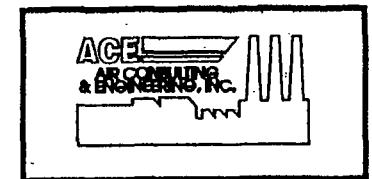
METER BOX NUMBER 1 BAROMETRIC PRESSURE (" Hg) 30.08

DRY GAS METER TEMPERATURE (F) 67 ASTM GLASS THERMOMETER TEMPERATURE (F) 67

HS	AVERAGE HD	GAS VOLUME, WET TEST METER			GAS VOLUME, DRY-GAS METER			TEMP. WET METER (F)	TEMP. DRY METER (F)	TIME (MIIN)	TIMER (MIN)
		INITIAL	FINAL	ACTUAL (FT3)	INITIAL	FINAL	ACTUAL (FT3)				
-0.44	2.0	1,974	7,639	5.665	434.052	439.702	5.650	61	67	7	7
-0.25	0.5	8.497	13.901	5.404	440.573	445.956	5.383	61	68	13	13
-0.56	3.0	14.864	20.806	5.942	446.922	452.888	5.966	61	69	6	6
-0.30	1.0	21.406	26,642	5.236	453.502	458.752	5.250	61	70	9	9
-0.70	4.0	27.724	33.396	5.672	459.838	465.561	5.723	60	71	5	5
-0.33	1.5	34.136	39.742	5.606	466.303	471.957	5.654	60	72	8	8

### RESULTS

DELTA H@	SCFM	Y
1.6576	0.8245	1.0093
1.5676	0.4235	1.0161
1.6541	1.0090	1.0039
1.5947	0.5927	1.0121
1.6681	1.1580	1.0023
1.6362	0.7153	1.0107
MEAN: 1.6297		1.0091



ACCEPTABLE?  YES  NO (CIRCLE) INITIALS SJA DATE 1-18-07

# AIR CONSULTING AND ENGINEERING, INC.

# POST TEST CALIBRATION

DATE 4-6-07 CALIBRATED BY C. Reshard PLANT Peavey Funeral Home SOURCE Incin. Outlet  
 METER BOX NUMBER 1 PYROMETER NUMBER 1 THERMOCOUPLE NUMBER 43  
 LEAK CHECK 0.00 CFM at 15 ("Hg) THERMOCOUPLE TEMP. _____ (F) / ASTM GLASS THERMOMETER _____ (F)  
 ACE Pb 30.06 ("Hg) / FLIGHT SVCS. Pb 30.06 ("Hg) METER TEMP. 62 (F) / ASTM GLASS THERMOMETER 62 (F)

ΔHS	AVERAGE ΔHD	GAS VOLUME, WET TEST METER			GAS VOLUME, DRY GAS METER			TEMP. WET METER (F)	TEMP. DRY METER (F)	TIME (MIN)	MAX. VACUUM ("Hg)
		INITIAL	FINAL	ACTUAL (FT3)	INITIAL	FINAL	ACTUAL (FT3)				
-0.23	0.75	0.512	5.983	5.471	293.722	299.244	5.522	56	63	11	4
-0.23	0.75	5.983	11.427	5.444	299.244	304.764	5.520	56	66	11	4
-0.23	0.75	11.427	16.846	5.419	304.764	310.292	5.528	56	67	11	4

### RESULTS

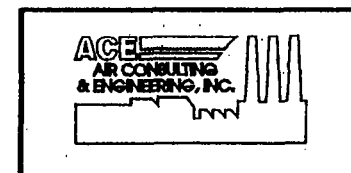
DELTA H@	SCFM	Y
1.6277	0.5113	1.0024
1.6345	0.5088	1.0035
1.6465	0.5065	0.9993
MEAN: 1.6363		1.0017

PRE TEST "Y" 1.0091

ACCEPTABLE?  YES / NO (CIRCLE)

INITIALS C.F.

DATE 4/6/07





**AIR CONSULTING AND ENGINEERING, INC.****PITOT TUBE CALIBRATION**DATE CALIBRATED 01-Nov-06 CALIBRATED BY Rick Hyre PITOT TUBE NUMBER 43

IS PITOT TUBE ASSEMBLY LEVEL YES / NO (circle)

ARE PITOT TUBE OPENING DAMAGED YES / NO (circle)

$$\alpha_1 = \underline{1.00}^\circ (<10^\circ), \quad \alpha_2 = \underline{1.50}^\circ (<10^\circ), \quad \beta_1 = \underline{0.75}^\circ (<5^\circ), \quad \beta_2 = \underline{0.50}^\circ (<5^\circ)$$

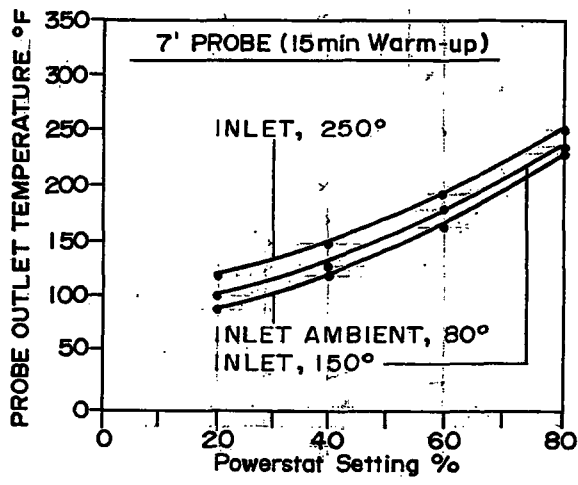
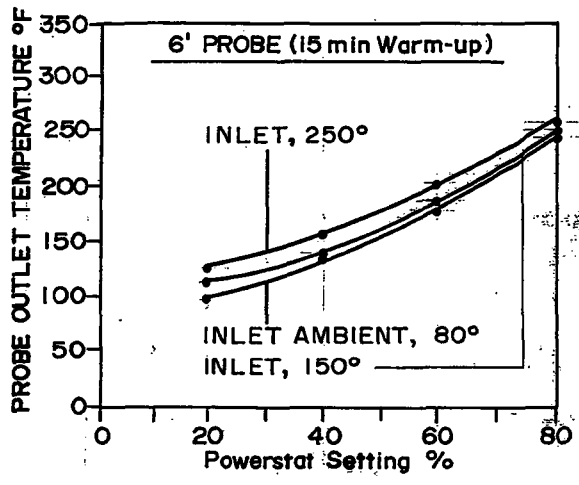
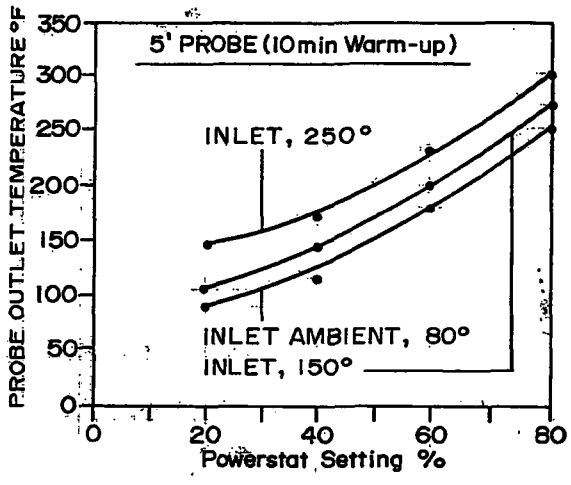
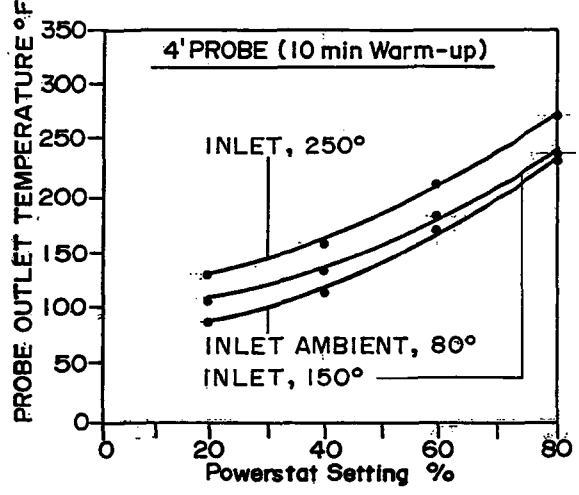
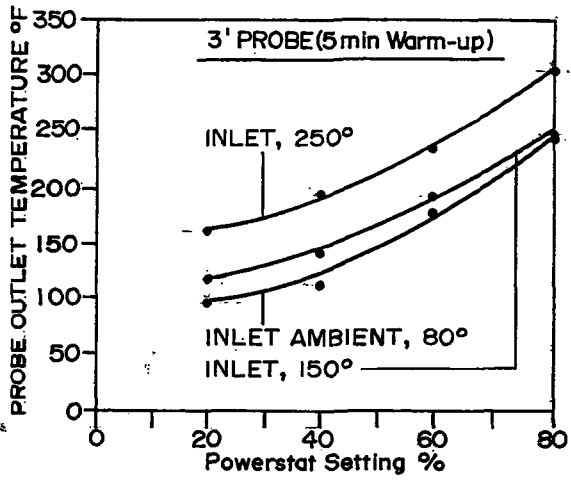
$$\gamma = \underline{0.75}^\circ \quad \nu = \underline{1.00}^\circ \quad A = \underline{1.036} \text{ in.} = (P_a + P_b)$$

$$Z = A \sin \gamma = \underline{0.014} \text{ in.}; <0.125 \text{ in.}$$

$$W = A \sin \nu = \underline{0.018} \text{ in.}; <0.031 \text{ in.}$$

$$P_a \underline{0.518} \text{ in.} \quad P_b \underline{0.518} \text{ in.} \quad D_t \underline{0.375} \text{ IN.}$$

Was calibration required? YES / NO (circle)



NOTE: Flow rate held constant at 0.75; 50% change in flow rate has little effect on probe temperature.

PROBE GRAPH

**AIR CONSULTING  
and  
ENGINEERING**



REFERENCE METHOD INITIAL LINEARITY TEST RECORD  
 OMEGA CREMATORY OUTLET  
 PEAVY FUNRAL HOME  
 BLOUNTSTOWN, FLORIDA  
 MARCH 29, 2007

CALIBRATION ERROR

RM METHOD: 10  
 GAS I.D. CO  
 CEM: TE 48H  
 RANGE: 624 PPM

RM METHOD: 3A  
 GAS I.D. O2  
 CEM: SVMX 1440  
 RANGE: 20.9 %

<u>GAS VALUE</u>	<u>RESPONSE</u>	<u>DIFF.</u>	<u>% RANGE</u>
624	614.28	-9.718	-1.557
81.8	81.40	-0.396	-0.064
27.75	29.29	1.537	0.246
0.00	0.75	0.749	0.120

<u>GAS VALUE</u>	<u>RESPONSE</u>	<u>DIFF.</u>	<u>% RANGE</u>
20.9	20.87	-0.027	-0.131
13.94	13.94	0.005	0.022
6.03	6.06	0.029	0.139
0	0.02	0.022	0.108

RM METHOD: 3A  
 GAS I.D. CO2  
 CEM: SVMX 1440  
 RANGE: 14.06 %

<u>GAS VALUE</u>	<u>RESPONSE</u>	<u>DIFF.</u>	<u>% RANGE</u>
14.06	14.08	0.02	0.15
5.92	6.00	0.08	0.55
0	0.02	0.02	0.16

AIR CONSULTING AND ENGINEERING, INC.  
2106 NW 67th Place, Suite 4, Gainesville, Florida 32653

**ANALYZER DRIFT CALCULATIONS  
OMEGA CREMATORY OUTLET  
PEAVY FUNRAL HOME  
BLOUNTSTOWN, FLORIDA  
MARCH 29, 2007**

Run Number	Parameter	Span	Cal. Gas Value	Initial Span Values		Final Span Values		% Drift over Run	
				Bias	Zero	Bias	Zero	Bias	Zero
1	O2	20.9	6.02	5.97	0.03	5.97	0.03	0.01	0.01
	CO2	14.02	14.02	13.73	0.10	13.78	0.09	0.33	-0.09
	CO	81.8	27.750	28.23	0.80	27.59	0.31	-0.78	-0.60
2	O2	20.9	6.02	5.97	0.03	5.97	0.03	-0.01	-0.01
	CO2	14.02	14.02	13.78	0.09	13.71	0.08	-0.48	-0.05
	CO	81.8	27.750	27.59	0.31	27.54	1.16	-0.06	1.04
3	O2	20.9	6.02	5.97	0.03	5.96	0.03	-0.05	0.03
	CO2	14.02	14.02	13.71	0.08	13.68	0.09	-0.25	0.09
	CO	81.8	27.750	27.54	1.16	27.72	0.31	0.21	-1.05



# Certificate of Analysis: EPA Protocol Gas Mixture

Airgas Specialty Gases  
1075 Cindare Drive  
Port Allen, LA 70767  
225.388.0900 Fax: 225.388.0959  
www.airgas.com

Cylinder Number: CC47123      Reference Number: 83-124061139-1  
Cylinder Pressure: 2000.6 PSIG      Expiration Date: 4/3/2009  
Certification Date: 4/3/2006      Laboratory: ASG - Port Allen - LA

## Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
CARBON MONOXIDE	27.75 PPM	±1%	NonDispersive Infrared	GA
NITROGEN	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

### Notes:

Do not use cylinder below 150 psig.

Approval Signature

## Reference Standard Information

Type	Balance Gas	Component	Cyl.Number	Concentration
NTRM 82635	NITROGEN	CARBON MONOXIDE	XC018674B	24.33 PPM

## Analytical Results

### 1st Component

**CARBON MONOXIDE**

1st Analysis Date: 03/27/2006

R 24.5	S 28.0	Z 0.3	Conc 27.77 PPM
S 28.1	Z 0.3	R 24.6	Conc 27.87 PPM
Z 0.3	R 24.6	S 28.0	Conc 27.77 PPM
AVG: 27.80 PPM			

2nd Analysis Date: 04/03/2006

R 24.2	S 27.5	Z 0.1	Conc 27.73 PPM
S 27.4	Z 0.0	R 24.1	Conc 27.63 PPM
Z 0.1	R 24.1	S 27.5	Conc 27.73 PPM
AVG: 27.69 PPM			

## Certificate of Analysis

Date of Analysis: 12/7/2005      Reference Number: 21-110922233-3  
Customer Name:      Part Number: X02NI99C15A2619  
Grade of Product: CERTIFIED  
STANDARD-SPEC

<u>Cylinder Number</u>	<u>Component</u>	<u>Requested Concentration</u>	<u>Actual Concentration</u>
CG140062	CARBON MONOXIDE	90 PPM	81.8 PPM
	NITROGEN	Balance	Balance

Notes:

**Relative Uncertainty of Analytical Value: +/- 2% of component or +/- 5% of component, if less than 50 PPM**

**Product composition verified by direct comparison to calibration standards traceable to NIST weights and/or NIST gas mixture reference materials**

Approval Signature 

## Certificate of Analysis

Date of Analysis: 3/25/2005      Reference Number: 21-110813707-3  
Customer Name:      Part Number: X02NI99C15A1907  
Grade of Product: CERTIFIED  
STANDARD-SPEC

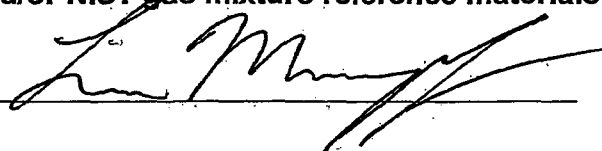
<u>Cylinder Number</u>	<u>Component</u>	<u>Requested Concentration</u>	<u>Actual Concentration</u>
GC183447	CARBON MONOXIDE	600 PPM	615.148 PPM
	NITROGEN	Balance	Balance

Notes:

**Relative Uncertainty of Analytical Value: +/- 2% of component or +/- 5% of component, if less than 50 PPM**

**Product composition verified by direct comparison to calibration standards traceable to NIST weights and/or NIST gas mixture reference materials**

Approval Signature





## Certificate of Analysis

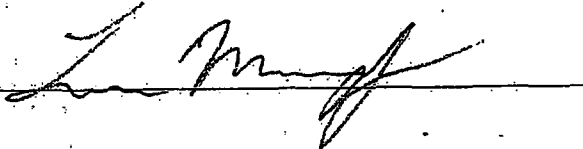
Date of Analysis: 2/28/2005      Reference Number: 21-110798149-1  
Customer Name:      Part Number: X02NI99C15A10X1  
Grade of Product: CERTIFIED  
STANDARD-SPEC

<u>Cylinder Number</u>	<u>Component</u>	<u>Requested Concentration</u>	<u>Actual Concentration</u>
SG9104857	CARBON MONOXIDE	650 PPM	633.099 PPM
	NITROGEN	Balance	Balance

Notes:

Relative Uncertainty of Analytical Value: +/- 2% of component or +/- 5% of component, if less than 50 PPM  
Product composition verified by direct comparison to calibration standards traceable to NIST weights and/or NIST gas mixture reference materials

Approval Signature



## Certificate of Analysis: EPA Protocol Gas Mixture

Cylinder Number: CC135799    Reference Number: 83-124054755-6  
 Cylinder Pressure: 2000.6 PSIG    Expiration Date: 1/18/2009  
 Certification Date: 1/18/2006    Laboratory: ASG - Port Allen - LA

### Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
OXYGEN	5.926%	± 1%	Paramagnetic	G1
CARBON DIOXIDE	14.06%	± 1%	NonDispersive Infrared	G1
NITROGEN	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

### Notes:

Do not use cylinder below 150 psig.

Approval Signature *Kim Pascula*

### Reference Standard Information

Type	Balance Gas	Component	Cyl. Number	Concentration
NTRM 82658	NITROGEN	OXYGEN	CC14334	9.72 %
NTRM 82745	NITROGEN	CARBON DIOXIDE	XC034304B	19.84 %

### Analytical Results

#### 1st Component

1st Analysis Date:

R 9.73    S 5.94  
 S 5.94    Z 0.01  
 Z 0.01    R 9.74

#### OXYGEN

01/16/2006

Z 0.01    Conc 5.926 %  
 R 9.73    Conc 5.926 %  
 S 5.94    Conc 5.926 %  
 AVG: 5.926 %

#### 2nd Component

1st Analysis Date:

R 19.78    S 13.98  
 S 14.04    Z 0.02  
 Z 0.02    R 19.78

#### CARBON DIOXIDE

01/16/2006

Z 0.02    Conc 14.02 %  
 R 19.78    Conc 14.08 %  
 S 14.04    Conc 14.08 %  
 AVG: 14.06 %



# Certificate of Analysis: EPA Protocol Gas Mixture

Airgas Specialty Gases  
1075 Cincinlare Drive  
Port Allen, LA 70767  
225.388.0900 Fax 225.388.0959  
www.airgas.com

Cylinder Number: CC6765@      Reference Number: 83-124051251-3  
Cylinder Pressure: 2000.6 PSIG      Expiration Date: 11/21/2008  
Certification Date: 11/21/2005      Laboratory: ASG - Port Allen - LA

## Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
CARBON DIOXIDE	6.047%	±1%	TIR	GI
OXYGEN	13.94%	±1%	Paramagnetic	GI
NITROGEN	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

### Notes:

Do not use cylinder below 150 psig.

Approval Signature *Paul Stinson*

## Reference Standard Information

Type	Balance Gas	Component	Cyl. Number	Concentration
NTRM 82659a	NITROGEN	OXYGEN	XC024394B	22.6 %
NTRM 81674	NITROGEN	CARBON DIOXIDE	XC018732B	6.89 %

## Analytical Results

### 1st Component

#### CARBON DIOXIDE

### 2nd Component

#### OXYGEN

1st Analysis Date: 11/21/2005

1st Analysis Date: 11/21/2005

R 0.428    S 0.383  
S 0.382    Z 0.000  
Z 0.000    R 0.426

Z 0.001    Conc 6.050 %  
R 0.427    Conc 6.040 %  
S 0.382    Conc 6.050 %  
AVG: 6.047 %

R 22.62    S 13.98  
S 13.98    Z 0.08  
Z 0.06    R 22.62

Z 0.08    Conc 13.94 %  
R 22.60    Conc 13.94 %  
S 13.98    Conc 13.94 %  
AVG: 13.94 %



# Certificate of Analysis: EPA Protocol Gas Mixture

Airgas Specialty Gases  
 1075 Cinclore Drive  
 Port Allen, LA 70767  
 (225) 388-0900  
 FAX: (225) 388-0959  
 www.airgas.com

Cylinder Number: CC68032    Reference Number: 83-124079789-1  
 Cylinder Pressure: 2000.6 PSIG    Expiration Date: 11/15/2009  
 Certification Date: 11/15/2006    Laboratory: ASG - Port Allen - LA

## Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
CARBON DIOXIDE	5.914 %	± 0.1 %	Non-Dispersive Infrared	G1
OXYGEN	14.00 %	± 0.1 %	Paramagnetic	G1
NITROGEN	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

### Notes:

Do not use cylinder below 150 psig.

Approval Signature *Pauline Johnson*

## Reference Standard Information

Type	Balance Gas	Component	Cyl. Number	Concentration
NTRM 82659a	NITROGEN	OXYGEN	XC024405B	22.60 %
NTRM 81674	NITROGEN	CARBON DIOXIDE	XC018885B	6.89 %

## Analytical Results

### 1st Component

### CARBON DIOXIDE

1st Analysis Date: 11/08/2006		2nd Component	
R 6.98	S 5.98	R 22.64	S 14.02
S 6.00	Z 0.02	S 14.00	Z 0.04
Z 0.02	R 7.00	Z 0.04	R 22.60
Z 0.02	Conc 5.894 %		
R 6.98	Conc 5.914 %		
S 6.02	Conc 5.934 %		
	AVG: 5.914 %		

### 2nd Component

### OXYGEN

1st Analysis Date: 11/15/2006		2nd Component	
Z 0.04	Conc 14.01 %	R 22.64	S 14.02
R 22.52	Conc 13.99 %	S 14.00	Z 0.04
S 14.00	Conc 13.99 %	Z 0.04	R 22.60
	AVG: 14.00 %		

**APPENDIX F**

**VISIBLE EMISSION DATA**

# EPA VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)  
 Method 9  203A  203B  Other: _____

Form Number _____ Page 1 of 2  
 Continued on VEO Form Number _____

Company Name Peary Federal Hall  
 Facility Name Omega Crematorium  
 Street Address 20367 NW Evans Ave  
 City Blountstown State FL ZIP 32429

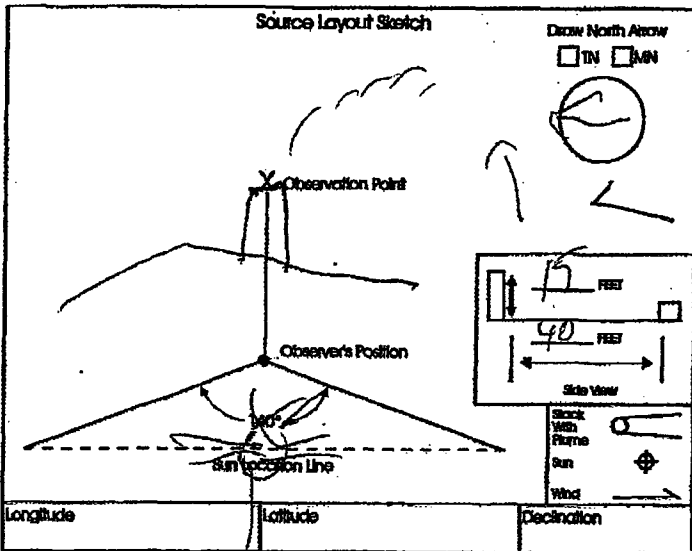
Process Hot Air Cremation Unit # _____ Operating Mode _____  
 Control Equipment Airburner Operating Mode 16850F

Describe Emission Point  
Round Black Stack on SW Corner  
 Height of Emis. Pt. Start 15 End 15 Height of Emis. Pt. Rel. to Observer Start 15 End 15  
 Distance to Emis. Pt. Start 40 End 40 Direction to Emis. Pt. (Degree) Start 90 End 90

Vertical Angle to Obs. Pt. Start 25 End _____ Direction to Obs. Pt. (Degree) Start 90 End 90  
 Distance and Direction to Observation Point from Emission Point Start 1 ft up End 1 ft up

Describe Emissions  
 Start no visible emissions End _____  
 Emission Color N/A Water Droplet Plume Attached  Detached  None

Describe Plume Background  
 Start SK2 End SK2  
 Background Color Green/white over hills Sky Conditions Start Partly End Partly  
 Wind Speed Start 0-5 mph End 0-5 mph Wind Direction Start SW End SW  
 Ambient Temp. Start 90°F End 90°F Wet Bulb Temp. _____ RH Percent _____



Additional Information _____

Observation Date		Time Zone		Start Time	End Time	Comments
Sec	Min	0	15	30	45	
2/29/07				7:22 AM	2:52	
1	0	0	0	0	0	Early looking
2	0	0	0	0	0	VE started
3	0	0	0	0	0	within 1 minute
4	0	0	0	0	0	Area 2
5	0	0	0	0	0	
6	0	0	0	0	0	
7	0	0	0	0	0	
8	0	0	0	0	0	
9	0	0	0	0	0	
10	0	0	0	0	0	
11	0	0	0	0	0	
12	0	0	0	0	0	
13	0	0	0	0	0	
14	0	0	0	0	0	
15	0	0	0	0	0	
16	0	0	0	0	0	
17	0	0	0	0	0	
18	0	0	0	0	0	
19	0	0	0	0	0	
20	0	0	0	0	0	
21	0	0	0	0	0	
22	0	0	0	0	0	
23	0	0	0	0	0	
24	0	0	0	0	0	
25	0	0	0	0	0	No objectionable
26	0	0	0	0	0	odors were detected.
27	0	0	0	0	0	
28	0	0	0	0	0	
29	0	0	0	0	0	
30	0	0	0	0	0	

Observer's Name (Print) Luis Lopez  
 Observer's Signature _____ Date 3/29/07  
 Organization At Environmental Consulting Service  
 Certified by DEP/ETA Date _____

# EPA VISIBLE EMISSION OBSERVATION FORM

Method Used (Circle One)  
 Method 9      203A      203B      Other: _____

Form Number _____ Page 2 of 2  
 Continued on VEO Form Number _____

Company Name Peavy Funeral Home  
 Facility Name Omega Crematory  
 Street Address 20367 NW Evans Ave  
 City Bloomington State IL Zip 62424

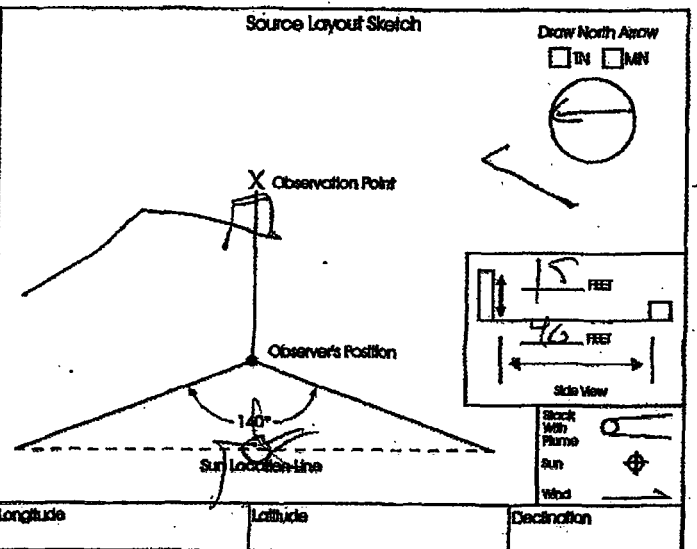
Process Human cremation Unit # _____ Operating Mode 160lb  
 Control Equipment Afterburner Operating Mode 1800°F

Describe Emission Point  
Round black stack  
SW corner  
 Height of Emiss. Pt. Start 15 End 15 Height of Emiss. Pt. Rel. to Observer Start 15 End 15  
 Distance to Emiss. Pt. Start 40 End 40 Direction to Emiss. Pt. (Degree) Start 90 End 90

Vertical Angle to Obs. Pt. Start 25 End _____ Direction to Obs. Pt. (Degree) Start 90 End 90  
 Distance and Direction to Observation Point from Emission Point Start 1 ft up End 1 ft up

Describe Emissions  
 Start No visible emission End _____  
 Emission Color N/A Water Droplet Plume Attached  Detached  None

Describe Plume Background  
 Start SW End _____  
 Background Color white Sky Conditions blue  
 Wind Speed 0-5 Wind Direction SW  
 Ambient Temp. Start 90°F End 90°F Wet Bulb Temp. _____ RH Percent _____



Observing Date	Time Zone	Start Time	End Time	Comments				
<u>8/29/07</u>		<u>2:52</u>	<u>3:22</u>	Sec	0	15	30	45
1	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	
20	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	
22	0	0	0	0	0	0	0	
23	0	0	0	0	0	0	0	
24	0	0	0	0	0	0	0	<u>No obstructions</u>
25	0	0	0	0	0	0	0	<u>obscured</u>
26	0	0	0	0	0	0	0	<u>obscured</u>
27	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	

Observer's Name (Print) Luis L. Lorenz  
 Observer's Signature _____ Date 8/29/07  
 Organization At Environmental Council  
 Certified By DEP/EPA Date 2/07

Congratulations! Here is your wallet card signifying your successful Volatile Emissions Evaluator certification on the date printed below. This certificate is valid for six (6) months. To maintain continuous certification, you must re-certify before or on the expiration date. Please mark your calendar accordingly. We appreciate your business and look forward to serving your certification needs in the future. ETA can support your program with a wide range of environmental services from measurements to litigation support. Please give us a call if we can be of service.

## EASTERN TECHNICAL ASSOCIATES

**LUIS LLORENS**

met the specifications of Federal Reference Method 8 and qualifies as a visible emissions evaluator. Median evaluation of white and blacks in the did not exceed 1.5% opacity and no other major opacity (15% opacity) had occurred during the certification test conducted at Eastern Technical Associates of Raleigh, NC. This certificate is valid for six months from date of issue and expires on the date below.

DATE OF SCHOOL	EXPIRATION DATE	LAST LECTURE
2/13/2007	8/15/2007	ORLS06
347924	LL0470376	
CERT NUMBER	STUDENT ID NUMBER	REARER

### *NEW INFORMATION ON YOUR WALLET CARD*

To serve our customers better, we have added your LAST LECTURE date for your convenience. The first 3 digits are the location, S for Spring or F for Fall, and the year. January - June are spring schools and July - December are fall schools.

If you have questions or comments, please contact:

Debbie Scalse or Sheila Weathersbee  
Customer Support

919-878-3185  
[www.eta-is-opacity.com](http://www.eta-is-opacity.com)

PO BOX 1009  
GARNER, NC 27529-1009



# VISIBLE EMISSIONS EVALUATOR

This is to certify that

*Luis Florens*

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

347924

Certificate Number

Tampa, Florida

Location

February 13, 2007

Date of Issue

Thomas Lore

President

Michael W. Sunford

Director of Training

**APPENDIX G**

**RESIDENCE TIME  
CALCULATION,  
CREMATORY TEMPERATURE  
CHART AND LOAD**

**RESIDENCE TIME CALULATION - CORRECTION FOR QUENCHED AIR AT OUTLET**

**PLANT:** Peavy Funeral home  
**SOURCE:** Crematory Exhaust  
**LOCATION:** Blountstown, Florida  
**DATE:** March 29, 2007

**SOURCE PARAMETERS**

	<u>OUTLET STACK</u>	<u>AMBIENT AIR</u>	<u>SECONDARY CHAMBER</u>
STACK PRESSURE:	30.14		
STACK MOISTURE, %	5.38		
TEMPERATURE, F	884.8	75	1700
AIR FLOW, ACFMD	3906.9		
AIR FLOW, ACFM	4129.0		
H2O FLOW, ACFM	222.1402		
PRESSURE, PSI	14.85	14.85	14.85
AIR ENTHALPY, BTU/LB	328.6	127.9	549.4
H2O ENTHALPY BTU/LB	617.3	235.7	1060.6
SCC VOLUME, CuFT			71
HUMIDITY RATIO		0.028	

**EQUATIONS**

- MASS = PVM/RT      M = MOLECULAR WEIGHT  
R = 1545 ft-lbf/lbm-mol-R  
MASS (lbm/min) =  $\frac{(psia)(ACFMD)(lbm/lbm-mol) \times (144 \text{ sq.in./sq.ft})}{(1545 \text{ ft-lbf/lbm-mol} \times R)(\text{Temp. R})}$
- HEAT LOSS FROM SCC = HEAT GAINED BY AMBIENT AIR  
M(AIR, SCC) = M(AIR, STACK) - (M(AIR, AMB.))  
M(H2O, SCC) = M(H2O, STACK) - M(H2O, AMB.)

**OUTLET FLOWS**

M(DRY AIR) = 116.52 lb/min  
M(H2O) = 4.12 lb/min  
M(TOTAL) = 120.64 lb/min

**SCC DRY AIR**

(M x ENTHALPY CHANGE)_{scc} = (M x ENTHALPY CHANGE)_{amb}.  
H(M_{scc}) = 220.8 BTU/lbm  
H(M_{amb}) = 200.7 BTU/lbm  
M(amb) = 1.100 x M(scc)  
M(scc) + M(amb) = 116.520 lb/min  
M(scc)AIR = 55.482 lb/min

**SCC H2O**

M(scc)H2O + M(amb)H2O = M(outlet)H2O  
M(amb.) H2O = 0.028 lb/lb dry air  
M(amb.) AIR = 61.04 lb/min  
M(amb.) H2O = 1.71 lb/min  
M(scc) H2O = 2.41 lb/min

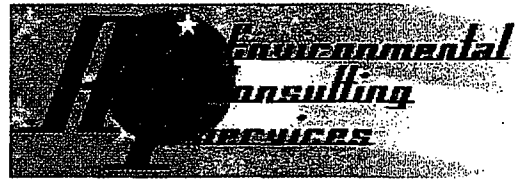
**SCC VOLUMETRIC FLOW**

V = MRT/PM      @      1700 F  
14.85 psi  
AIR:      V = 2988.0 ACFM  
H2O:      V = 208.7 ACFM  
TOTAL SCC:      V = 3196.6 ACFM

<b>SCC RESIDENCE TIME</b>	<b>RT =</b>	<b>1.33 SECONDS</b>
---------------------------	-------------	---------------------







Friday, March 30, 2007

Dagmar Fick  
Air Consulting and Engineering, Inc.  
2106 NW 67th Place, Suite, Suite 4  
Gainesville, Florida 32606

RE: **Peavy Funeral Home - Omega Crematory**  
**Permit Number: 0130010-001-AC**

Dear Dagmar:

Enclosed is one copy of the compliance test results for the above referenced source. Also attached is the temperature strip chart. No visible emissions or objectionable odors were detected during the testing period.

The process rate was as follows:

Run 1	175 lbs	
Run 2	160 lbs	
Run 3	150 lbs	+
AVG:	162 lbs	

If you have any question please contact me at (407) 574-2021.

Respectfully submitted,  
AI ENVIRONMENTAL CONSULTING SERVICES, INC..

A handwritten signature in black ink, appearing to read 'Luis Lloréns', is written over a horizontal line.

Luis Lloréns  
President/Project Manager





**APPENDIX H**

**PROJECT PARTICIPANTS**



## **PROJECT PARTICIPANTS**

### ***Air Consulting and Engineering, Inc.***

Richard Hyre  
Field Testing

Steve Bell  
Field Testing

Shane Lane  
Field Testing

Dagmar Fick  
Report Preparation

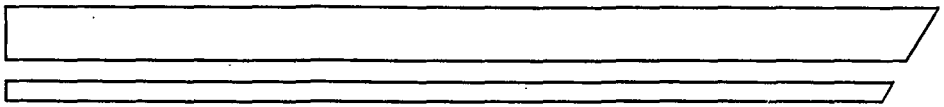
Gloria Gagich  
Document Production

### ***AI Environmental Consulting Services***

Luis Lloréns  
Visible Emission Observer  
Project Coordinator

### ***Peavy Funeral Home***

Marlon Peavy  
Production Records

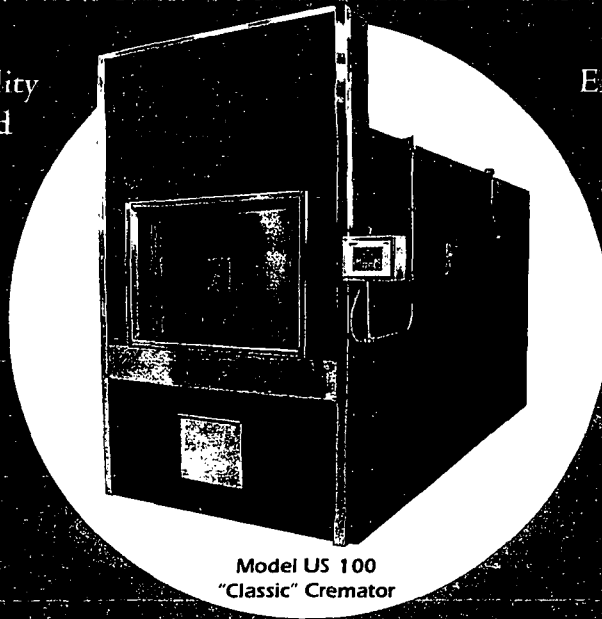
ACE 

*Attachment 2*  
*Equipment Drawings and Brochures*

# The "Classic" Cremator

## PERFORMANCE BEYOND EXPECTATIONS

BUILT to exacting quality and safety standards and backed by a two-year limited warranty, the fuel efficient "Classic" outperforms every other cremator in its price range. Take a look at some of the performance benefits the "Classic" offers!



Model US 100  
"Classic" Cremator

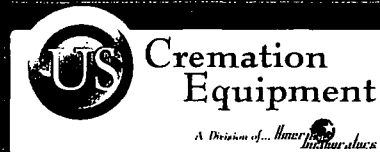
Exceptional standard features combine with professional expertise to deliver the product and service you demand. Unsurpassed in customer support, you can rely on U. S. Cremation Equipment's "Classic" to provide years of trouble-free operation.

### CLASSIC PERFORMANCE

- Cremate up to six bodies in a 10-hour work day
- Complete cremation every 60 - 90 minutes
- No cool down required between cremations
- Designed to cremate obese cases up to 800 lbs.
- Fully automatic PLC operating system

### CLASSIC FEATURES

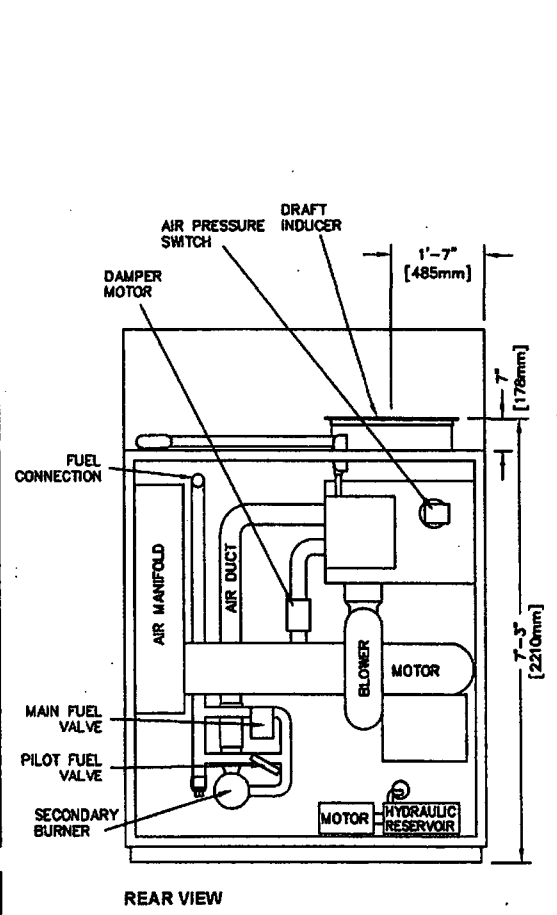
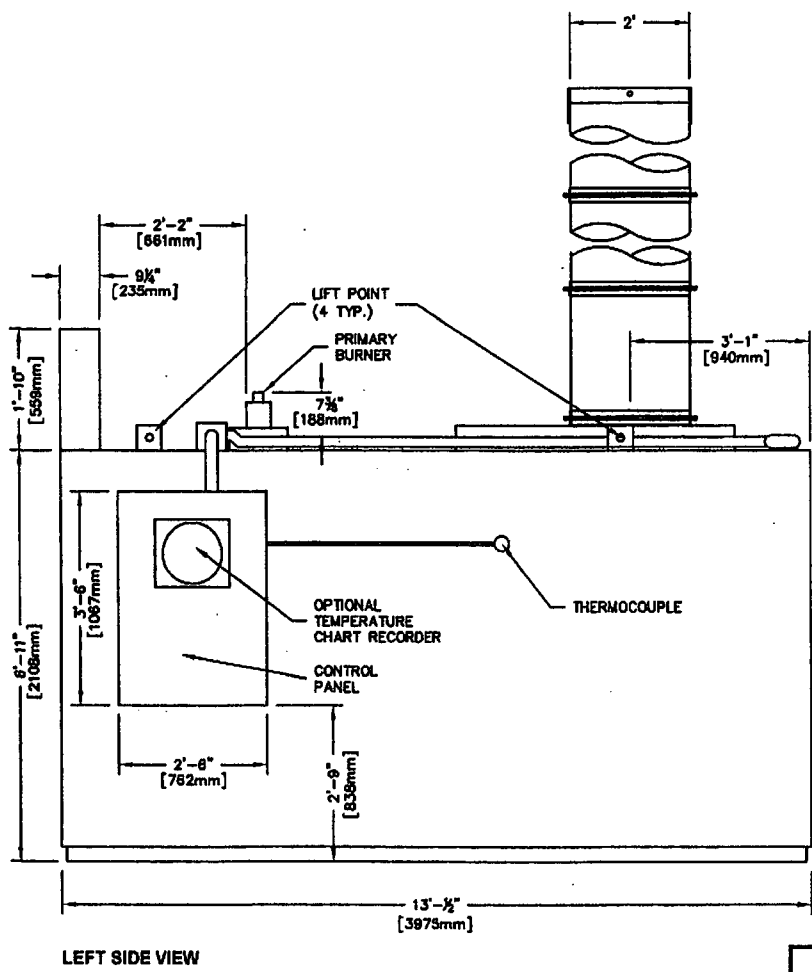
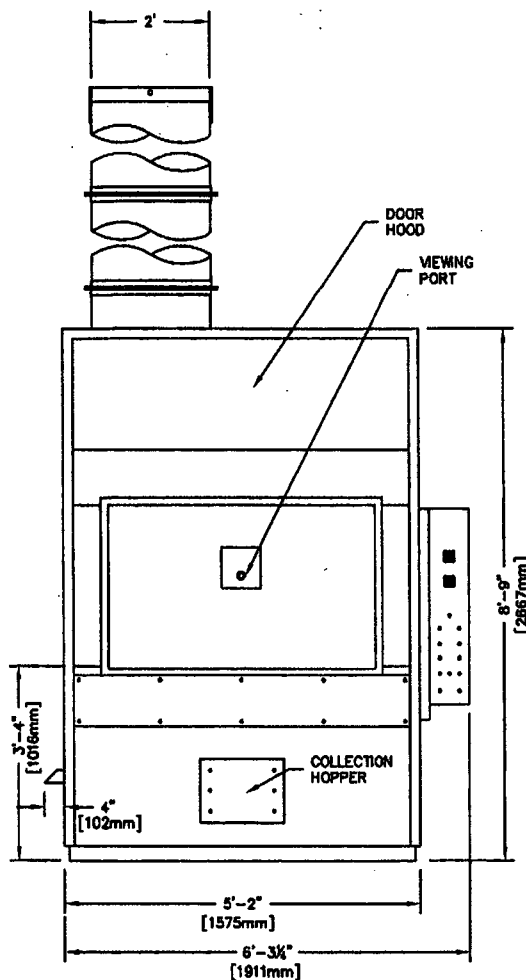
- Power charging door/dual hydraulic cylinders
- Primary chamber viewport
- Secondary chamber temperature recorder
- Color touch screen control - standard
- Powder coat finish with stainless steel trim



370 S. North Lake Boulevard, Suite 1004 • Altamonte Springs, FL 32701 • Ph: 321.282.7357 • Fax: 321.282.7358  
www.uscremationequipment.com • E-mail: info@uscremationequipment.com

# "CLASSIC" MODEL US 100

NOTE: ALL DIMENSIONS ARE APPROXIMATE.

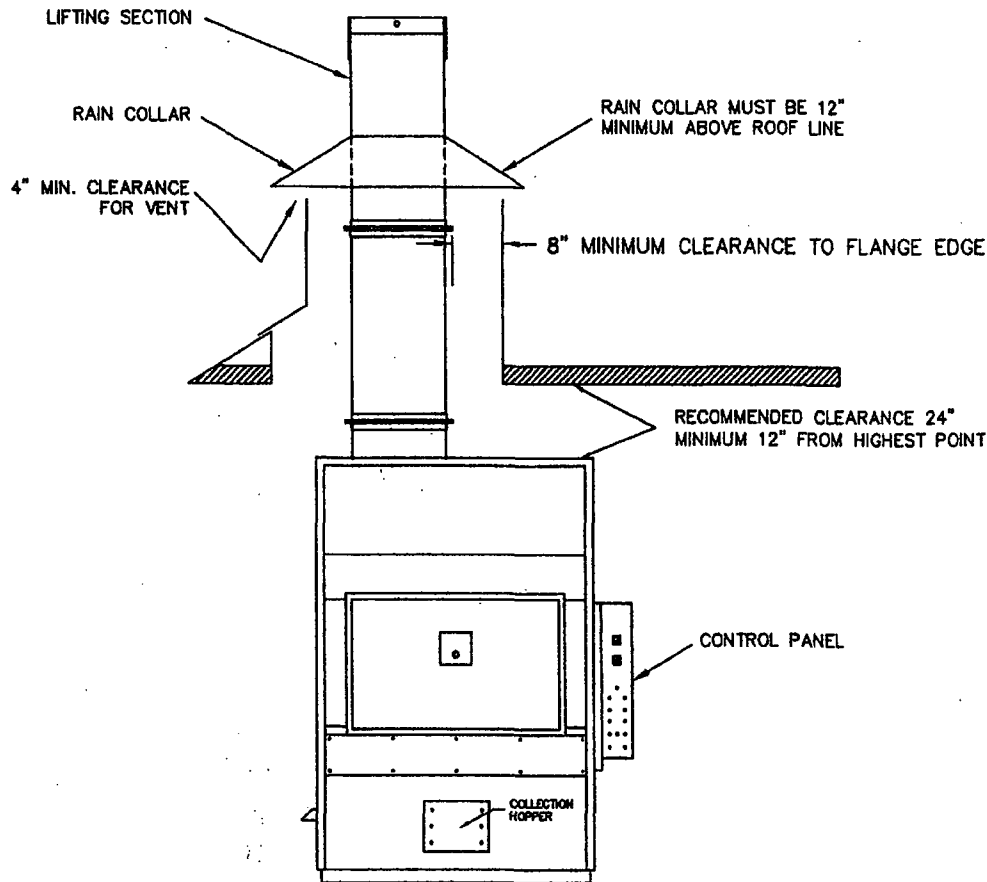


**U.S. CREMATION EQUIPMENT**  
 A DIVISION OF **American Cremation** FLORIDA, U.S.A.  
WWW.AMERICANCREMATION.COM

**CREMATORY UNIT ASSEMBLY VIEWS**

DATE	REV.	DATE	REV.	SCALE	SHEET	REV.
2/14/06				1002-04-06	1 OF 1	0

# RECOMMENDED CLEARANCES FOR CREMATOR STACK AND ROOF PENETRATION



FRONT VIEW


**NOTES:**

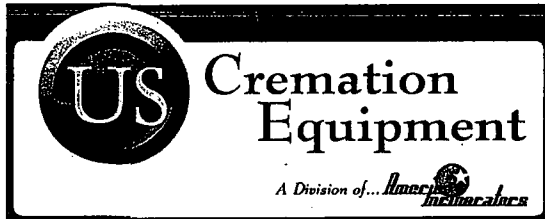
- 1) USE NON-COMBUSTIBLE LINER AND MATERIALS.
- 2) CONSULT LOCAL BUILDING CODES AND ORDINANCES FOR ANY RESTRICTIONS WHICH MAY APPLY.
- 3) NON-COMBUSTIBLE FLASHING TO BE PROVIDED BY OTHERS.
- 4) AIR LOUVER TO ALLOW APPROXIMATELY 2500 CFM FREE AIR.
- 5) GAS REGULATOR TO BE PROVIDED BY OTHERS FOLLOWING INSTALLATION MANUAL INSTRUCTIONS.

CLEARANCES:	RECOMMENDED	MINIMUM
REAR OF UNIT	36"	24"
SIDE	24"	24"
SIDE WITH CONTROL PANEL	36"	24"
TOP (AT HIGHEST POINT)	24"	12"
STACK (TO FLANGE EDGE)	10"	8"

44" MINIMUM DIAMETER OPENING REQUIRED FOR PROPER STACK CLEARANCE.

VENTING IS CRITICAL AND MANDATORY  
CONSULT A QUALIFIED ENGINEER

<b>U.S. CREMATION EQUIPMENT</b>			
A DIVISION OF			FLORIDA, U.S.A.
<b>TITLE</b> CLEARANCES FOR INSTALLATION			
DRAWN TB	DATE 9-26-08	DWG. NO. 1001-09-06	SCALE NTS
		SHEET 1 OF 1	REV. 0



## HUMAN CREMATION CHAMBER SPECIFICATION

---

### EQUIPMENT:

US Cremation Equipment a division of American Incinerators Co. - Multiple Chambered human Crematory, Natural Gas, Propane (LP) or Oil fired.

### MANUFACTURER:

US Cremation Equipment a division of American Incinerators Corp.

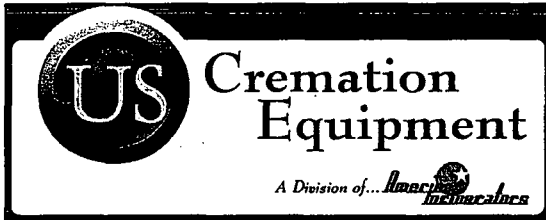
### CONSTRUCTION STANDARDS:

The American Incinerators cremation chamber shall be constructed of U.L./CSA listed components and will meet or exceed nationally accepted incinerator construction standards per the Incinerator Institute of America (IIA) publication guidelines; i.e.:

- A. Primary chamber will not exceed 60% of total furnace volumes. Flue connection shall not be considered part of furnace volume.
- B. Flame supervision through continuous ultraviolet scanning flame detectors on all burners.
- C. High temperature refractory construction with air-cooled walls to prevent excessive heat radiation.
- D. Exhaust gas temperature reduction.

### INCINERATION CHAMBER DIMENSIONS:

Chamber volumes:	Primary - 73 CF Secondary - 71 CF
Structural footprint:	12'0" (L) x 5'0" (W)
Over-all dimensions:	12'7" (L) x 6'0" (W) x 9'2" (H) w/std. hyd. door



**OPERATING TEMPERATURE:**

Temperatures are determined as a result of federal, state or local permitting authority operating standards.

Typical primary chamber setting: 1,000°F-1,200°F  
Typical secondary chamber setting: 1,400°F-1,800°F

**RETENTION TIME:**

In excess of 1 second.

**CAPACITY:**

One body and associated container per cremation cycle. 200 pounds per hour or 750 pounds per batch.

**DRAFT:**

Induced via refractory lined draft inducer.

**SHIPPING WEIGHT:**

24,500 lbs.

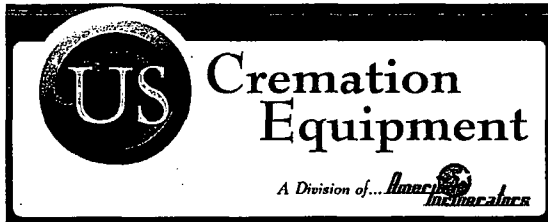
**EMISSIONS:**

The American Incinerators cremation chamber shall meet or exceed federal, state and local environmental regulations.

**EMISSION CONTROL:**

Secondary chamber equipped with one, 1,500,000 BTU/HR burner. Also equipped with an electronic exhaust gas scanner system which temporarily suspends operation of the primary chamber burner.





**STEEL CONSTRUCTION SPECIFICATIONS:**

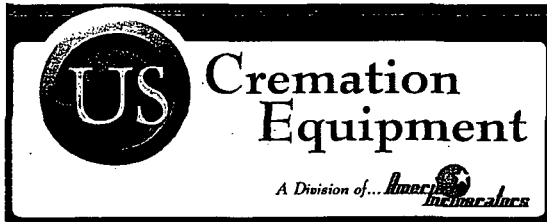
- A. The structure to be heavy 3" steel angle , square tube; 3/8" steel plate, seal welded construction.
- B. Subfloors to be 3/16" steel plate, seal welded construction.
- C. The exterior shell to be 12 gauge steel removable panels.
- D. Interior shell to be 10 gauge steel, seal welded construction.

**INSULATION & REFRACTORY SPECIFICATIONS:**

- A. Hot Hearth: 3000°F abrasion resistant castable refractory, monolithic cast 7" - 13" thick, 1 -1/2" recessed top and rounded, stressed arched bottom.
- B. Chamber Floors: 3000°F abrasion resistant castable refractory, 5" thick on top of 2" 2400°F light weight insulating castable.
- C. Chamber Ceilings: 3000°F castable refractory, monolithic cast, rounded, stressed arched, 5"-9" thick, topped by 2" 2400°F light weight insulating castable.
- D. Interior Walls: 2800°F. alumina-silicate firebrick, 2 1/2" x 4 1/2" x 9", all chambers are backed by 4" of 1900°F ceramic fiber insulation
- E. Stack: Lined with 2" of 2200°F insulating refractory.

**SKIN TEMPERATURE CONTROL:**

Integral dual casing, completely air-cooled design to prevent excessive heat radiation.



**COMBUSTION EQUIPMENT:**

- A. Combustion Air - One, 3 phase, 208-230/460V, 17-15.5/7.6 amp 7 hp air-blower motor (1,400 CFM)
- B. Primary Chamber - One 500,000 BTU/HR nozzle mix, gas-fired burner. Eclipse, North American, or equal.
- C. Secondary Chamber - One, 1,500,000 BTU/HR modulating, nozzle mix, gas-fired burner. Eclipse, North American, or equal.
- D. Burner Flame Safeguard - Control supervision on each burner via a flame safeguard relay and ultra-violet light detector.
- E. Low Air Pressure Safety Switch - Interlocked to all burners.

**EXHAUST GAS TEMPERATURE REDUCTION:**

Hot air duct operating exit temperature: 900°F

**HOT AIR DUCT:**

10 gauge carbon steel, high temperature 2" refractory lining, pre-drilled flanges, 24" Outside Diameter, 28" at flanges.

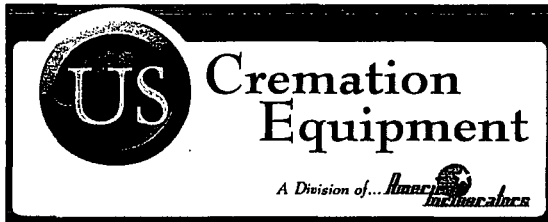
**UTILITY REQUIREMENTS:**

A. GAS:

- 1. Pressure:
  - a) Natural Gas: 7" to 9" W.C.
  - b) Propane: 11" W.C.
- 2. Flow Rate: 2,000,000 BTU/HR

B. ELECTRICAL:

- 1. One, three phase, 208-230/460V, 17-15/8 amp connection for 5hp blower.



**CREMATION CHAMBER LOADING/CLEAN-OUT DOOR:**

Hydraulically operated, refractory lined, upward movement guillotine style door with gate view port.

**CREMATION PROCESS CONTROL:**

The cremation cycle is controlled by a programmable logic control (PLC) system. A visual confirmation of the system status is provided through control panel indicator lights and digital temperature display. Continuous fuel and air modulation is automatically controlled by a time/temperature actuated system. Operator interface is through two sets of simple push button controls and panel timer.

**EXTERIOR FINISH:**

The cremation chamber is finished with grey hi-resistance powder coating with stainless steel trim. Back of unit is coated with an epoxy type black coating.

*Attachment 2*  
*Emissions Calculations*

US Cremation Equipment  
Model "Classic"

Pounds Incinerated Per Hour (Average)	Hours Per Year	SO2 lb/ton	SO2 lb/hr	SO2 TPY	Nox lb/ton	Nox lb/hr	Nox TPY	TOC lb/ton	TOC lb/hr	TOC TPY
200	8760	2.5	0.25	1.095	3	0.3	1.314	3	0.3	1.314

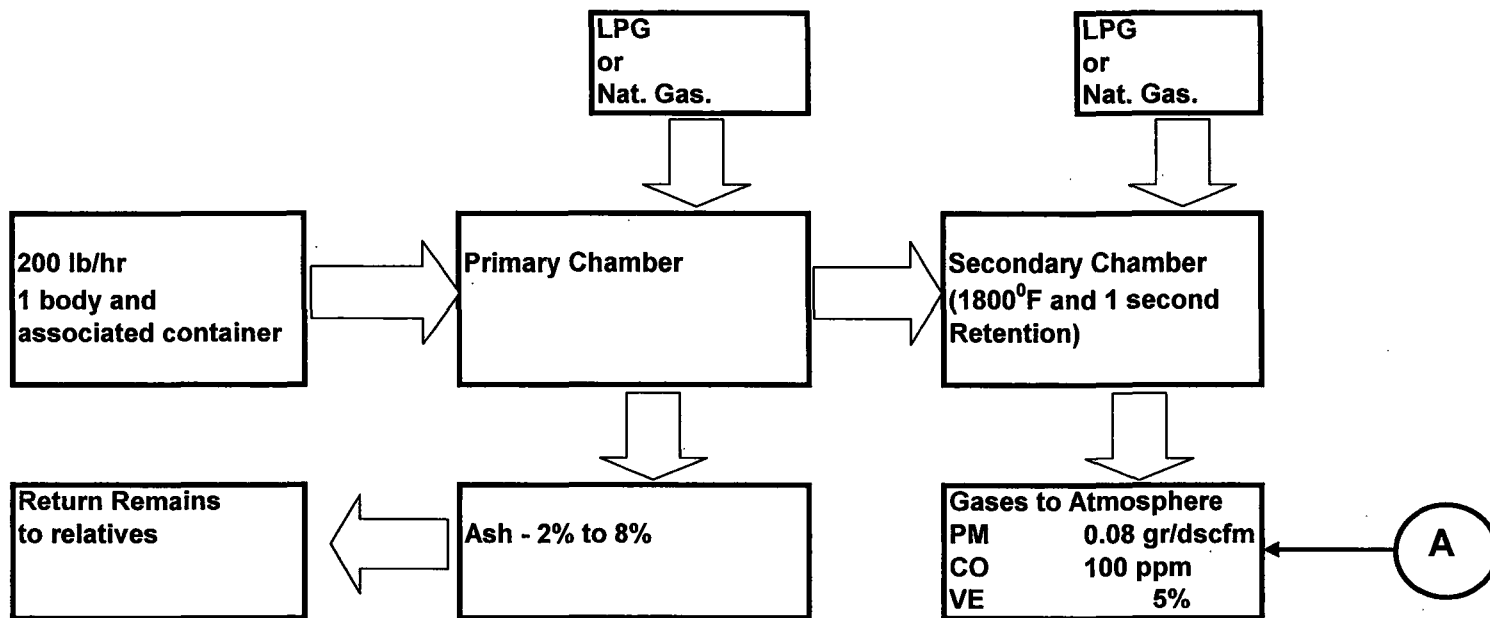
CO=100 PPM @ 7% O2 MAX, Actual CO Emissions Measured at 3.49 PPM  
CO = 100 PPM X 28 MW X 1700 DSCFM X 2.595E-09 X 60 min/hr = 0.74 lb/hr CO  
0.74 lb/hr CO X 8760 hrs/yr X 1 ton/2000 lb = 3.24 TPY CO

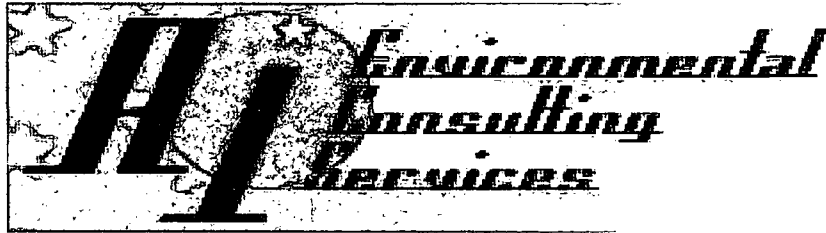
Actual Emissions were measured at 0.04 gr/dscfm at 7% O2  
PM = 0.08 gr/dscf X 1 pound/7000 gr X 1700 DSCFM X 60 min/hr = 1.17 lb/hr PM  
1.17 lb/hr PM X 8760 hrs/yr X 1 ton/2000 lb = 5.12 TPY PM

*Attachment 4*  
*Process Flow Diagram*

Process Flow Diagram

"Classic" Crematory





***General Permit Application  
Human Crematory***

***Prepared for:  
Beach Funeral Home and Cremation Services  
4999 N. Wickham Road  
Melbourne, Florida 32940  
Brevard County***

***Prepared By:  
AI Environmental Consulting Services, Inc.  
370 S. North Lake Blvd, Ste. 1004  
Altamonte Springs, Florida 32701***

***Date: October 2009***



## *Application Contents*

Form 62-210.920(2)(c) General Permit Application  
Attachment 1 - Compliance Test Report  
Attachment 2 - Equipment Drawings and Brochures  
Attachment 3 - AP-42 Emissions Calculations  
Attachment 4 - Process Flow Diagram



October 1, 2009

Florida Department of Environmental Protection  
FDEP Receipts  
PO Box 3070  
Tallahassee, FL 32315-3070

**Re: General Permit Application  
Beach Funeral Home and Cremation Services  
4999 N. Wickham Road  
Melbourne, Florida 32940**

RECEIVED

OCT 21 2009

Bureau of Air Monitoring  
& Mobile Sources

To whom it may Concern:

Enclosed is one (1) copy of the above referenced application along with a check made payable to the **Florida Department of Environmental Protection** in the amount of \$100.00 for the application fee.

I trust this application is complete; however, should you have any questions or need any additional information for issuing the general permit, please contact me at (407) 574-2021 or e-mail at [AI@CFL.RR.COM](mailto:AI@CFL.RR.COM).

Respectfully submitted,  
AI ENVIRONMENTAL CONSULTING SERVICES

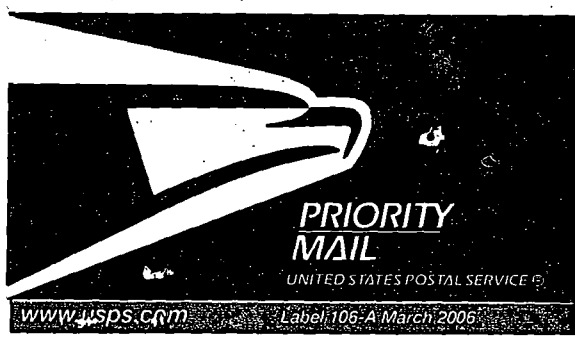
Luis Llorens  
President/Project Manager

Enclosures: One (1) Application and check

Beach Funeral Homes  
& Cremation Services  
4999 N. Wickham Road  
Melbourne, Florida 32940



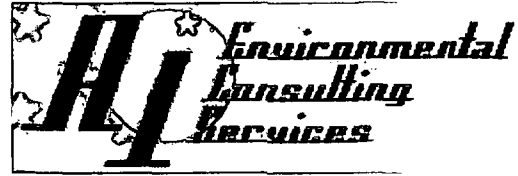
Florida Department of  
Environmental Protection  
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Lallahassee, FL. 32315-3070



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NOV 02 2009

Bureau of Air Monitoring  
& Mobile Sources



October 22, 2009

Florida Department of Environmental Protection  
FDEP Receipts  
PO Box 3070  
Tallahassee, FL 32315-3070

**Re: Revised General Permit Application  
Beach Funeral Home and Cremation Services  
4999 N. Wickham Road  
Melbourne, Florida 32940**

To whom it may Concern:

As discussed during our conversation of today, enclosed is one (1) revised copy of the above referenced application.

I trust this application is complete; however, should you have any questions or need any additional information for issuing the general permit, please contact me at (407) 574-2021 or e-mail at [AI@CFL.RR.COM](mailto:AI@CFL.RR.COM).

Respectfully submitted,  
AI ENVIRONMENTAL CONSULTING SERVICES

A handwritten signature in black ink, appearing to read 'Luis Llorens', with a stylized flourish at the end.

Luis Llorens  
President/Project Manager

Enclosures: One (1) Application w/o attachments



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4999 N WICKHAM ROAD  
MELBOURNE, FL 32940

FLORIDA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

FDEP Receipts

P.O. Box 3070

Tallahassee, Florida 32315-3070

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