GROVE
SCIENTIFIC & ENGINEERING

Dept. of Environmental Protection

JAN 12 2009

Southwest District

December 23, 2008

Mara Grace Nasca
F.D.E.P. - Southwest District Office
13051 N Telecom Parkway
Temple Terrace, Florida 33637

Re: Air Permit Renewal Application
SCI Asphalt Plant No. 3

0830023-005-AO

Dear Ms. Nasca:

Enclosed are two (2) signed copies of the application and the attachments for the above referenced facility. A check for the application fee in the amount of $1500.00 is also included.

If you have any questions, please call me at (407) 298-2282.

Respectfully,

GROVE SCIENTIFIC & ENGINEERING COMPANY

Sara Greivell

Sara Greivell
Environmental Scientist

CC: Billy Burke - SCI Asphalt Plant 3

Permit File Copy

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR NON-TITLE V AIR PERMIT RENEWAL

See Instructions for Form No. 62-210.900(4)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **Steven Counts, Inc.**	
2. Site Name: **Asphalt Plant #3**	
3. Facility Identification Number: **0830023**	4. Facility Status Code: **A**

Application Contact

1. Name and Title of Application Contact: **Bruno Ferraro, President**
2. Application Contact Mailing Address: Organization/Firm: **Grove Scientific & Engineering Company** Street Address: **6140 Edgewater Drive, Suite F** City: **Orlando** State: **Florida** Zip Code: **32810**
3. Application Contact Telephone Numbers: Telephone: **(407) 298- 2282** Fax: **(407) 290- 9038**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	01/12/09
2. Permit Number:	0830023-005-AO

Dept. of Environmental Protection

JAN 12 2009

Southwest District

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative:

Steven Counts, President SCounts@SCIpave1T.com

2. Owner/Authorized Representative Mailing Address:

Organization/Firm: **Steven Counts, Inc.**
Street Address: **3601 S.W 38th Avenue**
City: **Ocala** State: **Florida** Zip Code: **34474**

3. Owner/Authorized Representative Telephone Numbers:
Telephone: **(352) 307- 2410** Fax: **(352) 307- 2411**

4. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this Application for Air Permit. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application 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 understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Signature

1/9/09
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Drum Mix Asphalt Plant	AO2A	$1500.00

Application Processing Fee

Check one: [X] Attached - Amount: **$1500.00** [ ] Not Applicable

Application Comment

Steven Counts, Inc. is applying for a operating permit renewal and is requesting an increase in the daily average maximum throughput from 150 tons per hour to 267 tons per hour. The maximum 12-month consecutive throughput would remain at 500,000 tons and the maximum fuel usage would remain at 1.2 million gallons per consecutive 12 months.

II. FACILITY INFORMATION

Facility Contact

1. Name and Title of Facility Contact: **Billy Burke**
2. Facility Contact Mailing Address: Organization/Firm: **Steven Counts, Inc.** Street Address: **3601 S.W. 38th Avenue** City: **Ocala** State: **Florida** Zip Code: **32810**
3. Facility Contact Telephone Numbers: Telephone: **(352) 307- 2410** Fax: **(352) 307- 2411**

Facility Supplemental Requirements

1. Area Map Showing Facility Location: [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested

Facility Comment

Emissions Unit ID_____

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section must be completed for each emissions unit addressed in this Application for Non-Title V Air Permit Renewal. If submitting the form in hard copy, indicate, in the space provided at the top of each page, the Emissions Unit ID of the emissions unit addressed on the page, as given in the unit's most current air operation permit.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Astec Drum Mix Asphalt Concrete Plant**	
2. Emissions Unit Status Code: **A**	3. Long-Term Reserve Shutdown Date: **N/A**
4. Control Equipment Method/Description (limit to 200 characters per device or method): **Emissions are controlled by an Astec Model RBH-55-10 pulse jet baghouse.**	

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate: **267 tons per hour**		
5. Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	**1,872** hours/year

Emissions Unit ID_____

Emissions Unit Supplemental Requirements

1. Fuel Analysis or Specification [X] Attached, Document ID: B [ ] Not Applicable [ ] Waiver Requested
2. Compliance Test Report [X] Attached, Document ID: B [ ] Not Applicable [ ] Previously submitted, Date:_____
3. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
4. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Other Information Required by Rule or Statute [X] Attached, Document ID: A [ ] Not Applicable

Emissions Unit Comment

Attachment A
Supplemental Information

Supplemental Information
Steven Counts, Inc.
Asphalt Plant #3

Introduction:

Steven Counts, Inc. Asphalt Plant #3, located at 9765 S.W. State Road 200, Ocala, Florida 34481, is requesting to renew their 5-year operating permit. This plant is requesting to increase the current permitted average rate of 150 tons per hour to 267 tons per hour. The maximum consecutive 12-month throughput limit will remain at 500,000 tons and the fuel usage will remain at 1.2 million gallons per consecutive 12-months.

A copy of the stack test report and fuel analysis is included in Attachment B and copies of the reporting and record keeping is included in Attachment C.

Potential Emissions:

The potential emissions are calculated using the emission factors from AP-42 Emission Factors for Drum Mix Hot Mix Asphalt Plants based on an annual throughput of 500,000 tons per year. CO, NOx, SO2 emission factors were taken from table 11.1-7 and VOC was taken from table 11.1-8. PM emissions were calculated based on 0.04 grains per dscfm.

Pollutant	Emissions (TPY)
NO_x	13.8
SO_2	14.5
Total PM	15
PM_{10}	included in total PM
CO	32.5
VOC	11

Application Fee:

The fee for an operating permit for an emission unit required to measure actual emissions by stack sampling is $1500.00.

Attachment B

Stack Test Report

Air Compliance Test Report
for
Particulate and Visible Emissions
Steven Counts, Inc.
9765 S.W. State Road 200
Ocala, Florida 34481
Drum Mix Asphalt Plant 3 with Baghouse
Permit No. 0830023-003-AO
Tested: September 29, 2008

Prepared For:
Grove Scientific
6140 Edgewater Dr. Suite F
Orlando, FL 32810
(407) 298-2282

Prepared By:
Bottorf Associates, Inc.
6729 Edgewater Commerce Parkway
Orlando, Florida 32810-4278
Phone: (407) 298-0846

BOTTORF ASSOCIATES INC.

Table of Contents

Introduction

On September 29, 2008, Particulate and Visible Emissions Tests were conducted on the Baghouse controlled Drum Mix Asphalt Plant which is operated by Steven Counts, Inc. The test was performed using EPA Test Method No. 1, 2, 3, 4, 5 and 9. The Allowable Particulate and Visible emissions were determined by the New Source Performance Standard for Hot Mix Asphalt Facilities contained in 40 CFR Part 60.90 (Subpart I) and this facilities state operating permit. Output process weight and other plant operational data was determined by plant personnel.

The test results show that this source is in compliance for Particulate and Visible Emissions. A summary of the results are as follows:

	Run No. 1	Run No. 2	Run No. 3	Average
Output Process Rate (tons/hour)	$O_1 = 242$	$O_2 = 244$	$O_3 = 244$	$O_{avg} = 243.33$
Percent Recycle in Mix	$R_{r_1} = 0$	$R_{r_2} = 0$	$R_{r_3} = 0$	$Rr_{avg} = 0$
Used Fuel Oil Consumption (gallons/hour)	$F_{r_1} = 280.72$	$F_{r_2} = 283.04$	$F_{r_3} = 283.04$	$Fr_{avg} = 282.27$
Baghouse Pressure Drop (inches water)	$P_{d_1} = 4$	$P_{d_2} = 4$	$P_{d_3} = 4$	$Pd_{avg} = 4$
Particulate Emissions Concentration (gr/dscf)	$c_{g_1} = 0.0025$	$c_{g_2} = 0.003$	$c_{g_3} = 0.0018$	$cs_{avg} = 0.0024$
Allowable Emissions Concentration (gr/dscf)	$c_{r_1} = 0.04$	$c_{r_2} = 0.04$	$c_{r_3} = 0.04$	$A_{avg} = 0.04$
Particulate Emission Rate (pounds/hour)	$P_{mr_1} = 0.7$	$P_{mr_2} = 0.83$	$P_{mr_3} = 0.48$	$Pmr_{avg} = 0.67$
Isokinetic Sampling Rate (%)	$I_1 = 99.31$	$I_2 = 98.22$	$I_3 = 101.85$	Iavg = 99.79
Average Visible Emissions (% opacity)	$VE_1 = 0$			$VE_{avg} = 0$
Average Allowable Visible Emissions (% opacity)	$VA_1 = 20$			$VA_{avg} = 20$

The test, analysis of samples, and all other procedures were performed in a professional manner and, are in accordance with the official procedures outlined in 40 C.F.R., Chapter I, Part 60, Appendix A and Chapter 62-297 F.A.C., of the State of Florida Department of Environmental Protection Rules.

Certification of Data

To whom it may concern:

We, the undersigned, hereby certify that, to the best of our knowledge, all data and material in this report is true and correct.

Kent D. Bottorf, President

Roger T. Caldwell, Vice President - Environmental Division

General Information

Facility Name: Steven Counts, Inc.

Facility Location: 9765 S.W. State Road 200, Ocala, Florida 34481

Type of Facility: Drum Mix Asphalt Plant 3

Type of Pollution Control Device: Knock Out Box followed by a Baghouse

Permit Number: 0830023-003-AO

Date of Test: September 29, 2008

Persons Conducting Test: Roger T. Caldwell, Test Equipment Operator
Sara Greivell, Visible Emissions Observer
Kent D. Bottorf, Sampling Technician
Kent D. Bottorf, Sample Analysis
Roger T. Caldwell, Report Preparation

Plant Personnel Involved: Billy Burke, Plant Operational Data

Agency Observer Involved: Max Grondahl, FDEP, Southwest District

Test Methods Used: EPA Method No. 1, 2, 3, 4, 5, and 9

Test Modifications: Flexible sample line between filter and first impinger.

Nomenclature

The variables shown below are used for calculations in this report. The *"a"* subscript represents the run number. Average values have a "avg" subscript. The symbol ":=" is an assignment statement and is used to define variables in terms of constants or other variables. The "=" forces calculation *of* the variable.

Calculations and report generation is performed on MathCad Version 5.0 Plus. Care *was* taken to insure consistency with the cited federal test methods. Software used within MathCad is proprietary in nature and unauthorized duplication *of* this material is prohibited.

Variable	Definition
a	Test run number variable.
An_a	Sampling nozzle area in square feet.
A_s	Stack area in square feet or square inches depending on it's location in the report.
Awb_f	Final acetone wash blank weight in grams.
Awb_i	Initial acetone wash blank weight in grams.
Bws_a	Stack gas moisture content in percent.
C_a	Acetone blank concentration in milligrams per milliliter.
cg_a	Particulate concentration in grains per dry standard cubic feet.
cmg_a	Particulate concentration in milligrams per dry standard cubic meter.
C_p	Pitot tube coefficient.
cr_a	Allowable emission from the source in grains per dry standard cubic feet.
cs_a	Particulate emission rate in grams per second.
DH_a	Average differential pressure across the orifice during the test run in inches of water.
Dn_a	The calibrated nozzle diameter prior to test in inches.
D_s	Stack diameter in inches for round stacks only.
Fno_a	The sample filter 1.0. number.
Fr_a	Consumption of fuel in gallons per hour during the test.
I_r	Dryer input rate during the test run.
K_p	Pitot tube constant.
I_a	Sampling isokinetic variation in percent.
L_s	Stack length in inches for rectangular stacks only.
Md_a	Stack gas dry molecular weight.
Mn_a	Total weight of particulate collected during the sample run in grams.
MS_a	Stack gas molecular weight in pounds per pound-mole.
Mw	Molecular weight of water.
O_a	Source output process weight during the test run in tons per hour.
P_a	Average square root of the velocity head in the stack gas in inches of water.
Pa	density of acetone.
$Pbar_a$	Ambient barometric pressure at the test site.

Nomenclature

Variable	Definition
Pd_a	Pressure.drop.across the bag house in inches of water.
Pg_a	Static Pressure in stack in inches of water.
Pmr_a	Particulate emissions rate in pounds per hour.
Pno_a	Front half catch acetone wash beaker number.
Ps_a	Absolute stack pressure in inches of mercury.
P_{std}	Standard pressure in inches of mercury.
q_a	Total sampling time of the test run in minutes.
$Qstd_a$	Stack gas volumetric flow rate in dry standard cubic feet per minute.
tm_a	Temperature of the dry gas meter in degrees Fahrenheit.
Tm_a	Temperature of the dry gas meter in degrees Rankine.
ts_a	Average temperature of the stack gas during the run in degrees Fahrenheit.
Ts_a	Average temperature of the stack gas during the run in degrees Rankine.
T_{std}	Standard temperature in degrees Rankine.
V_a	Acetone wash volume in milliliters.
VA_a	Allowable visible emission during the test run in percent opacity.
VE_a	Observed visible emissions during the test run in percent opacity.
Vf_a	Final volume of water in impinger train in milliliters.
Vi_a	Initial volume of water in impinger train in milliliters.
Vlc_a	Volume of liquid collected in the impinger train in milliliters.
Vm_a	Metered dry gas volume in cubic feet.
$Vrnstd_a$	Sample gas volume in dry standard cubic feet
VS_a	Stack gas velocity in feet per second.
$Vwcstd_a$	Volume of the water condensed in the first three impingers in standard cubic feet.
$Vwsgstd_a$	Volume of the water condensed in the silica gel in standard cubic feet.
W_a	Acetone wash blank in milligrams.
Wf_a	Final weight of silica gel in impinger train in grams.
Wff_a	Final sample filter weight in grams.
Wfi_a	Initial sample filter weight in grams.
Wi_a	Initial weight of silica gel in impinger train in grams.
W_s	Stack width in inches for rectangular stacks only.
Wwf_a	Final Front half catch acetone wash beaker weight after drying in grams.
Wwi_a	Initial Front half catch acetone wash beaker weight before drying in grams.
X_a	Sampling port location in inches.
Y	Dry gas meter calibration coefficient.
Y_a	Sampling point location in inches.

Stack Test Input Data

	Run No. 1	Run No. 2	Run No. 3
Final Silica Gel Weight (g)	$W_{f_1} := 210.24$	$W_{f_2} := 211.81$	$W_{f_3} := 210.91$
Initial Silica Gel Weight (g)	$W_{i_1} := 200.00$	$W_{i_2} := 200.00$	$W_{i_3} := 200.00$
Final Impinger Volume (ml)	$V_{f_1} := 435$	$V_{f_2} := 422$	$V_{f_3} := 444$
Initial Impinger Volume (ml)	$V_{i_1} := 200$	$V_{i_2} := 200$	$V_{i_3} := 200$
Dry Gas Volume (dcf)	$V_{m_1} := 53.27$	$V_{m_2} := 53.46$	$V_{m_3} := 54.17$
Temperature at Meter (F)	$t_{m_1} := 84.92$	$t_{m_2} := 92.63$	$t_{m_3} := 94.50$
Stack Static Pressure (in H2O)	$P_{g_1} := -0.13$	$P_{g_2} := -0.13$	$P_{g_3} := -0.13$
Barometric Pressure (in Hg)	$P_{bar_1} := 29.96$	$P_{bar_2} := 29.96$	$P_{bar_3} := 29.96$
Average Stack Temperature (F)	$t_{s_1} := 209.63$	$t_{s_2} := 203.00$	$t_{s_3} := 209.46$
Total Sampling Time (min)	$\theta_1 := 60$	$\theta_2 := 60$	$\theta_3 := 60$
Average Pressure Differential across the Orifice (in H2O)	$\Delta H_1 := 2.548$	$\Delta H_2 := 2.606$	$\Delta H_3 := 2.667$
Average Square Root of Velocity Head of Stack Gas (in H2O)	$P_1 := 1.0743$	$P_2 := 1.0637$	$P_3 := 1.0531$
Diameter of Nozzle (in)	$D_{n_1} := 0.24233$	$D_{n_2} := 0.24233$	$D_{n_3} := 0.24233$
Filter I.D. Number	$F_{no_1} := 1107$	$F_{no_2} := 1108$	$F_{no_3} := 1109$
Final Filter Weight (g)	$Wf_{f_1} := 0.2551$	$Wf_{f_2} := 0.2573$	$Wf_{f_3} := 0.2576$
Initial Filter Weight (g)	$Wf_{i_1} := 0.2525$	$Wf_{i_2} := 0.2548$	$Wf_{i_3} := 0.2546$
Probe Wash Beaker No.	$P_{no_1} := 1$	$P_{no_2} := 2$	$P_{no_3} := 3$
Final Probe Wash Weight (g)	$Ww_{f_1} := 3.6511$	$Ww_{f_2} := 3.6544$	$Ww_{f_3} := 3.6131$
Initial Probe Wash Weight (g)	$Ww_{i_1} := 3.6453$	$Ww_{i_2} := 3.6471$	$Ww_{i_3} := 3.6102$
Output Process Weight During the Test Run (tons/hr)	$O_1 := 242$	$O_2 := 244$	$O_3 := 244$
Allowable Emissions (gr/dscf)	$c_{r_1} := 0.04$	$c_{r_2} := 0.04$	$c_{r_3} := 0.04$

Stack Test Input Data

	Run No. 1	Run No. 2	Run No. 3
Used Oil Consumption (gallons/hour)	$F_{r_1} := 280.72$	$F_{r_2} := 283.04$	$F_{r_3} := 283.04$
Pressure Drop Across Baghouse (inches of water)	$P_{d_1} := 4.0$	$P_{d_2} := 4.0$	$P_{d_3} := 4.0$
Percent Recycle in Mix	$R_{r_1} := 0$	$R_{r_2} := 0$	$R_{r_3} := 0$
Average Visible Emissions	$VE_1 := 0$		
Allowable Visible Emissions	$VA_1 := 20$		
Stack Gas Oxygen Concentration (ppm)	$O_{2_1} := 15.5$	$O_{2_2} := 15.5$	$O_{2_3} := 15.5$
Stack Gas Carbon Dioxide Concentration (ppm)	$CO_{2_1} := 4.5$	$CO_{2_2} := 4.5$	$CO_{2_3} := 4.5$

Calculated and Physical Constants

Acetone Wash Volume (ml)	$V_a := 300$
Final Acetone Wash Blank Weight (g)	$Awb_f := 3.6359$
Initial Acetone Wash Blank Weight (g)	$Awb_i := 3.6359$
Number of Test Runs Range Variable	$a := 1, 2 .. 3$
Pitot Tube Constant	$K_p := 85.49$
Pitot Tube Coefficient	$C_p := 0.84$
Stack Diameter (in)	$D_s := 47$
Stack Length (in)	$L_s := 0$
Stack Width (in)	$W_s := 0$
Dry Gas Meter Calibration Factor	$Y := 0.998$
Molecular Weight of Water (lb/lb-mole)	$M_w := 18.00$
Density of Acetone (mg/ml)	$p_a := 789.9$
Standard Pressure (in Hg)	$P_{std} := 29.92$
Standard Temperature (R)	$T_{std} := 528$

Area of Stack (square feet)

$$A_s := \frac{\pi \cdot \left(\frac{D_s}{2}\right)^2}{144}$$

$$A_s = 12.05$$

Area of Sampling Nozzle (square feet)

$$A_{n_a} := \frac{\pi \cdot \left(\frac{D_{n_a}}{2}\right)^2}{144}$$

Run No. 1	Run No. 2	Run No. 3
$A_{n_1} = 3.203 \cdot 10^{-4}$	$A_{n_2} = 3.203 \cdot 10^{-4}$	$A_{n_3} = 3.203 \cdot 10^{-4}$

Calculated and Physical Constants

Absolute Stack Pressure (in Hg)

$$P_{s_a} := P_{bar_a} + \left(\frac{P_{g_a}}{13.6}\right)$$

Run No. 1	Run No. 2	Run No. 3
$P_{s_1} = 29.95$	$P_{s_2} = 29.95$	$P_{s_3} = 29.95$

Absolute Stack Temperature (R)

$$T_s := t_s + 460$$

Run No. 1	Run No. 2	Run No. 3
$T_{s_1} = 669.63$	$T_{s_2} = 663$	$T_{s_3} = 669.46$

Absolute Meter Temperature (R)

$$T_{m_a} := t_{m_a} + 460$$

Run No. 1	Run No. 2	Run No. 3
$T_{m_1} = 544.92$	$T_{m_2} = 552.63$	$T_{m_3} = 554.5$

Volume of Water Collected (ml)

$$V_{lc_a} := \left(V_{f_a} - V_{i_a}\right) + \left(W_{f_a} - W_{i_a}\right)$$

Run No. 1	Run No. 2	Run No. 3
$V_{lc_1} = 245.24$	$V_{lc_2} = 233.81$	$V_{lc_3} = 254.91$

Particulate Measurement Calculations

From EPA Method No.5 (40 CFR, Ch.1, Pt.60, App A)

Acetone Blank Concentration (mg/mg)

$$C_a := \frac{(Awb_f - Awb_i) \cdot 1000}{(V_a \cdot p_a)}$$

$$C_a = 0$$

Acetone Wash Blank (mg)

$$W_a := C_a \cdot V_a \cdot p_a$$

$$W_a = 0$$

Total Weight of Particulate Collected in the Filter and Probe Wash (g)

$$M_{n_a} := \left[\left(Wf_{f_a} - Wf_{i_a} \right) + \left(Ww_{f_a} - Ww_{i_a} \right) \right] - \left(\frac{W_a}{1000} \right)$$

Run No. 1	Run No. 2	Run No. 3
$M_{n_1} = 0.0084$	$M_{n_2} = 0.0098$	$M_{n_3} = 0.0059$

Determination of Stack Gas Moisture Content

From EPA Method No. 4 (40 CFR, Ch.I, Pt.60, App.A)

Volume of Water Condensed in the First Three Impingers (scf)

$$Vwc_{std_a} := 0.04707 \cdot \left(V_{f_a} - V_{i_a}\right)$$

Run No. 1	Run No. 2	Run No. 3
$Vwc_{std_1} = 11.06$	$Vwc_{std_2} = 10.45$	$Vwc_{std_3} = 11.49$

Volume of Water Collected in the Silica Gel (scf)

$$Vwsg_{std_a} := 0.04715 \cdot \left(W_{f_a} - W_{i_a}\right)$$

Run No. 1	Run No. 2	Run No. 3
$Vwsg_{std_1} = 0.48$	$Vwsg_{std_2} = 0.56$	$Vwsg_{std_3} = 0.51$

Sample Gas Volume Corrected to Standard Conditions (dscf)

$$Vm_{std_a} := 17.64 \cdot Y \cdot \frac{\left(V_{m_a} \cdot P_{bar_a}\right)}{T_{m_a}}$$

Run No. 1	Run No. 2	Run No. 3
$Vm_{std_1} = 51.56$	$Vm_{std_2} = 51.02$	$Vm_{std_3} = 51.53$

Stack Gas Moisture Content (%)

$$B_{ws_a} := \frac{\left(Vwc_{std_a} + Vwsg_{std_a}\right)}{\left(Vwc_{std_a} + Vwsg_{std_a} + Vm_{std_a}\right)} \cdot 100$$

Run No. 1	Run No. 2	Run No. 3
$B_{ws_1} = 18.29$	$B_{ws_2} = 17.74$	$B_{ws_3} = 18.89$

Determination of Stack Gas Dry Molecular Weight

From EPA Method No.3 (40 CFR, Ch.I, Part 60, App. A)

Stack Gas Oxygen Content (%)

Run No. 1	Run No. 2	Run No. 3
$O2_1 = 15.5$	$O2_2 = 15.5$	$O2_3 = 15.5$

Stack Gas Carbon Dioxide Content (%)

Run No. 1	Run No. 2	Run No. 3
$CO2_1 = 4.5$	$CO2_2 = 4.5$	$CO2_3 = 4.5$

Stack Gas Nitrogen and Carbon Monoxide Content (%)

$$NCO2_a := 100 - \left(CO2_a + O2_a\right)$$

Run No. 1	Run No. 2	Run No. 3
$NCO2_1 = 80$	$NCO2_2 = 80$	$NCO2_3 = 80$

Stack Gas Dry Molecular Weight (lb/lb-mole)

$$M_{d_a} := \left(0.440 \cdot CO2_a\right) + \left(0.320 \cdot O2_a\right) + \left(0.280 \cdot NCO2_a\right)$$

Run No. 1	Run No. 2	Run No. 3
$M_{d_1} = 29.34$	$M_{d_2} = 29.34$	$M_{d_3} = 29.34$

Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)

From EPA Method No. 2 (40 CFR, Ch.I, Pt.60, App.A)

Stack Gas Wet Molecular Weight (lb/lb-mole)

$$M_{s_a} := M_{d_a} \cdot \left(1 - \frac{B_{ws_a}}{100}\right) + \left[18.0 \cdot \frac{\left(B_{ws_a}\right)}{100}\right]$$

Run No. 1	Run No. 2	Run No. 3
$M_{s_1} = 27.27$	$M_{s_2} = 27.33$	$M_{s_3} = 27.2$

Stack Gas Velocity (ft/sec)

$$v_{s_a} := K_p \cdot C_p \cdot P_a \cdot \sqrt{\left[\frac{T_{s_a}}{\left(P_{s_a} \cdot M_{s_a}\right)}\right]}$$

Run No. 1	Run No. 2	Run No. 3
$v_{s_1} = 69.86$	$v_{s_2} = 68.75$	$v_{s_3} = 68.56$

Stack Gas Volumetric Flow Rate (acf/min)

$$Q_{a_a} := v_{s_a} \cdot 60 \cdot A_s$$

Run No. 1	Run No. 2	Run No. 3
$Q_{a_1} = 50501.4$	$Q_{a_2} = 49698.2$	$Q_{a_3} = 49560$

Stack Gas Volumetric Flow Rate (dscf/min)

$$Q_{std_a} := 60 \cdot \left[1 - \frac{\left(B_{ws_a}\right)}{100}\right] \cdot v_{s_a} \cdot A_s \cdot \left(\frac{T_{std}}{T_{s_a}}\right) \cdot \left(\frac{P_{s_a}}{P_{std}}\right)$$

Run No. 1	Run No. 2	Run No. 3
$Q_{std_1} = 32568.7$	$Q_{std_2} = 32589$	$Q_{std_3} = 31736.6$

Determination of Isokinetic Variation and Particulate Emissions

From EPA Method No.5 (40 CFR, Ch.1, Pt.60, App A)

Isokinetic Variation (%)

$$I_a := \frac{0.0945 \cdot T_{s_a} \cdot Vm_{std_a}}{P_{s_a} \cdot v_{s_a} \cdot A_{n_a} \cdot \theta_a \cdot \left(1 - \frac{B_{ws_a}}{100}\right)}$$

Run No. 1	Run No. 2	Run No. 3
$I_1 = 99.31$	$I_2 = 98.22$	$I_3 = 101.85$

Particulate Concentration (gr/dscf)

$$c_{g_a} := \frac{M_{n_a}}{Vm_{std_a}} \cdot 15.43$$

Run No. 1	Run No. 2	Run No. 3
$c_{g_1} = 0.0025$	$c_{g_2} = 0.003$	$c_{g_3} = 0.0018$

Particulate Concentration (mg/dscm)

$$c_{mg_a} := \frac{M_{n_a}}{Vm_{std_a}} \cdot 1000 \cdot 35.31$$

Run No. 1	Run No. 2	Run No. 3
$c_{mg_1} = 5.75$	$c_{mg_2} = 6.78$	$c_{mg_3} = 4.04$

Particulate Mass Rate (g/sec)

$$c_{s_a} := \frac{\frac{M_{n_a}}{Vm_{std_a}} \cdot Q_{std_a}}{60}$$

Run No. 1	Run No. 2	Run No. 3
$c_{s_1} = 0.0884$	$c_{s_2} = 0.1043$	$c_{s_3} = 0.0606$

Determination of Actual And Allowable Particulate Emissions Rate

From EPA Method No.5 (40 CFR, Ch.1, Pt.60, App A)

Particulate Mass Rate (lb/hr)

$$P_{mr_a} := 0.1323 \cdot \left(\frac{M_{n_a}}{Vm_{std_a}} \right) \cdot Q_{std_a}$$

Run No. 1	Run No. 2	Run No. 3
$P_{mr_1} = 0.7$	$P_{mr_2} = 0.83$	$P_{mr_3} = 0.48$

Allowable Emission Rate (gr/dscf)

Run No. 1	Run No. 2	Run No. 3
$c_{r_1} = 0.04$	$c_{r_2} = 0.04$	$c_{r_3} = 0.04$

Actual Emission Rate (gr/dscf)

Run No. 1	Run No. 2	Run No. 3
$c_{g_1} = 0.0025$	$c_{g_2} = 0.003$	$c_{g_3} = 0.0018$

Percent of Allowable Emissions (Actual vs. Allowable)

$$c_{x_a} := \frac{c_{g_a}}{c_{r_a}} \cdot 100$$

Run No. 1	Run No. 2	Run No. 3
$c_{x_1} = 6.28$	$c_{x_2} = 7.41$	$c_{x_3} = 4.42$

Calculation of Average Values

Average Stack Temperature (F)

$$ts_{avg} := \sum_{a} \frac{t_{s_a}}{3} \qquad ts_{avg} = 207.4$$

Average Stack Gas Moisture Content (%)

$$Bws_{avg} := \sum_{a} \frac{B_{ws_a}}{3} \qquad Bws_{avg} = 18.31$$

Average Sample Gas Volume Corrected To Standard Conditions (dscf)

$$Vm_{avg} := \sum_{a} \frac{Vm_{std_a}}{3} \qquad Vm_{avg} = 51.37$$

Average Stack Gas Velocity (ft/sec)

$$vs_{avg} := \sum_{a} \frac{v_{s_a}}{3} \qquad vs_{avg} = 69.06$$

Average Stack Gas Volumetric Flow Rate (dscf/min)

$$Qstd_{avg} := \sum_{a} \frac{Q_{std_a}}{3} \qquad Qstd_{avg} = 32298.1$$

Average Isokinetic Variation (%)

$$Iavg := \sum_{a} \frac{I_a}{3} \qquad Iavg = 99.79$$

Average Allowable Particulate Emission Concentration (gr/dscf)

$$A_{avg} := \sum_{a} \frac{c_{r_a}}{3} \qquad A_{avg} = 0.04$$

Average Particulate Emission Concentration (gr/dscf)

$$cs_{avg} := \sum_{a} \frac{c_{g_a}}{3} \qquad cs_{avg} = 0.0024$$

Calculation of Average Values

Average Output Process Rate (tons/hour)

$$O_{avg} := \sum_{a} \frac{O_a}{3} \qquad O_{avg} = 243.3$$

Average Fuel Consumption

$$Fr_{avg} := \sum_{a} \frac{Fr_a}{3} \qquad Fr_{avg} = 282.27$$

Average Baghouse Pressure Drop

$$Pd_{avg} := \sum_{a} \frac{Pd_a}{3} \qquad Pd_{avg} = 4$$

Average Percent Recycle in Mix

$$Rr_{avg} := \sum_{a} \frac{Rr_a}{3} \qquad Rr_{avg} = 0$$

Average Emission Rate

$$Pmr_{avg} := \sum_{a} \frac{Pmr_a}{3} \qquad Pmr_{avg} = 0.67$$

Average Visible Emission

$$VE_{avg} := \sum_{a} \frac{VE_1}{3} \qquad VE_{avg} = 0$$

Average Allowable Visible Emission

$$VA_{avg} := \sum_{a} \frac{VA_1}{3} \qquad VA_{avg} = 20$$

Summary of Test Results

Stack Temperature (F)

Run No. 1	Run No. 2	Run No. 3	Average
t_{s_1} = 209.63	t_{s_2} = 203	t_{s_3} = 209.46	ts_{avg} = 207.36

Stack Gas Moisture Content (%)

Run No. 1	Run No. 2	Run No. 3	Average
B_{ws_1} = 18.29	B_{ws_2} = 17.74	B_{ws_3} = 18.89	Bws_{avg} = 18.31

Sample Gas Volume Corrected To Standard Conditions (dscf)

Run No. 1	Run No. 2	Run No. 3	Average
Vm_{std_1} = 51.56	Vm_{std_2} = 51.02	Vm_{std_3} = 51.53	Vm_{avg} = 51.37

Stack Gas Velocity (ft/sec)

Run No. 1	Run No. 2	Run No. 3	Average
v_{s_1} = 69.86	v_{s_2} = 68.75	v_{s_3} = 68.56	vs_{avg} = 69.06

Stack Gas Volumetric Flow Rate (dscfm)

Run No. 1	Run No. 2	Run No. 3	Average
Q_{std_1} = 32568.7	Q_{std_2} = 32589	Q_{std_3} = 31736.6	$Qstd_{avg}$ = 32298.1

Isokinetic Variation (%)

Run No. 1	Run No. 2	Run No. 3	Average
I_1 = 99.31	I_2 = 98.22	I_3 = 101.85	Iavg = 99.79

Particulate Emissions Concentration (gr/dscf)

Run No. 1	Run No. 2	Run No. 3	Average
c_{g_1} = 0.0025	c_{g_2} = 0.003	c_{g_3} = 0.0018	cs_{avg} = 0.0024

Allowable Emission Concentration (gr/dscf)

Run No. 1	Run No. 2	Run No. 3	Average
c_{r_1} = 0.04	c_{r_2} = 0.04	c_{r_3} = 0.04	A_{avg} = 0.04

Calculation of Traverse Point Locations

Stack Diameter

$D_s = 47$

Stack Area

$$A_s := \pi \cdot \left(\frac{D_s}{2}\right)^2$$

Stack Radius

$$r := \frac{D_s}{2}$$

Sampling Port Offset

$O_s := 2$

Concentric Area Determination

$$d_1 := \sqrt{\frac{\frac{A_s}{12}}{.785375}} \qquad r_1 := \frac{d_1}{2} \qquad r_1 = 6.78$$

$p_6 := r - r_1 \qquad p_6 = 16.72$

$p_7 := r + r_1 \qquad p_7 = 30.28$

$$d_2 := \sqrt{\frac{\frac{3 \cdot A_s}{12}}{.785375}} \qquad r_2 := \frac{d_2}{2} \qquad r_2 = 11.75$$

$p_5 := r - r_2 \qquad p_5 = 11.75$

$p_8 := r + r_2 \qquad p_8 = 35.25$

$$d_3 := \sqrt{\frac{\frac{5 \cdot A_s}{12}}{.785375}} \qquad r_3 := \frac{d_3}{2} \qquad r_3 = 15.17$$

$p_4 := r - r_3 \qquad p_4 = 8.33$

$p_9 := r + r_3 \qquad p_9 = 38.67$

$$d_4 := \sqrt{\frac{\frac{7 \cdot A_s}{12}}{.785375}} \qquad r_4 := \frac{d_4}{2} \qquad r_4 = 17.95$$

$p_3 := r - r_4 \qquad p_3 = 5.55$

$p_{10} := r + r_4 \qquad p_{10} = 41.45$

$$d_5 := \sqrt{\frac{\frac{9 \cdot A_s}{12}}{.785375}} \qquad r_5 := \frac{d_5}{2} \qquad r_5 = 20.35$$

$p_2 := r - r_5 \qquad p_2 = 3.15$

$p_{11} := r + r_5 \qquad p_{11} = 43.85$

$$d_6 := \sqrt{\frac{\frac{11 \cdot A_s}{12}}{.785375}} \qquad r_6 := \frac{d_6}{2} \qquad r_6 = 22.5$$

$p_1 := r - r_6 \qquad p_1 = 1$

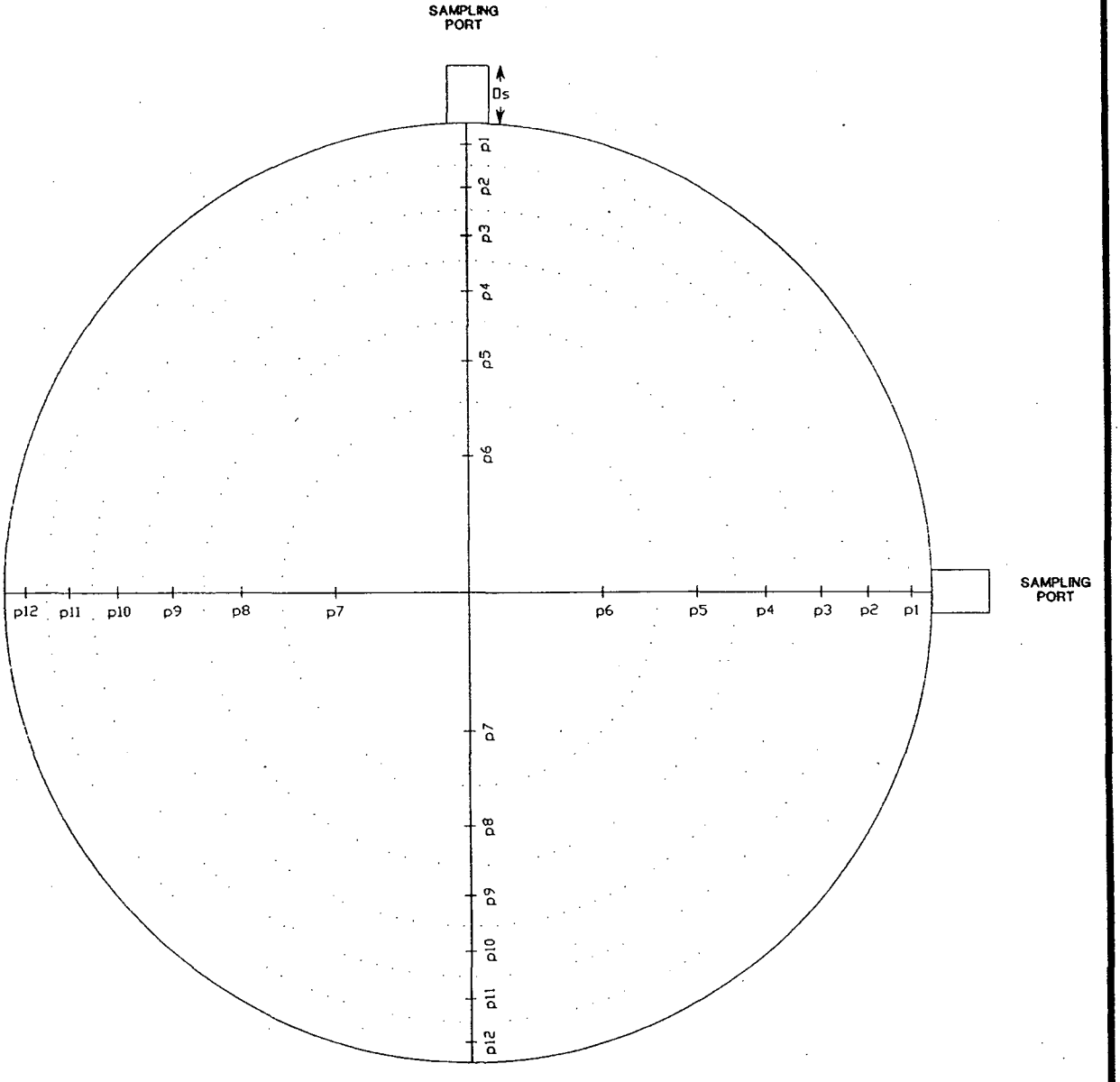
$p_{12} := r + r_6 \qquad p_{12} = 46$

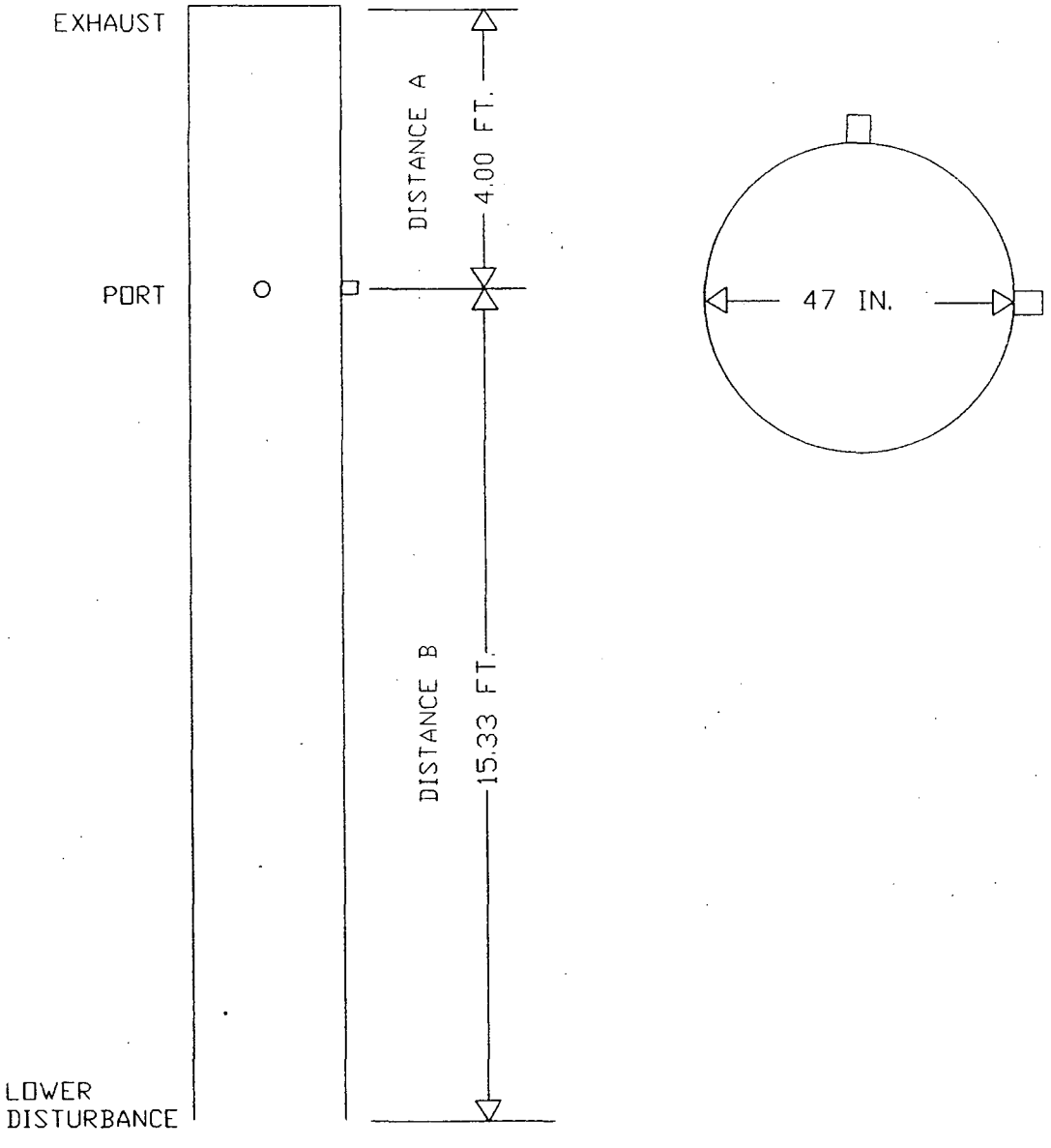
Probe Marks to Locate Sample Points (in)

$p_1 + O_s = 3$
$p_2 + O_s = 5.15$
$p_3 + O_s = 7.55$
$p_4 + O_s = 10.33$
$p_5 + O_s = 13.75$
$p_6 + O_s = 18.72$

$p_7 + O_s = 32.28$
$p_8 + O_s = 37.25$
$p_9 + O_s = 40.67$
$p_{10} + O_s = 43.45$
$p_{11} + O_s = 45.85$
$p_{12} + O_s = 48$

Traverse Point Diagram





STACK DIAGRAM

BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS–ANALYTICAL LABORATORY
6729 EDGEWATER COMMERCE PARKWAY ORLANDO FLORIDA 32810-4276
PHONE: (407) 298-8946

STEVEN COUNTS, INC.
DRUM MIX ASPHALT PLANT 3
9765 S.W. S.R. 200 OCALA, FLORIDA

DRAWN BY: RTC	DATE: 9/30/08
REVIEWED BY: KDB	VERSION: 10/366
SCALE: NTS	FILENAME: STK2526

2526
PROJECT NO.

Test Methods and Sampling Procedure

The sampling train that was used for this emission testing was manufactured by the following.

- Meter Box – Research Appliance Company (R.A.C.)
- Impingers – Southeastern Lab Apparatus, Inc.
- Filter Holder - Southeastern Lab Apparatus, Inc.
- Probe Assembly – Apex Instruments, Inc.
- Sampling Nozzle - Apex Instruments, Inc.
- Filter Hot Box – Bottorf Associates, Inc.
- Umbilical Cord - Bottorf Associates, Inc.
- Digital thermometers – Omega
- Fyrite – Bacharach Industrial Instruments Co.

The sampling train meets all specifications as outlined by the United States Environmental Protection Agency.

As specified in the various test methods, all necessary calibrations on the dry gas meter, orifice, thermocouples, digital thermometers, sampling nozzle, and pitot tube were performed. The results of the calibrations are included in this report.

EPA Method 1 (Sample and Velocity Traverses For Stationary Sources) was used to determine the number of sampling points and the sampling location. The test location and nearest disturbances (upstream and downstream) from the test site can be found on the included stack diagram.

EPA Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate, Type S Pitot Tube) was used to determine the stack gas velocity and volumetric flow rate. An S-type pitot tube was used in conjunction with a dual inclined oil gauge manometer. Prior to and after each test repetition, a leak check was performed on the pitot tube / manometer assembly and indicated no leak for 15 seconds.

EPA Method 3 (Gas Analysis For The Determination of Dry Molecular Weight) was used to determine the dry molecular weight of the stack gas. A Fyrite analysis of gas grab samples was performed during each test repetition.

EPA Method 4 (Determination of Moisture Content of Stack Gases) was used to determine the stack gas moisture content during each test repetition.

EPA Method 5 (Determination of Particulate Emissions from Stationary Sources) was used to determine particulate concentration and particulate mass rate during each test repetition. The sampling train consisted of a calibrated nozzle, probe with heated liner, glass fiber filter and filter holder, umbilical cord, four impingers, leak free pump, dry gas meter and orifice. A detailed schematic of the train can be found in the included EPA Method No. 5 Sampling Train Diagram.

Before each test run, the probe and filter holder assembly were secured in the filter hot box. In each of the first two impingers was placed 100 milliliters of distilled water. The third impinger was left empty, and the fourth impinger was loaded with 200.0 grams of silica gel. Before each test repetition, an optional leak check was performed to ensure all connections were secure.

After the probe and filter heaters warmed up to the specified operating temperature, the probe was inserted into the stack at the first sampling traverse point. The initial gas meter reading, run start time, and stack gas parameters were recorded on the field data sheet (Microsoft Excel and Lap Top Computer used), the pump turned on, and the sampling rate set at the isokinetic rate. At the end of the sampling period for the first point, the probe was moved to the next traverse point, and the sampling rate was adjusted to maintain the isokinetic sampling rate for the measured gas

parameters at that point. This procedure was followed until all of the traverse points had been sampled. At each point, the following information was measured and recorded on the field data sheet: dry gas meter volume, stack gas velocity pressure differential, orifice meter pressure differential, stack gas temperature, sample train filter exit gas temperature, impinger train exit gas temperature, dry gas meter temperature, and sample train system vacuum. After each sampling port was completed, the main valve was closed, pump turned off, and the probe was removed from the stack. After all of the traverse points had been sampled, the main valve was closed, pump turned off, and the probe was removed from the stack.

Immediately following each test repetition (run), condensate was drained from the umbilical cord into the impinger train, and a leak check was performed on the sample train to a vacuum that was equal to or higher then the highest vacuum obtained during the sampling run. The leak check indicated no leak or less then the allowable 0.02 CFM. The sampling train was then disassembled. The filter holder was first removed, and then the filter removed from the filter holder in a controlled environment to ensure that no particulate matter was lost during the recovery process. The filter was placed in a sealed, labeled container and returned to the laboratory. The front half of the filter holder, probe, union and nozzle were brushed and cleaned until all particulate matter was removed. Reagent grade acetone was used in a controlled environment to ensure that no particulate matter was lost during the recovery process. The acetone wash was placed in a labeled polyethylene container, level marked, and returned to the laboratory.

Next, the moisture catch from the first three impingers was measured with a graduated cylinder, and the silica gel from the fourth impinger returned to its labeled container, sealed, and returned to the laboratory. The impingers were then reloaded as previously described.

All samples including filters, acetone wash, and silica gel are received at the laboratory. The filters are desiccated for a minimum of 24 hours, and then weighed to a constant weight.

A sample of the acetone used for cleanup was saved as a blank in a separate container labeled "Acetone Blank". The contents of each of the four acetone containers were transferred to tared beakers. The containers were then rinsed with acetone to ensure that all of the particulate matter was recovered. The volume of the acetone was then recorded and then evaporated by placing the beakers on a low temperature (below boiling point) hot plate. The evaporation was closely supervised to prevent bumping and subsequent loss of the sample. Each beaker, with residue, was desiccated for 24 hours and weighed to a constant weight and reported the nearest 0.1 milligrams.

The pre-weighed silica gel samples were returned in their original containers. The samples were weighed to the nearest 0.5 grams.

EPA METHOD NO. 9 (Visual Determination of the Opacity of Emissions from Stationary Sources)

1. Principle and Applicability

1.1 Principle. The opacity of emissions from stationary sources is determined visually by a qualified observer.

1.2 Applicability This method is applicable for the determination of the opacity of emissions from stationary sources and for qualifying observers for visually determining opacity of emissions.

2. Procedures

The observer qualified in accordance with paragraph 3 of this method shall use the following procedures for visually determining the opacity of emissions:

2.1, Position The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140 sector to his back. Consistent with the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction, and when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, non circular, stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight perpendicular to the longer axis of such a set of multiples stacks (e.g., stubstacks on baghouses).

2.2 Field Records The observer shall record the name of the plant, emission location, type facility, observer's name and affiliation, a sketch of the observer's position relative to the source, and the date on a field data sheet. The time, estimated 'distances to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on a field data sheet at the time opacity readings are initiated and completed.

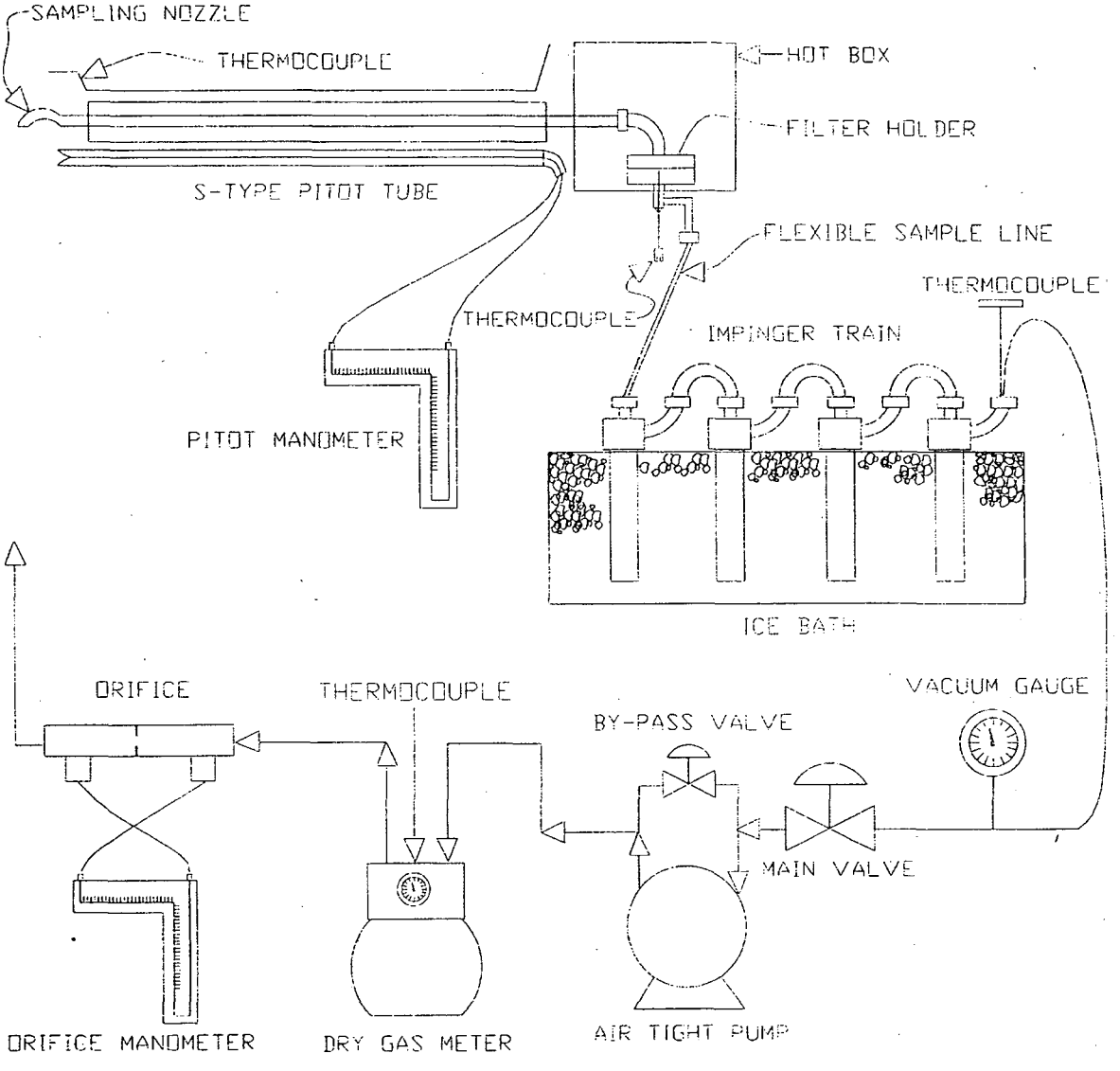
2.3 Observations Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume momentarily at 15 second intervals.

2.3.1 Attached Steam Plumes When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observation shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

2.3.2 Detached Steam Plume When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

2.4 Recording Observation Opacity observation shall be recorded to the nearest 5 percent at 15 second intervals on an observation recorded sheet. A minimum of 24 observations shall be recorded. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15 second period.

2.5 Data Reduction Opacity shall be determined as an average of 24 consecutive observations recorded at 15 second intervals. Divide the observations recorded on the record sheet into sets of 24 consecutive observations. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap. For each set 24 observations, calculate the average by summing the opacity of the 24 observation and dividing this sum by 24. If an applicable standard specifies an averaging time requiring more than 24 observations calculate the average for all observations made 'during the, specified time period. Record the average, opacity on a record sheet.



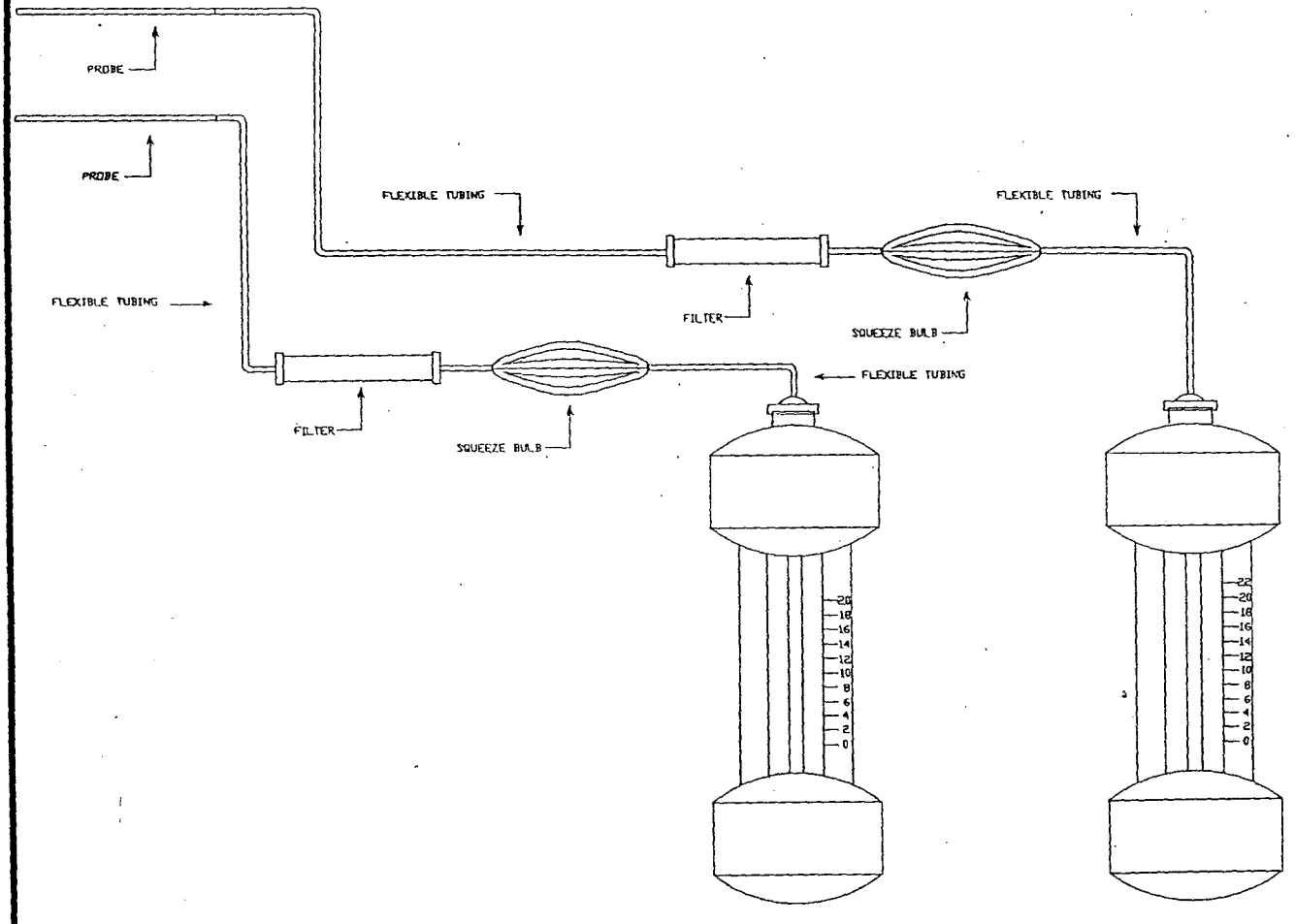
SAMPLING EQUIPMENT SCHEMATIC DIAGRAM

DATE:	REVISION:

BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS - ANALYTICAL LABORATORY
6129 EDGEWATER COMMERCE PARKWAY ORLANDO FLORIDA 32810-4276
PHONE: (407) 298-8846

EPA METHOD 5 SAMPLING TRAIN

DRAWN BY: KDD	DATE: 1/22/91	0001
REVIEWED BY: RTC	VERSION: AUTOSKETCH	
SCALE: NO SCALE	FILENAME: EPA5DIAG	PROJECT NO.



DATE:	REVISION:

BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS - ANALYTICAL LABORATORY
6767 EXECUTIVE COMMERCE PARKWAY ORLANDO FLORIDA 32810-4619
PHONE (407) 298-4114

EPA METHOD 3 SAMPLING TRAIN

DRAWN BY:	KDB	DATE: 1/29/91	0001
REVIEWED BY:	STC	VERSION: AUTOSKETCH	
SCALE:	NO SCALE	FILENAME: EPA3DIAG	PROJECT NO.

APEX INSTRUMENTS ORIFICE SET CALIBRATION

Calibration Information	
Orifice Series	NB
Serial Number	40-73
Meter Gamma	0.99800

Calibration Conditions			
Date	Time	24-Jul-02	9:15
Barometric Pressure		29.7	in Hg
Theoretical Critical Vacuum[1]		14.0	in Hg
Calibration Technician		QMD	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	cR/in Hg

[1]The Critical Orifice Coefficient, K', in English units, $(ft^3*R^{*1/2})/(in.Hg*min)$.
[2]The Critical Orifice Coefficient, K', in Metric units, $(m^3*K^{*1/2})/(mmHg*min)$.

Calibration Data												Results	
			Metering Console						Critical Orifice				
Run #	Orifice Number	Run Time Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Volume Total	Outlet Temp Initial	Outlet Temp Final	Amb Temp Initial	Amb Temp Final	Actual Vacuum	Coefficient English Units	Coefficient Metric Units
		(Θ)	(P_m)	(V_{mi})	(V_{mf})	(V_m)	(t_{mi})	(t_{mf})	($t_{amb i}$)	($t_{amb f}$)		K'	K'
		min	in H_2O	cubic feet	cubic feet	cubic feet	°F	°F	°F	°F	in Hg	see above[1]	see above[2]
1	40.0	6	0.30	762.500	764.357	1.857	80	80	79	79	24	0.2345	1.949E-04
2	40.0	6	0.30	764.357	766.206	1.849	80	80	79	79	24	0.2335	1.940E-04
3	40.0	6	0.30	766.206	768.065	1.859	80	80	79	80	24	0.2349	1.952E-04
											Average	0.2343	1.947E-04
1	48.0	6	0.70	768.065	770.822	2.757	80	80	79	79	23	0.3485	2.896E-04
2	48.0	6	0.70	770.822	773.579	2.757	80	80	80	80	23	0.3488	2.898E-04
3	48.0	6	0.70	773.579	776.338	2.759	80	80	80	80	23	0.3491	2.901E-04
											Average	0.3488	2.898E-04
1	55.0	16	1.20	776.338	785.980	9.642	80	80	80	80	21	0.4581	3.806E-04
2	55.0	6	1.20	785.980	789.592	3.612	80	80	81	81	21	0.4580	3.806E-04
3	55.0	6	1.20	789.592	793.208	3.616	80	80	81	81	21	0.4585	3.810E-04
											Average	0.4582	3.808E-04
1	63.0	6	2.00	793.208	797.876	4.668	81	81	81	81	20	0.5920	4.919E-04
2	63.0	6	2.00	797.876	802.547	4.671	81	81	82	81	20	0.5927	4.925E-04
3	63.0	6	2.00	802.547	807.219	4.672	81	81	82	82	20	0.5931	4.928E-04
											Average	0.5926	4.924E-04
1	73.0	6	3.50	807.219	813.626	6.407	81	81	82	82	17	0.8163	6.783E-04
2	73.0	6	3.50	813.626	820.035	6.409	82	82	82	82	17	0.8151	6.773E-04
3	73.0	6	3.50	820.035	826.450	6.415	82	83	82	92	17	0.8188	6.804E-04
											Average	0.8167	6.787E-04

I certify that the above Orifice Set was calibrated in accordance with USEPA Methods, CFR 40 Part 60, Appendix A, Method 5, Item 7.2.2

Signature [signature] Date 9/10/02

APEX INSTRUMENTS METHOD 5 PRE-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
5-POINT ENGLISH UNITS

BOTTORF ASSOCIATES, INC. METER NO. 2 ANNUAL METER CALIBRATION

Meter Console Information	
Console Model Number	RACT 2 (23/3)
Console Serial Number	2075
DGM Model Number	N/A
DGM Serial Number	N/A

Calibration Conditions			
Date	Time	1-Jul-08	14:08
Barometric Pressure		30.05	in Hg
Theoretical Critical Vacuum[1]		14.2	in Hg
Calibration Technician		RTC	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	°R/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3 \cdot {}^\circ R^{1/2})/(in.Hg \cdot min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_m)	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
5.0	4.10	626.840	632.278	90	91	NB73	0.8167	82	80	16
8.0	2.10	632.278	638.636	91	92	NB63	0.5926	80	78	16
9.0	1.20	638.636	644.198	92	93	NB55	0.4582	78	78	16
12.0	0.72	644.198	649.858	92	93	NB48	0.3488	78	79	16
19.0	0.30	649.858	655.850	92	93	NB40	0.2343	78	79	16

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
5.291	1.058	5.276	1.055	0.997	-0.001	1.055	2.037	0.134
6.145	0.768	6.136	0.767	0.999	0.000	0.767	1.952	0.049
5.354	0.595	5.343	0.594	0.998	0.000	0.594	1.851	-0.053
5.442	0.454	5.420	0.452	0.996	-0.002	0.452	1.914	0.010
5.755	0.303	5.765	0.303	1.002	0.003	0.303	1.763	-0.140
				0.998	Y Average		1.903	ΔH@ Average

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +-0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR 40 Part 60, using calibrated critical orifices.
The critical orifices were calibrated using a Dry Gas meter that was calibrated with Wet Test Meter # 11AE6,
which in turn was calibrated using the American Bell Prover # 3785, certificate # F107, which is traceable to the National Bureau of Standards (N.I.S.T.).

Signature Roger T. Bottorff Date 7-1-08

APEX INSTRUMENTS METHOD 5 POST-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
3-POINT ENGLISH UNITS

STEVEN COUNTS, INC., PLANT 3 - POST TEST METER CALIBRATION

Meter Console Information	
Console Model Number	RACT 2 (2343)
Console Serial Number	2075
DGM Model Number	N/A
DGM Serial Number	N/A

Calibration Conditions			
Date	Time	29-Sep-08	14:35
Barometric Pressure		29.96	in Hg
Theoretical Critical Vacuum[1]		14.1	in Hg
Calibration Technician		RTC	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	oR/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3*°R^{1/2})/(in.Hg*min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_{mi})	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
5.0	4.150	471.670	477.140	90	90	NB73	0.8167	82	77	16
9.0	1.200	477.140	482.713	90	90	NB55	0.4582	77	76	16
12.0	0.720	482.713	488.380	90	91	NB48	0.3488	76	75	16

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
5.312	1.062	5.267	1.053	0.992	-0.001	1.053	2.065	0.118
5.373	0.597	5.334	0.593	0.993	0.000	0.593	1.860	-0.087
5.452	0.454	5.419	0.452	0.994	0.001	0.452	1.916	-0.031
				0.993	Y Average		1.947	ΔH@ Average

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +-0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR 40 Part 60, using calibrated critical orifices.
The critical orifices were calibrated using a Dry Gas meter that was calibrated with Wet Test Meter # 11AE6,
which in turn was calibrated using the American Bell Prover # 3785, certificate # F107, which is traceable to the National Bureau of Standards (N.I.S.T.).

Signature Roger Tidwell Date 9-29-08

Thermocouple Calibration

Calibration Date: June 30, 2008
Calibration Device: NIST Thermometer
Calibrated By: Roger Caldwell

Thermocouple Calibration

Device	Ice Bath	Ambient Air	Boiling Water
NIST Thermometer	32	79	212
Dry Gas Meter Thermocouple	31	78	211
Impinger Outlet Thermocouple	32	78	213
Stack Temperature (4 ft. Probe Thermocouple) (Heated)	31	79	211
Stack Temperature (5 ft. Probe Thermocouple) (Heated)	32	79	212
Stack Temperature (6 ft. Probe Thermocouple) (Heated)	33	78	213
Stack Temperature (6 ft. Probe Thermocouple) (UnHeated)	33	79	213
Filter Thermocouple	32	78	211
Ambient Thermocouple (6")	33	80	213

APEX INSTRUMENTS METHOD 5 POST-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
3-POINT ENGLISH UNITS
STEVEN COUNTS, INC., PLANT 3 - POST TEST METER CALIBRATION

Meter Console Information	
Console Model Number	RACT 2 (2343)
Console Serial Number	2075
DGM Model Number	N/A
DGM Serial Number	N/A

Calibration Conditions			
Date	Time	29-Sep-08	14:35
Barometric Pressure		29.96	in Hg
Theoretical Critical Vacuum[1]		14.1	in Hg
Calibration Technician		RTC	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	oR/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3 °R^{1/2})/(in.Hg * min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_{mi})	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
5.0	4.150	471.670	477.140	90	90	NB73	0.8187	82	77	16
9.0	1.200	477.140	482.713	90	90	NB55	0.4582	77	76	16
12.0	0.720	482.713	488.380	90	91	NB48	0.3488	76	75	16

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
5.312	1.062	5.267	1.053	0.992	-0.001	1.053	2.065	0.118
5.373	0.597	5.334	0.593	0.993	0.000	0.593	1.860	-0.087
5.452	0.454	5.419	0.452	0.994	0.001	0.452	1.918	-0.031
				0.993	Y Average		1.947	ΔH@ Average

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +-0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR 40 Part 60, using calibrated critical orifices.
The critical orifices were calibrated using a Dry Gas meter that was calibrated with Wet Test Meter # 11AE6,
which in turn was calibrated using the American Bell Prover # 3785, certificate # F107, which is traceable to the National Bureau of Standards (N.I.S.T.).

Signature Roger T Caldwell Date 9-29-08

Thermocouple Calibration

Calibration Date: June 30, 2008
Calibration Device: NIST Thermometer
Calibrated By: Roger Caldwell

Thermocouple Calibration

Device	Ice Bath	Ambient Air	Boiling Water
NIST Thermometer	32	79	212
Dry Gas Meter Thermocouple	31	78	211
Impinger Outlet Thermocouple	32	78	213
Stack Temperature (4 ft. Probe Thermocouple) (Heated)	31	79	211
Stack Temperature (5 ft. Probe Thermocouple) (Heated)	32	79	212
Stack Temperature (6 ft. Probe Thermocouple) (Heated)	33	78	213
Stack Temperature (6 ft. Probe Thermocouple) (UnHeated)	33	79	213
Filter Thermocouple	32	78	211
Ambient Thermocouple (6")	33	80	213

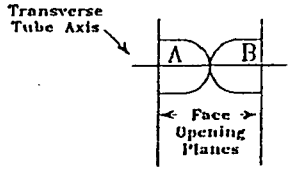
Pitot Tube Calibration

Pitot Tube Identification: Five Foot Heated Probe

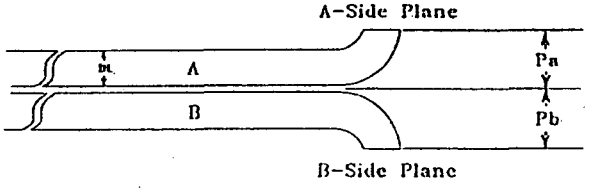
Calibration Date: 7-2-08

Calibrated By: Roger Caldwell

Are Pitot Tube openings damaged: No

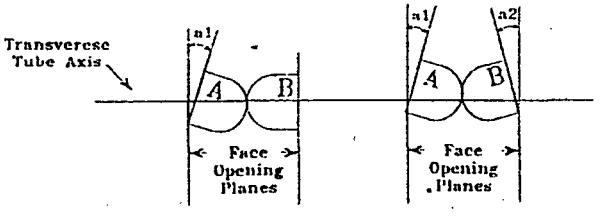


Dt = 0.375 inches



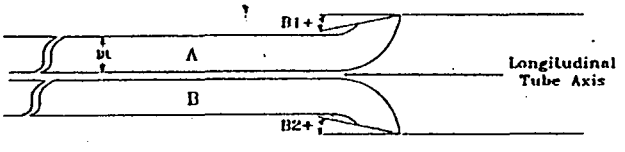
Dt x 1.05 = 0.394 inches

Dt x 1.50 = 0.5625 inches



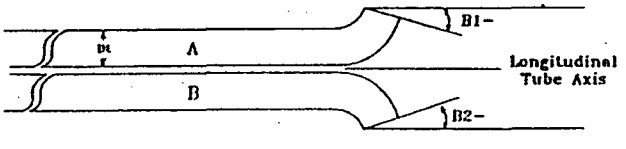
Pa = 0.460 inches

Pb = 0.460 inches



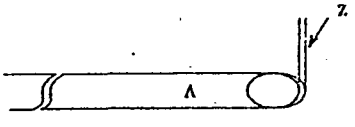
a1 = 0 degrees

a2 = 0 degrees

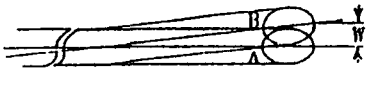


B1 = 0 degrees

B2 = 0 degrees



Z = 0 inches



W = 0 inches

The above measurements demonstrate that top side and end views of the face openings of the tube are aligned within the specifications contained in figure 2-2 and 2-3 of EPA Method 2. Therefore a pitot tube coefficient value of 0.84 has been assigned to this pitot tube.

PARTICULATE FIELD DATA

RUN NO. 1

FACILITY NAME: *STEVEN COUNTS, INC.*

LOCATION: *S.R.200 & C.R.484 (14 MILES SW. OF OCALA)*

SOURCE NAME: *DRUM MIX ASPHALT PLANT 3 WITH KNOCK OUT BOX AND BAGHOUSE*

PROJECT NO.	2526
DATE:	9/29/2008
OPERATOR:	RTC
START TIME:	8:09 AM
FINISH TIME:	9:12 AM
K FACTOR:	2.2
ASSUMED MOISTURE:	20
DRY GAS METER NO.	2
METER CAL. DATE	7/1/2008
Cp:	0.84
^H AT ORIFICE (IN H2O	1.903
Y:	0.998
Y/Yi:	
Pre Pitot Leak Check	0 @ 5"H2O
Post Pitot Leak Check	0 @ 5"H2O
Pre Meter Leak Check	0.0@15"HG
Post Meter Leak Check	0.0 @ 5"HG
Probe	5'

NOZZLE MEASUREMENT 1 (IN)	0.243
NOZZLE MEASUREMENT 2 (IN)	0.242
NOZZLE MEASUREMENT 3 (IN)	0.242
AVERAGE NOZZLE DIAMETER (IN:)	0.24233333
STACK DIAMETER (IN):	47
STATIC PRESSURE (IN. H2O):	-0.13
BAR. PRESSURE (IN HG):	29.96
TEST TIME (MIN):	60
METERED VOLUME (CU FT):	53.27
AVERAGE SQ RT ^P :	1.0743
AVERAGE ^H (IN H2O):	2.548
AVERAGE METER TEMP (F):	84.917
AVERAGE STACK TEMP (F):	209.63
STACK GAS OXYGEN (%)	15.50
STACK GAS CARBON DIOXIDE (%)	4.50
TOTAL NUMBER OF POINTS:	24
WATER COLLECTED 1ST 3 IMP (ML)	235

POINT NUMBER	SAMPLING TIME (MIN)	DRY GAS METER (CUBIC FT)	VELOCITY HEAD (IN H_2O)	SQUARE ROOT OF DELTA P (IN H2O)	PRESSURE DIFFERENTIAL ACROSS ORIFICE (IN H2O)	DRY GAS METER TEMP (F)	PUMP VACUUM (IN HG)	IMPINGER TEMP (F)	FILTER TEMP (F)	STACK TEMP (F)
		307.85								
1	2.5	309.90	1.10	1.049	2.420	77	3	47	244	210
2	5.0	312.10	1.10	1.049	2.420	77	4	48	249	212
3	7.5	314.20	1.20	1.095	2.640	77	5	50	252	213
4	10.0	316.00	0.95	0.975	2.090	78	4	51	255	214
5	12.5	318.00	0.94	0.970	2.068	78	4	52	258	214
6	15.0	320.00	0.93	0.964	2.046	80	4	52	261	214
7	17.5	322.00	0.98	0.990	2.156	80	4	52	254	214
8	20.0	324.10	1.10	1.049	2.420	82	5	52	249	214
9	22.5	326.30	1.20	1.095	2.640	83	5	53	250	214
10	25.0	328.60	1.30	1.140	2.860	84	5	53	252	214
11	27.5	330.90	1.30	1.140	2.860	84	5	54	253	213
12	30.0	333.15	1.30	1.140	2.860	84	5	54	253	211
1	2.5	335.30	1.10	1.049	2.420	85	5	52	243	210
2	5.0	337.60	1.20	1.095	2.640	86	5	51	244	211
3	7.5	339.70	1.20	1.095	2.640	87	5	52	247	210
4	10.0	341.90	1.20	1.095	2.640	87	5	52	247	209
5	12.5	344.00	1.00	1.000	2.200	88	4	52	246	206
6	15.0	346.00	1.00	1.000	2.200	89	4	52	246	205
7	17.5	348.30	1.10	1.049	2.420	90	4	52	245	204
8	20.0	351.00	1.30	1.140	2.860	91	4	52	246	204
9	22.5	353.50	1.40	1.183	3.080	92	4	52	248	204
10	25.0	356.70	1.40	1.183	3.080	92	4	53	249	204
11	27.5	359.00	1.30	1.140	2.860	93	5	53	248	204
12	30.0	361.12	1.20	1.095	2.640	94	4	53	243	203

This form was filled out in the field with a lap top computer and Microsoft Excel software.

PARTICULATE FIELD DATA

RUN NO. 2

FACILITY NAME: *STEVEN COUNTS, INC.*

LOCATION: *S.R.200 & C.R.484 (14 MILES SW. OF OCALA)*

SOURCE NAME: *DRUM MIX ASPHALT PLANT 3 WITH KNOCK OUT BOX AND BAGHOUSE*

PROJECT NO.	2526
DATE:	9/29/2008
OPERATOR:	RTC
START TIME:	9:32 AM
FINISH TIME:	10:33 AM
K FACTOR:	2.3
ASSUMED MOISTURE:	18
DRY GAS METER NO.	2
METER CAL. DATE	7/1/2008
Cp:	0.84
^H AT ORIFICE (IN H2O	1.903
Y:	0.998
Y/Yi:	
Pre Pitot Leak Check	0 @ 5"H2O
Post Pitot Leak Check	0 @ 5"H2O
Pre Meter Leak Check	0.0@15"HG
Post Meter Leak Check	0.0 @ 6"HG
Probe	5'

NOZZLE MEASUREMENT 1 (IN)	0.243
NOZZLE MEASUREMENT 2 (IN)	0.242
NOZZLE MEASUREMENT 3 (IN)	0.242
AVERAGE NOZZLE DIAMETER (IN:)	0.24233333
STACK DIAMETER (IN):	47
STATIC PRESSURE (IN. H2O):	-0.13
BAR. PRESSURE (IN HG):	29.96
TEST TIME (MIN):	60
METERED VOLUME (CU FT):	53.46
AVERAGE SQ RT ^P :	1.0637
AVERAGE ^H (IN H2O):	2.606
AVERAGE METER TEMP (F):	92.625
AVERAGE STACK TEMP (F):	203.00
STACK GAS OXYGEN (%)	15.50
STACK GAS CARBON DIOXIDE (%)	4.50
TOTAL NUMBER OF POINTS:	24
WATER COLLECTED 1ST 3 IMP (ML)	222

POINT NUMBER	SAMPLING TIME (MIN)	DRY GAS METER (CUBIC FT)	VELOCITY HEAD ($IN H_2O$)	SQUARE ROOT OF DELTA P (IN H2O)	PRESSURE DIFFERENTIAL ACROSS ORIFICE (IN H2O)	DRY GAS METER TEMP (F)	PUMP VACUUM (IN HG)	IMPINGER TEMP (F)	FILTER TEMP (F)	STACK TEMP (F)
		361.85								
1	2.5	364.10	1.10	1.049	2.530	88	5	49	262	199
2	5.0	366.40	1.20	1.095	2.760	88	6	48	252	199
3	7.5	368.60	1.10	1.049	2.530	88	6	50	249	200
4	10.0	370.60	1.10	1.049	2.530	89	6	52	261	201
5	12.5	372.80	1.10	1.049	2.530	89	6	52	265	201
6	15.0	375.00	1.10	1.049	2.530	90	6	54	249	201
7	17.5	377.20	1.00	1.000	2.300	91	6	54	247	202
8	20.0	379.30	1.10	1.049	2.530	91	6	54	250	202
9	22.5	381.70	1.30	1.140	2.990	92	6	54	251	203
10	25.0	393.90	1.10	1.049	2.530	92	6	55	250	203
11	27.5	386.20	1.30	1.140	2.990	93	6	55	248	203
12	30.0	388.50	1.20	1.095	2.760	93	6	55	248	204
1	2.5	390.80	1.10	1.049	2.530	93	6	54	244	203
2	5.0	393.00	1.20	1.095	2.760	94	6	54	245	203
3	7.5	395.30	1.20	1.095	2.760	94	6	54	244	203
4	10.0	397.50	1.10	1.049	2.530	94	6	55	245	204
5	12.5	399.60	0.99	0.995	2.277	95	5	55	251	204
6	15.0	401.80	1.00	1.000	2.300	95	5	55	251	204
7	17.5	404.00	1.10	1.049	2.530	95	5	55	251	205
8	20.0	406.30	1.10	1.049	2.530	95	6	54	251	205
9	22.5	408.50	1.10	1.049	2.530	96	6	56	249	205
10	25.0	410.70	1.20	1.095	2.760	96	6	55	247	206
11	27.5	413.00	1.20	1.095	2.760	96	6	56	246	206
12	30.0	415.31	1.20	1.095	2.760	96	6	54	245	206

This form was filled out in the field with a lap top computer and Microsoft Excel software.

PARTICULATE FIELD DATA

RUN NO. 3

FACILITY NAME: *STEVEN COUNTS, INC.*

LOCATION: *S.R.200 & C.R.484 (14 MILES SW. OF OCALA)*

SOURCE NAME: *DRUM MIX ASPHALT PLANT 3 WITH KNOCK OUT BOX AND BAGHOUSE*

PROJECT NO.	2526
DATE:	9/29/2008
OPERATOR:	RTC
START TIME:	10:54 AM
FINISH TIME:	11:55 AM
K FACTOR:	2.4
ASSUMED MOISTURE:	17
DRY GAS METER NO.	2
METER CAL. DATE	7/1/2008
Cp:	0.84
^H AT ORIFICE (IN H2O	1.903
Y:	0.998
Y/Yi:	
Pre Pitot Leak Check	0 @ 5"H2O
Post Pitot Leak Check	0 @ 5"H2O
Pre Meter Leak Check	0.0@15"HG
Post Meter Leak Check	0.0 @ 5"HG
Probe	5'

NOZZLE MEASUREMENT 1 (IN)	0.243
NOZZLE MEASUREMENT 2 (IN)	0.242
NOZZLE MEASUREMENT 3 (IN)	0.242
AVERAGE NOZZLE DIAMETER (IN:)	0.24233333
STACK DIAMETER (IN):	47
STATIC PRESSURE (IN. H2O):	-0.13
BAR. PRESSURE (IN HG):	29.96
TEST TIME (MIN):	60
METERED VOLUME (CU FT):	54.17
AVERAGE SQ RT ^P :	1.0531
AVERAGE ^H (IN H2O):	2.667
AVERAGE METER TEMP (F):	94.500
AVERAGE STACK TEMP (F):	209.46
STACK GAS OXYGEN (%)	15.50
STACK GAS CARBON DIOXIDE (%)	4.50
TOTAL NUMBER OF POINTS:	24
WATER COLLECTED 1ST 3 IMP (ML)	244

POINT NUMBER	SAMPLING TIME (MIN)	DRY GAS METER (CUBIC FT)	VELOCITY HEAD ($IN H_2O$)	SQUARE ROOT OF DELTA P (IN H2O)	PRESSURE DIFFERENTIAL ACROSS ORIFICE (IN H2O)	DRY GAS METER TEMP (F)	PUMP VACUUM (IN HG)	IMPINGER TEMP (F)	FILTER TEMP (F)	STACK TEMP (F)
		416.25								
1	2.5	418.50	1.10	1.049	2.640	90	4	50	244	205
2	5.0	420.80	1.10	1.049	2.640	90	5	49	249	205
3	7.5	423.00	1.10	1.049	2.640	90	5	54	263	206
4	10.0	425.10	1.00	1.000	2.400	90	5	56	264	209
5	12.5	427.10	0.97	0.985	2.328	91	4	56	255	208
6	15.0	429.30	1.00	1.000	2.400	92	5	53	247	209
7	17.5	431.40	1.00	1.000	2.400	93	5	53	245	209
8	20.0	433.70	1.10	1.049	2.640	94	5	53	245	208
9	22.5	436.10	1.20	1.095	2.880	95	5	54	248	208
10	25.0	438.50	1.20	1.095	2.880	95	5	53	252	206
11	27.5	440.80	1.30	1.140	3.120	95	5	54	253	206
12	30.0	443.20	1.30	1.140	3.120	95	5	53	253	207
1	2.5	445.50	1.10	1.049	2.640	95	5	50	241	205
2	5.0	447.80	1.20	1.095	2.880	96	5	52	250	208
3	7.5	450.20	1.20	1.095	2.880	96	5	51	255	209
4	10.0	452.40	1.00	1.000	2.400	96	5	52	254	210
5	12.5	454.50	1.00	1.000	2.400	96	5	52	250	212
6	15.0	456.70	1.00	1.000	2.400	96	5	53	248	213
7	17.5	458.90	1.00	1.000	2.400	97	5	52	246	213
8	20.0	461.20	1.10	1.049	2.640	97	5	53	246	213
9	22.5	463.40	1.10	1.049	2.640	97	5	53	245	214
10	25.0	465.80	1.20	1.095	2.880	97	5	52	244	214
11	27.5	468.10	1.20	1.095	2.880	97	5	53	243	215
12	30.0	470.42	1.20	1.095	2.880	98	5	53	242	215

This form was filled out in the field with a lap top computer and Microsoft Excel software.

PLANT OPERATIONAL DATA DURING EMISSION TESTING
* Please attach a copy of the most recent fuel oil analysis.

FACILITY NAME : STEVEN COUNTS, INC., PLANT 3

SOURCE TYPE : ASPHALT PLANT NO. 1 WITH BAGHOUSE

DATE OF TEST : 9-29-08

RUN NO.	DATE OF RUN	TIME OF RUN (START TIME) TO (FINISH TIME)	PRODUCTION RATE (TONS/HOUR)	PERCENT RECYCLE IN MIX (%)	FUEL TYPE	FUEL RATE (GPH) or (GAL/TON)	BAGHOUSE PRESSURE DROP (IN. H2O)
1	9-29	8:09 9:12	242 Tons.	0	#5 OIL	1.16	4
2	9-29	9:32 10:33	244 Tons.	0	#5 OIL	1.16	4
3	9-29	10:54 11:55	244 Ton	0	#5 OIL	1.16	4

THIS IS TO CERTIFY THAT THE INFORMATION PROVIDED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE

Billy Bond

SYNERGY RECYCLING LLC

9-29-08

DELIVERY TICKET
38115

Friday, September 26, 2008
Scheduled Date: 9/26/2008
Last Service Date:
Frequency:
Purchase Order: 31346

SOLD TO	SHIP TO NEW START
STEVEN COUNTS, INC 3601 S.W. 38TH AVE OCALA, FL 34474-4378 352-307-2410	STEVEN COUNTS, INC PLANT #3 9765 SW HWY 200 OCALA, FL 34481 352-266-0125 Acct# 6314-002

Service/Billing Description

Service Code	Service Description	Qty	UofM
GALLONS OF ON-SPEC-USED OIL- FUEL			
API	30.1		
PPG	7.291		
FLASHPOINT	GREATER THAN 200F SW-1010		
MOISTURE	BY DISTILLATION <1%		
ARSENIC	<1.0 PPM		
CADMIUM	0.15 PPM		
CHROMIUM	<4.0 PPM		
LEAD	24.0 PPM		
PCB	< 1.0 PPM		
TOTAL HALOGONS	300 PPM SW486 METH 9077		
SULFUR	.3776%		
BTU	138,988		

Gallons 7,050

G— 77,740
T— 26,700
N— 51,040

Delivered By: 5609

Received By:

ANALYTICAL #0810851-01/BATCH QUANTITY 59,006 GALLONS HEAT TO 145F TO MAINTAIN 80 TO 100 SSU

DELIVERY TICKET
38115

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

September 22, 2008

LABORATORY REPORT

Client: Synergy Recycling LLC
Address: P.O. Box 2521
Kingsland, GA 31548

Date Collected: 9/19/2008
Date Received: 9/22/2008
Project #: N/A
Client ID #: 091808989
Laboratory ID #: 0810851-01
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Arsenic	6010	<1.0ppm	9/22/2008
Cadmium	6010	0.15ppm	9/22/2008
Chromium	6010	<4.0ppm	9/22/2008
Lead	6010	24.0ppm	9/22/2008
PCB	8082	<1.0ppm	9/22/2008
Sulfur, Wt%	D-2622-94	0.3776%	9/22/2008

Laboratory Manager: _____

AeroMet
Engineering, Inc.
Solutions for a Changing Environment

Certification of Visible Opacity Reading

Sara Greivell

qualified to conduct EPA Method 9 Tests for visible opacity in accordance with the methods established for such qualification in 40 CFR Part 60 Appendix A on August 7, 2008

Date: 8/7/08

Signature: _____
Instructor, AeroMet Engineering

Certificate expires: ***02/07/09***

GROVE SCIENTIFIC & ENGINEERING

VISIBLE EMISSIONS OBSERVATION FORM

COMPLIANCE STATUS: YES | NO | UNK

Source/Process Information

Facility Name: Steven Counts, Inc Asphalt plant 3
Source Name: Asphalt Plant #3
Permit No: 0830023-003-AC
Location Address: 9745 SW Hwy 200, Ocala FL 34481
Contact: Billy Burke
Phone No: 352-266-3108
Process/Production Rate: Asphalt Production
Control Equipment: baghouse
Operating Mode: normal
Fuel Type/Rate: #5 fuel oil
Material Type/Rate: 240 TPH
Permitted Rate: 250 TPH
Describe Emission Point: Round Metal Black Stack
Height Above Ground Level: ~40 FT
Height Relative to Observer: ~40 FT

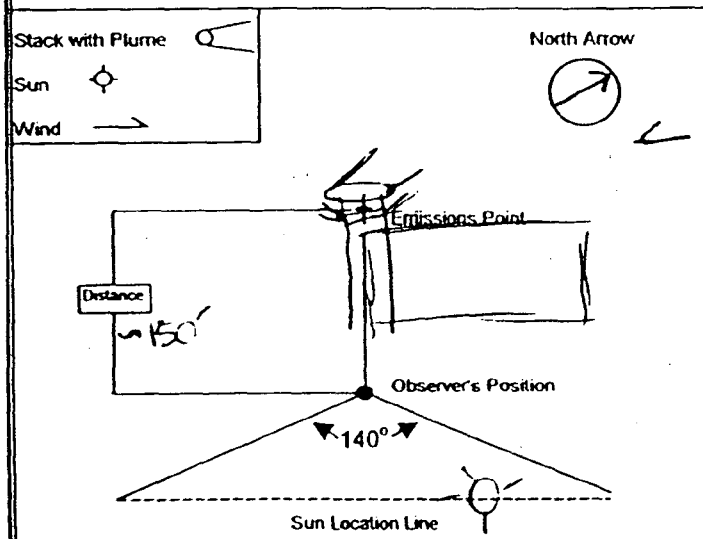
Emissions Description

Describe Emissions: Start: none visible End:
Plume Color: N/A
Plume Type: N/A
Water Droplets Present: Yes ☐ No ☒
If yes, is plume: Attached ☐ N/A Detached ☐

Meteorological Information

Background: Start: sky End:
Background Color: Start: blue End:
Sky Conditions/% Cloud Cover: Start: 10% End:
Ambient Temp: Start: 73°F End:
Wind Speed: Start: calm End: 0-2 mph
Wind Direction: Start: calm End: NE

Observation Data, Site Diagram



Observation Readings

Observation: EPA Method 9
Start Time: 8:09
Stop Time: 9:09

Sec / Min	0	15	30	45	Min / Sec	0	15	30	45
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Compliance Information

Range of Opacity Readings: Min 0 Max 0
Average of Highest 24 Consecutive Readings: 0
Short Term Average Data: Averaging Period 3 minutes Actual Average 0 %
Comments: no objectional odors detected * Run #1 *

Certification Data, Signatures

Observer's Name: Sara Greivell
Observer's Signature: Sara Greivell Date: 9-29-08
Organization: Grove Scientific + Engineering
Certified By: Aerimet Engineering Date: 8-7-08
I have received a copy of these observations: Signature Date
APES Number

Attachment C

Records for Last Three Months

Asphalt Production & Hours of Operation

2008	September		Plant 3 9765 SW Hwy 200 Ocala, FL 34481			
DATE	**Daily Tons**	**Accum Tons**		**Hrs**	**Accum Total Hrs**	**Daily Aver Ton/Hr**
		Prev Total →	96,531.58			
1-Sep		0.00	96,531.58		0	
2-Sep	307.61	307.61	96,839.19	1.5	1.5	205.07
3-Sep	394.39	702.00	97,233.58	1.5	3	262.93
4-Sep	195.19	897.19	97,428.77	1	4	195.19
5-Sep	405.80	1,302.99	97,834.57	2	6	202.90
6-Sep	254.82	1,557.81	98,089.39	1.5	7.5	169.88
7-Sep	64.68	1,622.49	98,154.07	1	8.5	64.68
8-Sep	1,107.20	2,729.69	99,261.27	5	13.5	221.44
9-Sep	1,254.04	3,983.73	100,515.31	6	19.5	209.01
10-Sep	1,293.12	5,276.85	101,808.43	6	25.5	215.52
11-Sep	833.85	6,110.70	102,642.28	4	29.5	208.46
12-Sep	1,698.25	7,808.95	104,340.53	8	37.5	212.28
13-Sep	1,101.83	8,910.78	105,442.36	5	42.5	220.37
14-Sep	214.45	9,125.23	105,656.81	1	43.5	214.45
15-Sep	977.17	10,102.40	106,633.98	4	47.5	244.29
16-Sep	2,001.55	12,103.95	108,635.53	8	55.5	250.19
17-Sep	1,001.24	13,105.19	109,636.77	5.5	61	182.04
18-Sep	791.83	13,897.02	110,428.60	3.5	64.5	226.24
19-Sep	649.49	14,546.51	111,078.09	3	67.5	216.50
20-Sep	40.67	14,587.18	111,118.76	0.5	68	81.34
21-Sep	36.94	14,624.12	111,155.70	0.5	68.5	73.88
22-Sep	357.69	14,981.81	111,513.39	1.5	70	238.46
23-Sep	753.74	15,735.55	112,267.13	3.5	73.5	215.35
24-Sep	60.81	15,796.36	112,327.94	0.5	74	121.62
25-Sep	400.20	16,196.56	112,728.14	2	76	200.10
26-Sep	326.21	16,522.77	113,054.35	1.5	77.5	217.47
27-Sep	478.07	17,000.84	113,532.42	2	79.5	239.04
28-Sep	3,202.86	20,203.70	116,735.28	13	92.5	246.37
29-Sep	3,898.89	24,102.59	120,634.17	15.5	108	251.54
30-Sep	2,991.57	27,094.16	123,625.74	12	120	249.30
			123,625.74		**120**	
this rpt =	**27,094.16**			**120**		
				Mo Avg TPH		
				226		
Year to date total		**123,625.74**				

2008	October		Plant 3 9765 SW Hwy 200 Ocala, FL 34481			
DATE	Daily Tons	Accum Tons		Hrs	Accum Total Hrs	Daily Aver Ton/Hr
		Prev Total →	123,625.74			
1-Oct	336.65	336.65	123,962.39	1.5	1.5	224.43
2-Oct	4,158.41	4,495.06	128,120.80	12	13.5	346.53
3-Oct	1,894.90	6,389.96	130,015.70	6.5	20	291.52
4-Oct	108.39	6,498.35	130,124.09	0.5	20.5	216.78
5-Oct		6,498.35	130,124.09		20.5	
6-Oct	264.67	6,763.02	130,388.76	1	21.5	264.67
7-Oct	544.25	7,307.27	130,933.01	2.5	24	217.70
8-Oct	1,219.84	8,527.11	132,152.85	5	29	243.97
9-Oct	916.65	9,443.76	133,069.50	4	33	229.16
10-Oct	685.38	10,129.14	133,754.88	3	36	228.46
11-Oct		10,129.14	133,754.88		36	
12-Oct		10,129.14	133,754.88		36	
13-Oct	366.38	10,495.52	134,121.26	1.5	37.5	244.25
14-Oct	606.89	11,102.41	134,728.15	2.5	40	242.76
15-Oct	153.26	11,255.67	134,881.41	1	41	153.26
16-Oct	469.49	11,725.16	135,350.90	2	43	234.75
17-Oct	387.65	12,112.81	135,738.55	1.5	44.5	258.43
18-Oct		12,112.81	135,738.55		44.5	
19-Oct		12,112.81	135,738.55		44.5	
20-Oct	311.35	12,424.16	136,049.90	1.5	46	207.57
21-Oct	592.36	13,016.52	136,642.26	2.5	48.5	236.94
22-Oct	325.60	13,342.12	136,967.86	1.5	50	217.07
23-Oct	208.36	13,550.48	137,176.22	1	51	208.36
24-Oct	170.11	13,720.59	137,346.33	0.5	51.5	340.22
25-Oct		13,720.59	137,346.33		51.5	
26-Oct		13,720.59	137,346.33		51.5	
27-Oct	344.79	14,065.38	137,691.12	2	53.5	172.40
28-Oct	265.00	14,330.38	137,956.12	1	54.5	265.00
29-Oct	268.82	14,599.20	138,224.94	1	55.5	268.82
30-Oct	505.23	15,104.43	138,730.17	2	57.5	252.62
31-Oct	93.50	15,197.93	**138,823.67**	0.5	**58**	
this rpt =	**15,197.93**			**58**		
				Mo Avg TPH		
				262		
Year to date total		**138,823.67**				

2008	November		Plant 3 9765 SW Hwy 200 Ocala, FL 34481			
DATE	Daily Tons	Accum Tons		Hrs	Accum Total Hrs	Daily Aver Ton/Hr
		Prev Total →	138,823.67			
1-Nov		0.00	138,823.67		0	
2-Nov		0.00	138,823.67		0	
3-Nov		0.00	138,823.67		0	
4-Nov		0.00	138,823.67		0	
5-Nov		0.00	138,823.67		0	
6-Nov	1,659.04	1,659.04	140,482.71	7	7	237.01
7-Nov	772.13	2,431.17	141,254.84	3.5	10.5	220.61
8-Nov		2,431.17	141,254.84		10.5	
9-Nov		2,431.17	141,254.84		10.5	
10-Nov	235.37	2,666.54	141,490.21	1	11.5	235.37
11-Nov	1,831.58	4,498.12	143,321.79	7.5	19	244.21
12-Nov	1,018.77	5,516.89	144,340.56	4.5	23.5	226.39
13-Nov	282.13	5,799.02	144,622.69	1.5	25	188.09
14-Nov	55.04	5,854.06	144,677.73	0.5	25.5	110.08
15-Nov		5,854.06	144,677.73		25.5	
16-Nov		5,854.06	144,677.73		25.5	
17-Nov		5,854.06	144,677.73		25.5	
18-Nov	1,130.29	6,984.35	145,808.02	5	30.5	226.06
19-Nov	320.56	7,304.91	146,128.58	1.5	32	213.71
20-Nov	44.93	7,349.84	146,173.51	0.5	32.5	89.86
21-Nov	456.14	7,805.98	146,629.65	2	34.5	228.07
22-Nov		7,805.98	146,629.65		34.5	
23-Nov		7,805.98	146,629.65		34.5	
24-Nov	510.20	8,316.18	147,139.85	2.5	37	204.08
25-Nov		8,316.18	147,139.85		37	
26-Nov		8,316.18	147,139.85		37	
27-Nov		8,316.18	147,139.85		37	
28-Nov		8,316.18	147,139.85		37	
29-Nov		8,316.18	147,139.85		37	
30-Nov		8,316.18	147,139.85		37	
			147,139.85		**37**	
this rpt =	**8,316.18**			**37**		
				Mo Avg TPH		
				225		
Year to date total		**147,139.85**				

Fuel Usage

2008	November		Plant 3
			9765 SW Hwy 200
			Ocala, FL 34481
DATE	Daily Fuel #5 Used Oil	Accum Gallons	Yr to date Gals
		Prev Total →	231,498
1-Nov		0	231,498
2-Nov		0	231,498
3-Nov		0	231,498
4-Nov		0	231,498
5-Nov		0	231,498
6-Nov		0	231,498
7-Nov	6,897	6,897	238,395
8-Nov		6,897	238,395
9-Nov		6,897	238,395
10-Nov		6,897	238,395
11-Nov		6,897	238,395
12-Nov		6,897	238,395
13-Nov	6,943	13,840	245,338
14-Nov	926	14,766	246,264
15-Nov		14,766	246,264
16-Nov		14,766	246,264
17-Nov		14,766	246,264
18-Nov		14,766	246,264
19-Nov		14,766	246,264
20-Nov		14,766	246,264
21-Nov		14,766	246,264
22-Nov		14,766	246,264
23-Nov		14,766	246,264
24-Nov		14,766	246,264
25-Nov		14,766	246,264
26-Nov		14,766	246,264
27-Nov		14,766	246,264
28-Nov		14,766	246,264
29-Nov		14,766	246,264
30-Nov		14,766	246,264
			246,264
this rpt =	**14,766**		
Monthly Average MMBTU/hour =		55.47	
Year to date total		**246,264**	