Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources.* AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

Commonwealth of Pennsylvania
Environmental Resources
August 7, 1987

Subject: Source Test Review

To: Data File
Tri-State Asphalt Company
Canton Township, Washington County

From: John S. Pitulski
Air Quality Program Specialist
Division of Technical Services and Monitoring
Bureau of Air Quality Control

Through: Chief, Source Testing and Monitoring Section

Tri-State Asphalt operates a newly constructed H&B Asphaltic Concrete Plant at the aforementioned location. The facility is fired by No. 2 fuel oil and has a rated operating capacity of 280 tons per hour. Effluent gases from the system are controlled by a reverse pulse air type baghouse collector system.

On July 7, 1987 particulate emission testing was conducted by personnel from Hemeon Associates at the outlet duct servicing the baghouse collector. The three tests were conducted in accordance with the applicable test methods and the reported results appear to be valid. The tests are acceptable to the Department.

The following information was extracted from a test report:

Test Run Number	1	2	3
Process Feed Rate (tons/hr)	222.4	248.1	231.1
Volumetric Flow Rate (dscfm)	19700	22300	22500
Particulate Emission Rate (lb/hr)	2.1	2.2	1.7
Allowable Emission Rate (lb/hr)	15.8	15.8	15.8
Percent Isokinetic	106	92.5	87

HEMEON ASSOCIATES INC.

Air Pollution Consulting Engineers
125 Thirty-Ninth Street
Pittsburgh, PA 15201

(412) 683-2000

PARTICULATE EMISSION TESTING
TRI-STATE ASPHALT COMPANY
WASHINGTON, PA

Report to:
Mr. Alan Snow
Tri-State Asphalt Company
44 Sixteenth Street
Wheeling, West Virginia 26003

Report by:
Mr. Richard L. Campbell
Operations Manager
Hemeon Associates, Inc.
125 Thirty-ninth Street
Pittsburgh, Pennsylvania 15201

July 20, 1987

8/11/87

TABLE OF CONTENTS

1.0 Introduction

2.0 Summary of Results

3.0 Test Program Description

APPENDICES

A. Formulas and Calculations

B. Test Methodology

C. Field Data Sheets

D. Laboratory Data

E. Process Data

1.0 INTRODUCTION

On July 7, 1987 particulate emission testing was conducted on the asphalt plant baghouse at Tri-State Asphalt Company's plant in Washington, PA. The test program was authorized by Mr. Alan Snow of Tri-State Asphalt Company. Testing was performed by Mr. Richard L. Campbell and Mr. John C. Parry of Hemeon Associates, Inc. Process coordination was provided by Tri-State Asphalt Company. Testing was observed by Mr. Bruce Frye of the PA DER.

PURPOSE

The purpose of this test program was to determine whether particulate matter emissions from the baghouse was in compliance with the PA DER regulations during normal operation.

2.0 SUMMARY OF RESULTS

TABLE NO. 1 below presents the particulate emission results from testing the baghouse outlet at Tri-State Asphalt Company's plant in Washington, PA.

TABLE NO. 1

Particulate Emission Results

Date 1987	Sample Location	Test No.	Particulate Emissions		
			gr/dscf	measured lb/hr	allowable lb/hr
7/7	Baghouse Outlet	T-1	0.012	2.1	15.6
7/7	Baghouse Outlet	T-2	0.012	2.2	16.3
7/7	Baghouse Outlet	T-3	0.009	1.7	15.9

According to regulations of the PA DER, the allowable emission rate is based on process feed rate. Based on the test results, the baghouse is in compliance with the PA DER regulations for particulate emissions.

TABLE NO. 2 is a summary of the flue gas parameters and particulate results.

TABLE NO. 3 is a summary of stack flow and particulate data.

TABLE NO. 4 is a summary of allowable emission rate calculations.

Table 2
SUMMARY OF FLUE GAS PARAMETERS AND
PARTICULATE RESULTS

	T-1	T-2	T-3
TEST DATA			
Test Date	7/7/87	7/7/87	7/7/87
Static Pres., in.WC	.6	.6	.6
Pitot Readings.rms	1.11	1.16	1.14
Gas Temp., deg. F	270	290	287
Flowmeter Ave., "WC	4.11	4.19	3.67
Gasmeter, Av.Tem., F	68	68	68
Sampling Time, min	120	75	75
Sample Vol., acf	93.855	58.099	55.271
Barom. Pres. in.Hg	28.97	28.9	28.85
Condensate, ml	449	331	280
Desicc. Gain, gms	60.7	17.4	18.8
GAS COMPOSITION			
CO2, mole fraction	.08	.08	.08
O2 , mole fraction	.133	.133	.133
N2 , mole fraction	.787	.787	.787
AREAS			
Stack Area, sq.ft.	9.271	9.271	9.271
Noss.Area sq.ft.	.000341	.000341	.000341
CALCULATED RESULTS			
Gas, Dry mol. wt.	29.81	29.81	29.81
Gas Dens., lb/cu ft	.0771	.0771	.0771
Sample vol, dry scf	92.2	56.9	54
Gas Samp., dry lbs	7.11	4.39	4.16
Water in Samp., lbs	2.006	.768	.659
Water Cont. lbs/lb	.282	.175	.158
Water, volume %	31.9	22.5	20.8
Water, weight %	22	14.9	13.6
Gas Mol Wt, Actual	26.04	27.15	27.35
Gas Dens.in stack	.0474	.048	.0485
Stack Gas, acfm	41300	42000	41400
Stack Gas, lbs/hr	117000	121000	120000
St.Gas, lbs/hr dry	91000	103000	104000
St.Gas, scfm,dry	19700	22300	22500
Percent Isokinetic	106	92.5	87

Table 3
STACK GAS FLOW AND PARTICULATE EMISSIONS

TEST NO.	T-1	T-2	T-3
DATE	7/07/87	7/07/87	7/07/87
Overall sampling period	8:12AM 11:07AM	12:04PM 2:07PM	2:55PM 4:34PM
Net sampling time, mins.	120	75	75
STACK GAS			
Temperature, deg. F	270	290	287
Flow rate:			
Actual lbs/hr	117000	121000	120000
Dry basis lbs/hr	91000	103000	104000
Acfm	41300	42000	41400
Scfm, dry	19700	22300	22500
PARTICULATE MATTER			
Concentration			
Dry Basis:			
Lbs dust per 1000 lb gas	.023	.021	.016
Grains per scf	.012	.012	.009
DUST EMISSION RATE, Lbs/hr	2.1	2.2	1.7

Table 4

CALCULATION OF ALLOWABLE EMISSION RATES

Allowable Emission Formula

$A = 0.76E^{0.42}$, where:

A = Allowable emissions in pounds per hour
E = Emission index = F x W pounds per hour
F = Process factor in pounds per unit, and
W = Production or charging rate in units per hour

Test T-1

Aggregate Feed Rate = 222.4 tons per hour
Allowable Emission Rate, $A = .76\ (W \times F)^{0.42}$
$A = .76\ (222.4 \times 6)^{0.42}$
A = 15.6 pounds per hour

Test T-2

Aggregate Feed Rate = 248.1 tons per hour
Allowable Emission Rate, $A = .76\ (W \times F)^{0.42}$
$A = .76\ (248.1 \times 6)^{0.42}$
A = 16.3 pounds per hour

Test T-3

Aggregate Feed Rate = 231.1 tons per hour
Allowable Emission Rate, $A = .76\ (W \times F)^{0.42}$
$A = .76\ (231.1 \times 6)^{0.42}$
A = 15.9 pounds per hour

TABLE NO. 5 is a summary of the process feed rates during the testing periods.

TABLE NO. 5

Process Feed Rates

Date 1987	Test No.	Total Feed* (tons/hr)
7/7	T-1	222.4
7/7	T-2	248.1
7/7	T-3	231.1

*Feed rates were averaged from the computer summary for each test period.

3.0 TEST PROGRAM DESCRIPTION

Test Program Description

Sampling was conducted at the baghouse outlet after the I.D. fan as shown in Figure No. 1. A total of 30 sample points were used to traverse the 30" x 44.5" exit duct. There were five sample ports located across the 44.5" length. Six points were sampled in each port for 4 minutes a point for a total test time of 120 minutes for Test No. 1. Sample time was decreased to 2.5 minutes per point for Tests No. 2 and No. 3 to decrease the sample time.

Sampling Procedure

After selecting the sampling site and the minimum number of traverse points, the stack pressure, temperature, moisture and range of velocity head were measured according to the procedures described in the Federal Register*.

Approximately 200 grams of silica gel were weighed in a sealed impinger prior to each test. Glass fiber filters** (4 inch diameter) were desiccated for at least 24 hours and weighed to the nearest 0.1 mg on an analytical balance. One hundred ml of distilled water was placed in each of the first two impingers; the third impinger was initially empty and the impinger containing the silica gel was placed next in series. The sampling train was leak-checked at the sampling site prior to each test run by plugging the inlet to the nozzle and pulling a 15 inch Hg vacuum, and at the conclusion of the test by plugging the inlet to the nozzle and pulling a vacuum equal to the highest vacuum reached during the test run.

A more detailed description of sampling and analytical procedure is given in Appendix B.

*Federal Register, Part 60, App. A, July 1, 1986
**Glass fiber filters, Type 934 AH

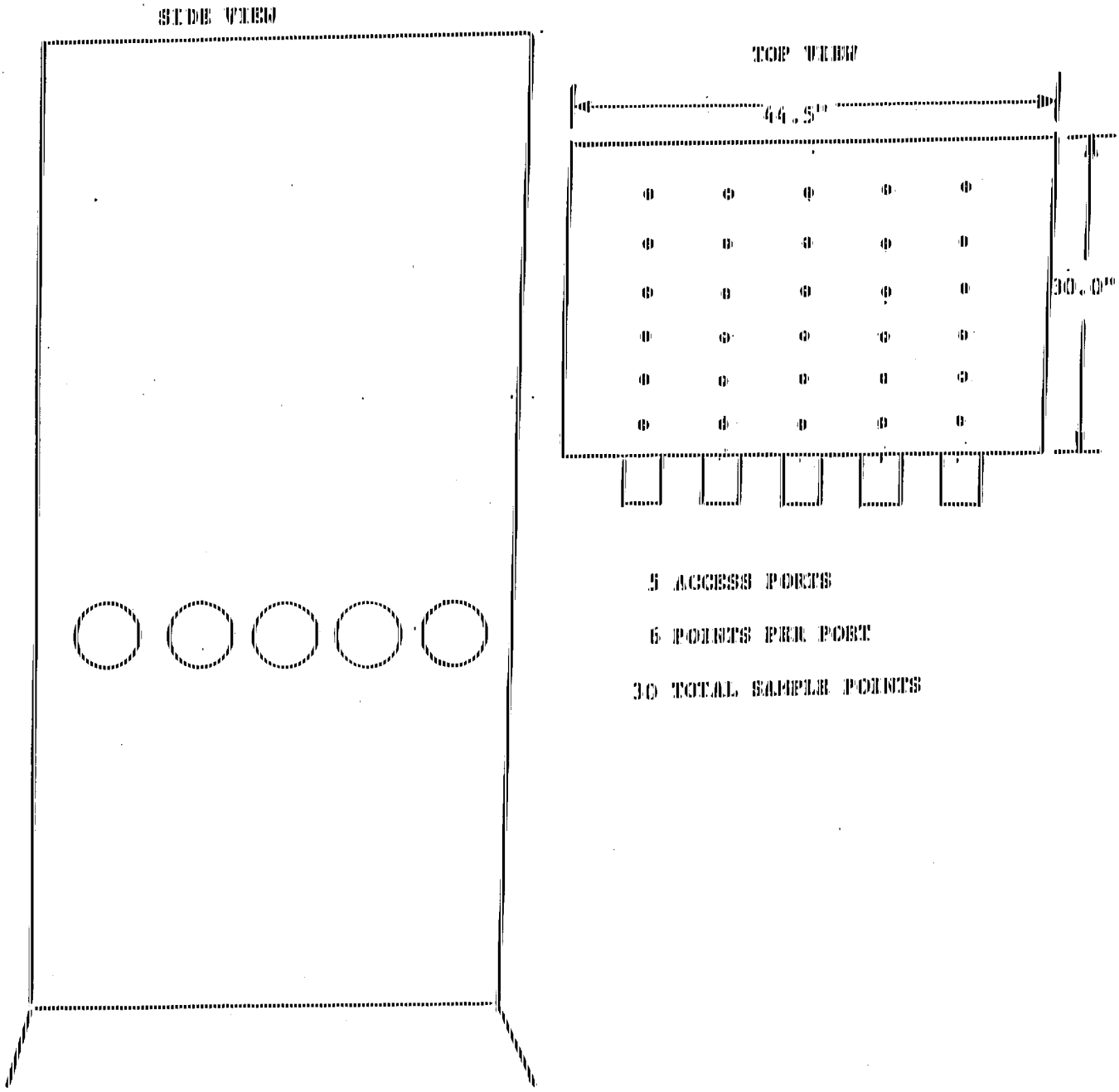

FIGURE NO. 1

SAMPLING LOCATION SCHEMATIC

A. Formulas and Calculations

Hemeon Associates, Inc.

NOMENCLATURE

A_s = Cross-sectional area of stack, (ft^2).

An = Cross-sectional area of nozzle, (ft^2).

c_s = Concentration of particulate matter in stack gas, dry basis corrected to standard conditions, (g/dscf).

C_p = Pitot tube coefficient.

Dg = Flue gas density (lbs. per scf).

Dgs = Flue gas density at stack conditions (lbs/ft^3).

Er = Emission rate (lbs/hr).

GVw = Gas sample volume weight (lbs).

Hfg = Humidity of flue gas (lbs of H_2O/lb. dry gas).

I = Percent of isokinetic sampling (%).

m_m = Total amount of particulate matter collected, g.

P_{bar} = Barometric pressure at the sampling site, (in. Hg).

P_s = Absolute stack gas pressure, (in. Hg).

P_{std} = Standard absolute pressure, (29.92 in. Hg).

Sf = Stack volumetric flow (ACFM).

Swf = Stack weight flow at stack conditions (lbs./hr).

Swfd = Stack weight flow dry basis (lbs./hr).

T_m = Absolute average dry gas meter temperature (^oR).

T_s = Absolute average stack gas temperature (^oR).

T_{std} = Standard absolute temperature, (528^oR).

V_m = Volume of gas sample as measured by dry gas meter, (dcf).

$V_{m(std)}$ Volume of gas sample measured by the dry gas meter, corrected to standard conditions, (dscf).

Wfg = Water in flue gas sample (lbs. of H_2O).

Wp = Weight of particulate (10^{-3} lbs.).

Wp/g = Pounds of particulate per 1000 lbs. of gas (lbs. particulate/1000 lbs. gas).

Y = Dry gas meter calibration factor.

ΔH = Average pressure differential across the orifice meter (in. H_2O).

θ = Total sampling time, min.

Hemeon Associates, Inc.

Example Calculations for Particulate Emissions

Test No.

1. Volume of dry gas sampled corrected to standard conditions. Note: V_m must be corrected for leakage if any leakage rates exceed L_a.

$$V_{m_{std}} = 17.65 \times V_m \times Y \left[\frac{P_{bar} + \frac{\Delta H}{13.6}}{T_m} \right] =$$

2. Weight of water in flue gas sample (lbs.).

$$Wfg = \frac{(\text{ml condensate} + \text{grams desic. gain})}{(453.6)} =$$

3. Water vapor concentration (%).

$$Wvc = \frac{(21.5 \times Wfg \times 100)}{(21.5 \times Wfg + Vmstd)} =$$

4. Dry molecular weight of stack gas.

$$M_d = 0.44\ (\%\ CO_2) + 0.32\ (\%\ O_2) + 0.28\ (\%\ N_2 + \%\ CO) =$$

5. Stack gas density (lbs./dscf).

$$Dg = \left(\frac{Md}{29}\right) \times .0753 =$$

6. Stack gas density at stack conditions (lbs./ft.^{3}).

$$Dgs = .0753 \times \left(\frac{Md}{29}\right) \times \frac{Pb + 13.6}{29.92\ \text{in.Hg}} \times \left(\frac{528}{Ts^{\circ}R}\right)$$

7. Molecular weight of stack gas.

$$M_s = M_d\ (1-Wvc) + 18\ Wvc =$$

8. Stack velocity at stack conditions, fps.

$$V_s = 85.49\ Cp \sqrt{\Delta p}\ \text{avg.} \sqrt{\frac{Ts}{P_s\ M_s}} =$$

9. Actual volumetric flow rate (ACFM).

$$Sf = \frac{1096.7 \times Cp \times \sqrt{\Delta P(RMS)} \times As}{\sqrt{Dgs}} =$$

10. Stack weight flow at stack conditions (lbs./hr.).

$$SwF = Sf \times Dgs \times 60 =$$

11. Gas sample weight (lbs.).

$$Gsw = Vmstd \times Dg =$$

12. Humidity of flue gas (lbs. of H_2O/lbs. dry gas).

$$Hfg = \left(\frac{WFg}{Gsw}\right) =$$

13. Stack weight flow on dry basis (lbs./hr).

$$SwFd = \left(\frac{SWf}{1 + Hfg}\right)$$

14. Stack volumetric flow at standard conditions (SCFM).

$$Sfs = \left(\frac{SWFd}{60 \times Dg}\right) =$$

15. Isokinetic sampling rate (%).

$$I = \left(\frac{Vmstd \times As \times 100}{Sfs \times An \times \theta}\right) =$$

16. Weight of particulate (10^{-3} lbs.).

$$Wp = (M_m \text{ wt. grams}) \times 2.2046 =$$

17. Pounds of particulate per 1000 lbs. of gas (lbs. part./1000 lbs. gas).

$$(Wp/g) = \left(\frac{Wp}{GVw}\right) =$$

18. Concentration of particulate in stack, dry basis corrected to standard conditions (g/dscf).

$$Cs = \left(\frac{7}{Vm\ std}\right) x\ Wp =$$

19. Particulate emission rate (lbs./hr.)

$$Ex = SwFd\ x\ \left(Wp/g\right)\ x\ 10^{-3} =$$

Hemeon Associates, Inc. report of 7-20-87
to Tri-State Asphalt Co., Washington, PA

B. Test Methodology

DETERMINATION OF PARTICULATE EMISSIONS
EPA METHOD 5

The following method was used in this test program. Sampling procedures followed those described in Method 5 of the Federal Register.*

SAMPLING APPARATUS

The particulate sampling train used in these tests at the exit stack met design specifications established by the Federal EPA and was assembled by Hemeon personnel. It consisted of:

Nozzle - Stainless steel (316) with sharp, tapered leading edge and accurately measured round opening.

Probe - Stainless steel with a heating system capable of maintaining a minimum gas temperature of 250°F at the exit end during sampling.

Pitot Tube - Type S pitot tube that met all geometry standards was used to monitor stack gas velocity.

Filter Holder - Pyrex glass with heating system capable of maintaining a filter temperature of approximately 250°F.

Draft Gauge - An inclined manometer made by Dwyer with a readability of 0.01 inches H_2O in the 0-1 inch range was used.

Impingers - Four impingers connected in series with glass ball joints. The first, third and fourth impingers were of the Greenburg-Smith design, modified by replacing the tip with a 1/2 inch I.D. glass tube extending to 1/2 inch from the bottom of the flask.

Metering System - Vacuum gauge, leak-free pump, thermometers capable of measuring temperature to within 5°F, calibrated dry gas meter, and related equipment, to maintain an isokinetic sampling rate and to determine sample volume. The dry gas meter is made by Rockwell and the fiber vane pump is made by Gast.

Barometer - Aneroid type to measure atmospheric pressure to ±0.1 inch Hg.

* Federal Register, Part 60, App. A, July 1, 1986

SAMPLING PROCEDURE

After selecting the sampling site and the minimum number of traverse points, the stack pressure, temperature, moisture and range of velocity head were measured according to the procedures described in the Federal Register.*

Approximately 200 grams of silica gel were weighed in a sealed impinger prior to each test. Glass fiber filters** (4 inch diameter) were desiccated for at least 24 hours dried at 105°C for two hours and weighed to the nearest 0.1 mg on an analytical balance. One hundred ml of dis-tilled water was placed in each of the first two impingers; the third impinger was initially empty; and the impinger containing the silica gel was placed next in series. The train was set up with the probe as shown in Figure A-1. The sampling train was leak-checked at the sampling site prior to each test run by plugging the inlet to the nozzle and pulling a 15 inch Hg vacuum, and at the conclusion of the test by plugging the inlet to the nozzle and pulling a vacuum equal to the highest vacuum reached during the test run.

The pitot tube and lines were leak-checked at the test site prior to and following the initial velocity traverse. The check was made by blowing into the impact opening of the pitot tube until 3 or more inches of water were recorded on the manometer and then capping the impact opening and hold-ing it for 15 seconds to assure it was leak free. The static pressure side of the pitot tube was leak checked using the same procedure, except suction was used to obtain the 3 in. H_2O manometer reading. Crushed ice was placed around the impingers to keep the temperature of the gases leaving the last impinger at 68°F or less.

During sampling, stack gas and sampling train data were recorded at each sampling point and when significant changes in stack flow conditions occured. Isokinetic sampling rates were set throughout the sampling period with the aid of isokinetic sampling equations. All sampling data were recorded on the Particulate Field Data Sheet.

* Federal Register, Part 60, App. A, July 1, 1986
** 934 AH type

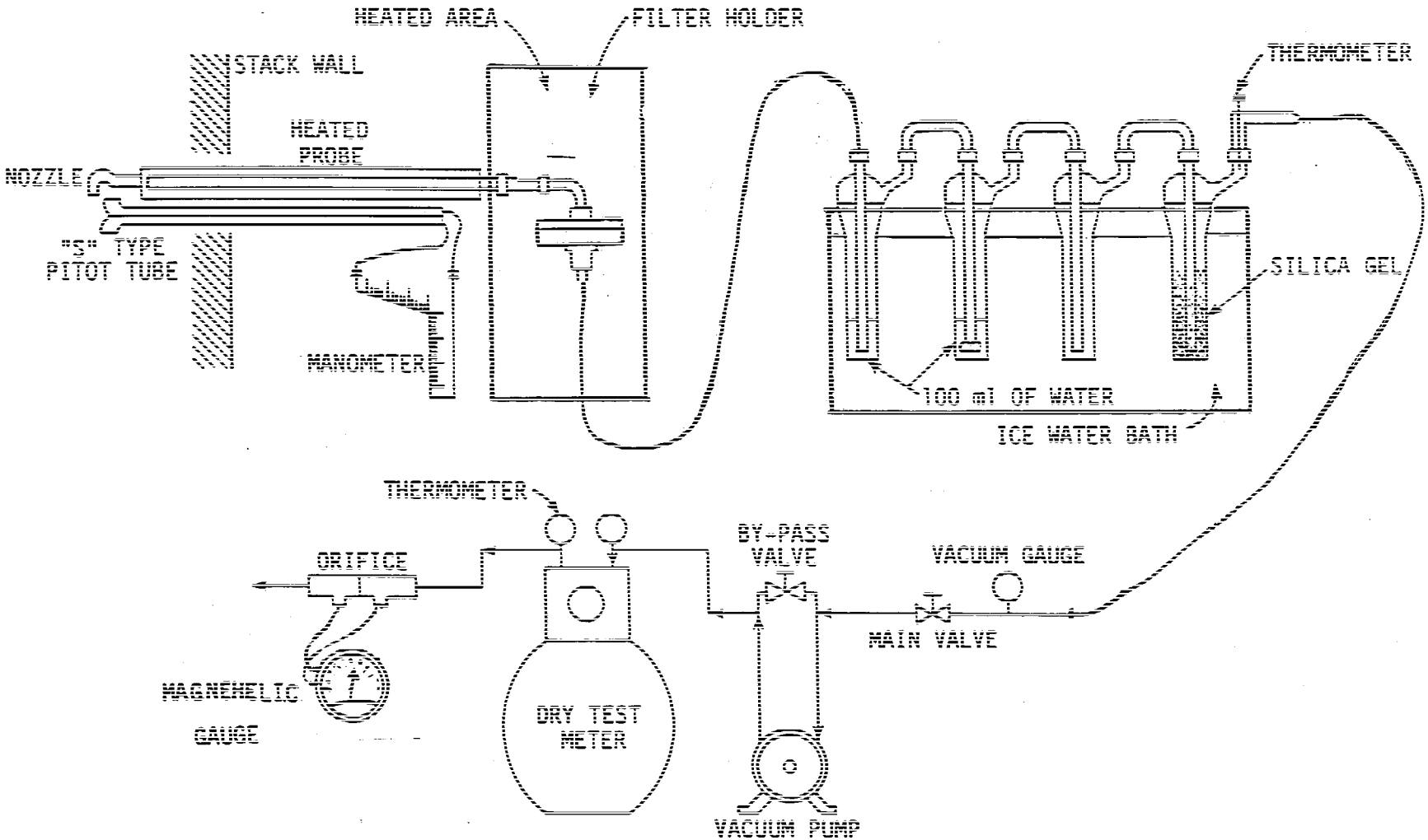

Figure 1. Particulate sampling train.

SAMPLE RECOVERY PROCEDURE

The sampling train was moved carefully from the test site to the cleanup area. Samples of the acetone and distilled water used in the sample recovery were taken for use as blanks. The volume of water from the first three impingers was measured. Sample fractions were recovered as follows:

Container No. 1 - The filter was removed from its holder and placed in a petri dish and sealed.

Container No. 2 - Loose particulate and H_2O washings from all sample-exposed surface prior to the filter were placed in a glass jar, sealed and labeled. Particulate was removed from the probe with the aid of a brush and water rinsing. The liquid level was marked after the container is sealed.

Container No. 3 - Loose particulate and acetone washings from all sample-exposed surface prior to the filter were placed in a glass jar, sealed and labeled. Particulate was removed from the probe with the aid of a brush and acetone rinsing. The liquid level was marked after the container was sealed.

Container No. 4 - A minimum of 200 ml of acetone was taken for the blank analysis. The blank was obtained and treated in a similar manner as the acetone washing.

Container No. 5 - Distilled water in the impinger section of the sampling train was measured and placed in a polyethylene container. The impingers and connecting glassware were rinsed with distilled H_2O and this rinse was added to the container for shipment to the laboratory.

Container No. 6 - A minimum of 200 ml of distilled water was taken for the blank analysis. The blank was obtained and treated in a similar manner as the water rinse.

The silica gel from the fourth impinger was weighed and the gain recorded on the Sample Recovery Data Sheet with other pertinent data.

ANALYTICAL PROCEDURES

The following procedures were used and follow the methods described in the Federal Register.*

Container No. 1 - The filter and any loose particulate matter from this sample container were placed into a tared glass weighing dish, baked at 105°C for 2 hours, desiccated for 24 hours to a constant weight and weighed to the nearest 0.1 mg.

Container No. 2 - The H_2O washings were transferred to a tared beaker and evaporated to dryness at 105°C, desiccated for 24 hours to a constant weight and weighed to the nearest 0.1 mg.

Container No. 3 - The acetone washings were transferred to a tared beaker and evaporated to dryness at ambient temperature and pressure, desiccated for 24 hours to a constant weight, and weighed to the nearest 0.1 mg.

Container No. 4 - The acetone blank was transferred to a tared beaker and evaporated to dryness at ambient temperature and pressure. The blank was then desiccated for 24 hours to a constant weight and weighed to the nearest 0.1 mg.

Container No. 5 - The contents of this container were filtered through tared filters to remove insoluble particulate. The filters and filtrates in tared beakers were then evaporated to dryness at 105°C, then desiccated to a constant weight and weighed on an analytical balance to the nearest 0.1 mg.

Container No. 6 - The distilled water blank was transferred to a tared beaker and evaporated to dryness at 105°C. The blank was then desiccated to a constant weight and weighed on an analytical balance to the nearest 0.1 mg.

The term "constant weight" means a difference of no more than 0.5 mg. or 1% of total weight less tare weight, whichever is greater between two consecutive readings, with no less than 6 hours of desiccation between weighings.

*Federal Register, Part 60, App. A, July 1, 1986

C. Field Data Sheets

HEMEON ASSOCIATES VELOCITY - SHEET NO. _____ Date 2-6-87

Plant & equipment: [illegible] Vel. test no. _____

						Stack dimen. 30" x 45"		Pitot no. 2		Pitot coeff. .85	
Time of day	Trav. point no.	Pitot reading in. WC	Gas temp. °F	Time of day	Trav. point no.	Pitot reading in. WC	Gas temp. °F	Time of day	Trav. point no.	Pitot reading in. Wc	Gas temp. °F
	A-1	1.2	232		C-1	.20	261		E-1	.80	270
	2	1.3	239		2	.20	265		2	.90	271
	3	1.4	242		3	.20	268		3	1.1	273
	4	1.7	254		4	.40	270		4	1.1	274
	5	1.6	255		5	.95	270		5	.90	273
	6	1.5	256		6	1.1	278		6	.80	272
	B-1	.60	253		D-1						
	2	.30	253		2						
	3	.40	261		3						
	4	.70	263		4						
	5	1.0	265		5						
	6	1.4	267		6						

.6 ml
5
St

171.407
158.990 3:56
12.417

RMS Average H_v, h_v from 24 readings = .90

Average gas temp. °F from _____ readings = _____

Barometric pressure _____ in. Hg

Static pressure _____ in. w.c.

SAMPLING TRAVERSE POINT LOCATIONS

Plant: [illegible]

Equipment: [illegible]

Date(s) of tests: [illegible]

SAMPLING TRAVERSE POINT LOCATIONS

Stack diameter: 22 x 44.5 inches

No. of sampling axes: 5

No. of traverse points on each axis: 4

No. of sampling points: 20

Port designation	Traverse point no.	Distance traverse point from near wall, inches
A-B-C-D-E	1	2.5
	2	7.5
	3	14.5
	4	17.5
	5	24.5
	6	27.5

HEMBON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator P. Campbell
Location [illegible] Test no. [illegible] Date [illegible]
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. .84 Pitot number [illegible] Meterbox number [illegible] Meterbox Cal(Y) [illegible] Noz. Diam. [illegible] Noz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. degrees F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time min	Vacuum "Hg	Meter reading cu. ft.	Meter temperature degrees F In	Meter temperature degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Init	xx		xx	Factor (.48)	8:12	0	xx	194.940	xx	xx			
1	.85	266		3.2	8:33	40	2.0	196.840	60	60	275	246	57
2	.90 1.1	290		4.4	8:37	80	3.0	200.080	60	60	273	243	57
3	.97 1.15	244		4.4	8:41	120	3.0	203.330	60	60	274	245	58
4	1.0 1.0	253		3.8	8:45	160	2.8	206.350	60	60	270	246	58
5	.95 .95	266		3.5	8:49	200	2.8	209.300	60	60	270	249	59
6	.90 .90	270		3.2	8:54 Stop	240	2.5	212.275	60	60	271	251	59
7	.85 .85	267		3.2	8:59 Start	280	2.5	214.885	60	60	271	249	59
2	.95 1.1	272		4.1	9:02	320	3.4	218.115	60	60	268	247	59
3	.95 1.2	279		4.4	9:06	360	3.5	221.285	60	60	267	247	59
4	.95 1.05	276		3.9	9:10	400	3.0	224.240	60	60	265	247	59
5	.95 .95	276		3.5	9:14	440	3.0	227.210	60	60	264	248	59
6	.90 .90	280		2.9	9:18 Stop	480	3.0	229.848	60	60	267	252	60
Summary	.885	270		4.1		480	2.8	35.548	35.5	60			

Ambient temp. ____ °F
Bar. Press. 28.97 in. Hg
Stac. Press. 4.6 in. WC

IMPINGER WATER
Final 1049 ml
Init. 200 ml
Cond. 849 ml

DESICCANT
Final 4444.2 gms
Init. 4444.4 gms
Gain -0.2 gms

ORSAT ANALYSES

Time			
CO_2	8.5	8.5	8.5
O_2	13.0	13.5	13.2
CO			

Final leak rate 0.00 cfm at 9.0 in. Hg

* Stop at 8:14 Timeclock Start at 8:31

HEMEON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator R. Campbell
Location [illegible] Test No. [illegible] Date 7-7-87
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. 120154
Pitot coeff. [illegible] Pitot no. [illegible] Meterbox number [illegible] Meterbox (Cal.(Y) [illegible] Nozz. Diam. [illegible] Nozz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. °F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time, mins	Vacuum, " Hg	Meter reading cu. ft.	Meter Temperature Degrees F In	Meter Temperature Degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Init.	xx	xx	xx	Factor [ ]	9:23	48	xx		xx	xx			
C	.949 .90	281		3.3	9:27	52	2.0	232.670	60°	60°	268	252	60
D	1.05 1.1	263		4.1	9:31	56	3.0	235.720	60°	60°	269	254	60
E	1.095 1.2	273		4.4	9:35	60	3.0	238.900	60°	60°	271	256	60
F	1.05 1.1	281		4.0	9:39	64	3.0	242.060	60°	60°	269	258	61
G	1.05 1.1	278		4.0	9:43	68	3.0	244.980	60°	60°	271	259	61
H	.949 .90	276		3.3	9:47	72	2.5	247.899	60°	60°	268	260	61
D-2	.99 1.98	272		3.6	St. 9:48 / 9:52	76	3.0	250.770	60°	60°	274	266	61
E	1.07 1.15	274		4.2	9:56	80	3.2	253.980	60°	60°	276	269	63
F	1.07 1.15	277		4.2	10:00	84	3.2	256.910	60°	60°	279	269	63
G	1.05 1.1	281		4.0	10:04	88	3.2	260.070	60°	60°	273	263	63
H	1.14 1.3	278		4.7	10:08	92	4.0	263.200	60°	60°	276	264	64
G	1.14 1.4	274		5.1	Stop 10:12	96	4.5	266.825	60°	60°	273	261	64
F-2	1.12 1.25	279		4.6	10:13 St / 10:17	100	4.0	270.080	60°	60°	271	264	63
E	1.14 1.3	283		4.7	10:21	104	4.0	273.440	60°	60°	269	266	62
F	1.16 1.35	293		4.8	10:25	108	4.0	276.860	60°	60°	272	268	61
G	1.14 1.3	288		4.7	10:29	112	4.0	280.280	60°	60°	270	267	64

* 9:19 plant line down

HEMEON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator R. Campbell
Location [illegible] Test No. 7-1 Date 7-7-87
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. [illegible] Pitot no. [illegible] Meterbox number [illegible] Meterbox (Cal.(Y) [illegible] Nozz. Diam. [illegible] Nozz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. °F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time, mins	Vacuum, " Hg	Meter reading cu. ft.	Meter Temperature Degrees F In	Meter Temperature Degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Init.	xx	xx	xx	Factor ( )		112	xx		xx	xx			
[illegible]	1.9 1.4	287		5.0	Sp 1087 11:03	116	4.5	283.730	[illegible]	[illegible]	271	268	61
[illegible]	1.225 1.5	197.		6.1	11:07	120	5.1	287.710	[illegible]	[illegible]	270	269	60

10:31 plant shut down 11:00 St.
937

HEMBOW ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator [illegible]
Location [illegible] Test no. T-4 Date [illegible]
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. .84 Pitot number [illegible] Meterbox number [illegible] Meterbox Cal.(Y) [illegible] Nozz. Diam. [illegible] Nozz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. degrees F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time min	Vacuum "Hg	Meter reading cu. ft.	Meter temperature degrees F In	Meter temperature degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Impinger
Init	xx		xx	Factor ( )	12:04	0	xx	381.795	xx	xx			
A-1	.90	289		3.3		2.5	2.5	384.510	60	60	274	271	56
2	.90	288		3.3		5.0	3.0	387.196	60	60	273	271	58
3	1.0	294		3.6		7.5	3.0	389.876	60	60	274	268	58
4	1.1	298		3.9		10.0	3.2	392.630	60	60	273	269	58
5	1.2	298		4.3		12.5	4.0	395.480	60	60	271	268	58
6	1.0	298		3.6	12:14	15.0	3.0	398.229	60	60	269	266	58
B-1	1.1	297		3.9	12:21	17.5	3.0	300.720	60	60	270	267	58
2	1.2	288		4.3		20.0	4.0	303.540	60	60	269	271	59
3	1.2	291		4.3		22.5	4.0	306.190	60	60	267	273	59
4	1.0	288		3.6		25.0	3.0	308.700	60	60	265	274	59
5	.90	288		3.3		27.5	3.0	311.140	60	60	264	273	59
6	1.0	288		3.6	12:31	30.0	3.0	313.665	60	60	268	274	59
Summary	[illegible]	290		[illegible]		25	[illegible]	[illegible]	59	60			

Ambient temp. _____ °F
Bar. Pres. 29.9 in. Hg
Stat. Press 4.6 in. WC

IMPINGER WATER
Final 531 ml
Init. 500 ml
Cond. 31 ml

DESICCANT
Final [illegible] gms
Init. [illegible] gms
Gain [illegible] gms

ORSAT ANALYSIS

Time			
CO_2			
O_2			
CO			

Final leak rate .005 cfm at 25 in. Hg

HEREON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant: [illegible] City [illegible] Operator: [illegible]
Location: [illegible] Test No. F2 Date 11-82
Stack diam. 30.375 Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. .84 Pitot no. [illegible] Meter number [illegible] (Cal. (Y) [illegible] Nozz. Diam. [illegible] Nozz. I.D. [illegible]

Traverse point no.	Velocity Head (Δp) in. H_2O	Gas temp. °F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for meter in (H_2O) Factor ( )	Clock time	Sample time, min	Vacuum, in Hg	Meter reading cu. ft.	Meter Temperature Degrees F In	Meter Temperature Degrees F Out	Temperature °F Probe	Temperature °F Filter box	Temperature °F Impingers
Inlet	sec	sec	sec		1:20	30	sec		sec	sec			
C1	1.1	290		4.3		32.5	3.5	311.820	60	60	271	260	69
2	1.0	259		4.5		35.0	4.0	313.100	60	60	269	260	60
3	1.0	276		4.4		37.5	4.0	315.470	60	60	272	259	60
4	1.0	281		4.4		40	4.0	317.660	60	60	276	261	60
5	1.15	278		4.2		42.5	4.0	319.850	60	60	271	258	61
6	1.1	289		4.0	Stop 1:36	45.0	3.8	321.840	60	60	267	257	61
D-1	1.25	288		4.5	Start 1:36	47.5	4.0	323.675	60	60	270	254	62
2	1.25	286		4.5		50.0	4.0	325.465	60	60	268	257	62
3	1.1	298		3.9		52.5	3.5	327.330	60	60	269	256	62
4	1.1	298		3.9		55.0	3.5	329.175	60	60	266	257	62
5	1.25	299		4.4		57.5	4.0	331.120	60	60	265	259	62
6	1.3	306		4.6	Stop 1:51	60.0	4.5	333.149	60	60	266	262	63
E-1	1.3	302		4.6	Start 1:51	62.5	4.5	335.120	60	60	269	262	64
2	1.25	303		4.4		65	4.5	337.050	60	60	270	260	64
3	1.4	302		4.9		67.5	5.0	338.900	60	60	267	262	63
4	1.4	299		5.0		70.0	5.0	340.450	60	60	270	261	64

HEMEON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator P. Campbell
Location [illegible] Test No. [illegible] Date [illegible]
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. [illegible] Pitot no. [illegible] Meterbox number [illegible] Meterbox (Cal.(Y) [illegible] Nozz. [illegible] Nozz. Diam. [illegible] I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. °F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time, mins	Vacuum, " Hg	Meter reading cu. ft.	Meter Temperature Degrees F In	Meter Temperature Degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Init.	xx	xx	xx	Factor ( )		700	xx		xx	xx			
E-5	1.4	292		5.0		725	5.0	343.600	00	00	271	268	64
6	1.5	295		5.3		750	5.0	345.779	00	00	273	265	65

HEMSON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator [illegible]
Location [illegible] Test no. [illegible] Date [illegible]
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. [illegible] Pitot number [illegible] Meterbox number [illegible] Meterbox Cal.(Y) [illegible] Noz. Diam. [illegible] Noz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. degrees F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in(H_2O)	Clock time	Sample time min	Vacuum "Hg	Meter reading cu. ft.	Meter temperature degrees F In	Meter temperature degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Unit	xx		xx	Factor ( )	[illegible]	0	xx	[illegible]	xx	xx			
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Summary	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

Ambient temp. _____ °F
Bar. Press. [illegible] in. HG
Stat. Press. [illegible] in. HG

IMPINGER WATER
Final [illegible] ml
Init. [illegible] ml
Cond. [illegible] ml

DESICCANT
Final [illegible] gms
Init. [illegible] gms
Gain [illegible] gms

ORSAT ANALYSIS

Time				
CO_2	[illegible]			
O_2	[illegible]			
CO				

Final Leak rate [illegible] cfm at [illegible] in. Hg

MEHRON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator [illegible] Date [illegible]
Location [illegible] Test No. [illegible] Filter no. [illegible]
Stack diam. [illegible] Barometer [illegible] Deflecant no. [illegible] Hetechor [illegible] Nozz. [illegible] Nozz. [illegible]
Pitot coeff. [illegible] Pitot no. [illegible] number [illegible] (Cal. (H) [illegible] Diam. [illegible] I.D. [illegible]

Traverse point no.	Velocity Head (Δ P) in. H_2O	Gas temp. °F	Orifice Δ H Theoretical in. H_2O	Orifice Δ H Corr. for moist. in. H_2O Factor	Clock time	Sample time, min	Vacuum, in Hg	Meter cond-log su. ft.	Meter Temperatures Degrees F In	Meter Temperatures Degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Impinger
Indc.	xx	xx	xx	Factor	[illegible]	[illegible]	xx	[illegible]	xx	xx			
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

HEMEON ASSOCIATES, INC.
Particulate Field Data Sheet

Plant [illegible] City [illegible] Operator [illegible]
Location [illegible] Test No. [illegible] Date [illegible]
Stack dimen. [illegible] Desiccant no. [illegible] Filter no. [illegible]
Pitot coeff. [illegible] Pitot no. [illegible] Meterbox number [illegible] Meterbox (Cal.(Y) [illegible] Nozz. Diam. [illegible] Nozz. I.D. [illegible]

Trav. point no.	Velocity Head (ΔP) (in.) H_2O	Gas temp. °F	Orifice ΔH Uncorr. in. (H_2O)	Orifice ΔH Corr. for moist. in. (H_2O)	Clock time	Sample time, mins	Vacuum, " Hg	Meter reading cu. ft.	Meter Temperature Degrees F In	Meter Temperature Degrees F Out	Temperatures °F Probe	Temperatures °F Filter box	Temperatures °F Last impinger
Init.	xx	xx	xx	Factor ( )	[illegible]	[illegible]	xx	[illegible]	xx	xx			
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Hemeon Associates, Inc. report of 7-20-87
to Tri-State Asphalt Co., Washington, PA

D. Laboratory Data

AIR QUALITY SERVICES, INC.

JUL 15 1987

Tri-State Asphalt Co.

TABLE I
ANALYSIS OF STACK SAMPLES FOR TOTAL SOLIDS
HEMEON ASSOCIATES
125 THIRTY-NINTH STREET
PITTSBURGH, PA 15201
PURCHASE ORDER #3987
SAMPLES RECEIVED: JULY 8, 1987

HEMEON SAMPLE NUMBER	AQS LABORATORY NUMBER	SAMPLE TYPE	SAMPLE VOLUME MILLILITER	TOTAL SOLIDS MILLIGRAMS
4369	39687	WATER	81	9.7
4370	39688	WATER	68	5.9
4371	39689	WATER	69	4.7
4372	39690	ACETONE	66	24.1
4373	39691	ACETONE	91	21.8
4374	39692	ACETONE	85	14.5

THE SAMPLES WERE WEIGHED ON A BALANCE CALIBRATED WITH WEIGHTS TRACEABLE TO THE NATIONAL BUREAU OF STANDARDS. THE DATA HAS NOT BEEN CORRECTED FOR A BLANK.

AIR QUALITY SERVICES, INC.

Tri-State Asphalt Co.

TABLE II
ANALYSIS OF STACK SAMPLES FOR SOLUBLE AND INSOLUBLE SOLIDS
HEMEON ASSOCIATES
125 THIRTY-NINTH STREET
PITTSBURGH, PA 15201
PURCHASE ORDER #3987
SAMPLES RECEIVED: JULY 8, 1987

HEMEON SAMPLE NUMBER	AQS LABORATORY NUMBER	SAMPLE VOLUME ML	INSOLUBLE SOLIDS MG	SOLUBLE SOLIDS MG	
4375	39693	995	32.6	204.9	Run 1
4376	39694	615	10.8	63.7	Run 2
4377	39695	479	6.0	47.9	Run 3

ACCON

SAMPLE WEIGHTS AND DUST CONCENTRATIONS

Test Date	7/07/87	7/07/87	7/07/87
Test No. .	T-1	T-2	T-3
Filter No.	120154	120155	120156
Acet.6H2o Rinse,mg	33.8	27.7	19.2
Filter Tare, mg.	682.9	658.7	664.2
Fil.+ Sample, mg.	690.3	662.9	669.6
Filt. sample, mg.	7.4	4.2	5.4
Total Fil.Catch mg	41.2	31.9	24.6
Imping. Incol.,mg.	32.6	10.8	6
Total Catch, mg.	73.8	42.7	30.6
Sample Gas Vol.acf	92.2	56.9	54
" "WE, lbs	7.11	4.39	4.16
PM Conc #/1000#gas	.023	.021	.016
" " gr/dry acf	.012	.012	.009

Hemeon Associates, Inc. report of 7-20-87
to Tri-State Asphalt Co., Washington, PA

E. Process Data

TONS = 256.26

TEMP=300.0F

T-1

B 07/07/87 MIX #= 6 MIX TPH=132.0 AC SP. GR.=1.020 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	92.0%	8.0%	0%	0%	0%	0%
	139.9	12.19	.0	.0	.0	.0
S	244.70	14.71	28.72	130.73	.00	91.[illegible]
S%	6.2%		6.0%	5.0%	4.0%	[illegible]

ACCUM. PERCENT= 5.6%
TONS = 256.26

TEMP=300.0F

T-1

33 07/07/87 MIX #= 6 MIX TPH=145.1 AC SP. GR.=1.020 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.0%	6.0%	0%	0%	0%	0%
	136.4	8.75	.0	.0	.0	.0
S	246.20	14.82	20.07	131.77	.00	91.[illegible]
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 257.95

TEMP=299.8F

T-1

38 07/07/87 MIX #= 6 MIX TPH=159.2 AC SP. GR.=1.020 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.2%	5.8%	10%	50%	0%	37%
	150.0	9.25	19.6	95.2	.0	70.1
S	249.92	14.98	29.40	133.56	.00	92.03
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 260.99

TEMP=299.8F

T-1

43 07/07/87 MIX #= 6 MIX TPH=213.8 AC SP. GR.=1.020 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.2%	5.8%	12%	50%	0%	37%
	201.4	12.43	22.0	94.1	.0	70.0
S	266.60	16.00	31.28	141.40	.00	98.00
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 278.37

TEMP=300.0F

T-1

48 07/07/87 MIX #= 6 MIX TPH=[illegible] AC SP. GR.=1.020 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	15.46	[illegible]	96.7	.0	69.5
[illegible]	[illegible]	17.94	36.06	145.23	.00	104.75
[illegible]	[illegible]		6.0%	5.0%	4.0%	8.0%

[illegible] CUM. PERCENT= 5.6%
[illegible] TONS = 2595.03

TEMP=299.7F

T-1

[illegible] 07/07/87 MIX #= 6 MIX TPH=211.9 AC SP. GR.=1.028 AC IN RECYC
= .0

	AGG	AC	AG1	AG2	AG3	AG4
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible] %	94.2%	5.8%	12%	50%	0%	38%
[illegible]	199.5	12.31	24.6	94.2	.0	72.1
[illegible]	299.81	18.00	35.04	157.07	.00	110.70
[illegible]	6.2%		6.0%	5.0%	4.0%	8.0%

[illegible] CUM. PERCENT= 5.6%
[illegible] TONS = 3115.71

TEMP=299.5F

T-1

[illegible] 07/07/87 MIX #= 6 MIX TPH=211.3 AC SP. GR.=1.028 AC IN RECYC
= .0

	AGG	AC	AG1	AG2	AG3	AG4
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible]	198.8	12.46	24.9	94.3	.0	71.7
[illegible]	396.33	19.12	36.93	164.90	.00	116.62
[illegible]	6.2%		6.0%	5.0%	4.0%	8.0%

[illegible] CUM. PERCENT= 5.6%
[illegible] TONS = 331.23

TEMP=299.6F

T-1

[illegible] 07/07/87 MIX #= 6 MIX TPH=210.6 AC SP. GR.=1.028 AC IN RECYC
= .0

	AGG	AC	AG1	AG2	AG3	AG4
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible] %	94.0%	6.0%	12%	50%	0%	38%
[illegible]	198.0	12.66	24.4	94.3	.0	64.1
[illegible]	388.06	20.16	38.80	172.73	.00	122.50
[illegible]	6.2%		6.0%	5.0%	4.0%	8.0%

[illegible] CUM. PERCENT= 5.7%
[illegible] TONS = [illegible]

TEMP=300.1F

T-1

[illegible] 07/07/87 MIX #= 6 MIX TPH=212.0 AC SP. GR.=1.028 AC IN RECYC
= .0

	AGG	AC	AG1	AG2	AG3	AG4
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible] %	94.1%	5.9%	12%	50%	0%	38%
[illegible]	199.5	12.47	24.3	94.1	.0	72.1
[illegible]	593.33	31.63	60.09	266.86	.00	192.61
[illegible]	6.2%		6.0%	5.0%	4.0%	8.0%

[illegible] CUM. PERCENT= 5.7%
[illegible] TONS = [illegible]

TEMP=300.5F

09:13 07/07/87 MIX #= 6

LE= 0

	AG2	AC	AG1
DES %	94.1%	5.9%	12%
ACT %	94.1%	5.9%	10%
TPH	198.3	12.52	20.3
TONS	365.95	22.23	42.56
MOIS%	6.2%		6.0%

AC ACCUM. PERCENT= 5.7%

MIX TONS = 383.96

AC TEMP=300.5F

09:15 07/07/87 MIX #= 7

LE= 0

	AG2	AC	AG1
DES %	94.1%	5.9%	12%
ACT %	94.1%	5.9%	10%
TPH	198.6	12.43	20.3
TONS	372.86	22.70	43.42
MOIS%	5.2%		6.0%

AC ACCUM. PERCENT= 5.7%

MIX TONS = 398.05

AC TEMP=300.5F

09:20 07/07/87 MIX #= 7

LE= 0

	AG2	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.5%	8%
TPH	208.9	9.73	16.5
TONS	391.05	23.61	44.72
MOIS%	5.2%		6.0%

AC ACCUM. PERCENT= 5.6%

MIX TONS = 410.27

AC TEMP=300.7F

09:25 07/07/87 MIX #= 4

LE= 0

	AG2	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.4%	8%
TPH	210.5	9.71	16.8
TONS	408.44	24.48	46.00
MOIS%	5.2%		6.0%

AC ACCUM. PERCENT= 5.6%

MIX TONS = 428.93

AC TEMP=300.6F

09:30 07/07/87 MIX #= 4

LE= 0

	AG2	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.7%	4.3%	6%
TPH	179.7	8.14	12.6
TONS	413.66	24.72	46.46
MOIS%	5.2%		6.0%

AC ACCUM. PERCENT= 5.6%

MIX TPH=210.1 AC SP. GR.=1.028 AC IN RECYC

T-1

AG2	AG3	AG4
50%	0%	38%
50%	0%	38%
94.0	.0	71.4
188.40	.00	134.47
5.0%	4.0%	8.0%

Wabco

Graphite-Epoxy

26 Erase

MIX TPH=211.1 T-1 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
50%	0%	38%
50%	0%	37%
94.3	.0	71.0
192.00	.00	137.21
5.0%	4.0%	8.0%

MIX TPH=218.6 T-1 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
10%	58%	22%
19.5	111.0	43.2
194.07	8.92	141.15
5.0%	4.0%	8.0%

MIX TPH=220.2 T-1 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
10%	58%	25%
19.8	110.91	48.5
195.64	18.15	145.07
5.0%	4.0%	8.0%

MIX TPH=187.8 T-1 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
9%	57%	25%
18.6	110.7	48.6
196.22	21.56	146.45
5.0%	4.0%	8.0%

Mat 275-5

Graphite

Epoxy 765

Bucket

AC TEMP=300.0F

09:30 07/07/87 MIX #= 6 MIX TPH=190.2 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	50%	24%
ACT %	95.8%	4.2%	6%	10%	57%	23%
TPH	182.3	7.94	12.7	19.8	110.3	44.5
TONS	415.39	24.79	46.59	196.38	22.48	146.83
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 436.09

AC TEMP=300.1F

09:35 07/07/87 MIX #= 6 MIX TPH=210.1 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	10%	50%	0%	37%
TPH	197.7	12.43	20.0	94.3	.0	70.3
TONS	431.61	25.71	48.43	203.74	22.82	152.64
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 453.14

AC TEMP=300.5F

09:40 07/07/87 MIX #= 6 MIX TPH=210.0 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	12%	50%	0%	37%
TPH	197.6	12.43	22.7	94.1	.0	70.6
TONS	448.05	26.73	50.30	211.57	22.82	159.60
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 470.58

AC TEMP=300.2F

09:45 07/07/87 MIX #= 6 MIX TPH=210.5 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	11%	49%	0%	36%
TPH	198.2	12.36	21.9	94.0	.0	69.3
TONS	464.46	27.76	52.18	219.40	22.82	164.56
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 488.03

AC TEMP=299.9F

09:50 07/07/87 MIX #= 6 MIX TPH=208.8 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	12%	50%	0%	38%

TONS	480.82	28.79	54.07	227.23	22.82	170.51
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 505.40

AC TEMP=300.1F

T-1

09:55 07/07/87 MIX #= 6 MIX TPH=211.6 AC SP. GR.=1.028 AC IN RECY
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	13%	50%	0%	38%
TPH	199.24	12.45	25.0	94.3	.0	72.3
TONS	497.31	29.82	55.95	235.07	22.82	176.46
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 532.90

AC TEMP=300.0F

T-1

10:00 07/07/87 MIX #= 7 MIX TPH=210.8 AC SP. GR.=1.028 AC IN RECYI
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	10%	49%	0%	38%
TPH	198.2	12.67	19.4	93.8	.0	72.8
TONS	513.87	30.86	157.82	242.90	22.82	182.42
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 540.46

AC TEMP=300.0F

T-1

10:05 07/07/87 MIX #= 8 MIX TPH=208.8 AC SP. GR.=1.028 AC IN RECYC
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	12%	49%	0%	38%
TPH	196.8	12.28	24.1	93.9	.0	72.6
TONS	510.35	31.86	59.79	250.73	22.82	188.38
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 557.89

AC TEMP=300.3F

T-1

10:06 07/07/87 MIX #= 9 MIX TPH=207.2 AC SP. GR.=1.028 AC IN RECYC
LE= .0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.1%	5.9%	10%	49%	0%	38%
TPH	194.9	12.29	19.7	93.8	.0	72.2
TONS	531.15	31.94	59.79	251.12	22.82	188.68
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.6%
MIX TONS = 558.87

AC TEMP=300.3F

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.1%	5.9%	10%	50%	0%	37%
	201.3	12.85	21.2	90.9	.0	73.2
S	548.34	33.60	61.75	259.29	22.82	194.89
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 576.93

TEMP=300.5F

14 07/07/87 MIX #= 6 MIX TPH=220.6 AC SP. GR.=1.028 AC IN RECY
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.1%	5.9%	10%	50%	0%	38%
	207.7	12.93	20.3	98.9	.0	75.4
S	559.55	33.71	63.04	264.62	22.82	198.95
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 588.85

TEMP=300.5F

19 07/07/87 MIX #= 6 MIX TPH=208.5 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.0%	6.0%	12%	50%	0%	37%
	196.1	12.44	23.0	94.2	.0	70.5
S	576.14	34.76	64.92	272.50	22.82	204.92
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 606.66

TEMP=300.5F

24 07/07/87 MIX #= 6 MIX TPH=214.0 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.2%	5.8%	12%	50%	0%	38%
	201.5	12.50	23.0	94.0	.0	72.7
S	592.74	35.80	66.81	280.33	22.82	210.88
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.6%
TONS = 624.29

TEMP=300.3F

29 07/07/87 MIX #= 6 MIX TPH=208.1 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.0%	6.0%	11%	49%	0%	38%
	195.6	12.48	21.4	93.8	.0	72.5
S	609.32	36.84	68.68	288.16	22.82	216.83
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.7%
TONS = 641.92

10:34 07/07/87 MIX #= 6
LE= 40

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	13%	49%	0%	38%
TPH	200.5	12.50	24.9	92.5	.0	72.4
TONS	625.68	37.88	70.56	296.00	22.82	222.78
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.7%
MIX TONS = 659.54
AC TEMP=300.6F

T-1
MIX TPH=212.9 AC SP. GR.=1.020 AC IN RECY

10:39 07/07/87 MIX #= 8
LE= 40

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	10%	0%	0%	0%
TPH	203.0	12.85	.0	.0	.0	.0
TONS	636.12	38.54	71.76	301.01	22.82	226.57
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.7%
MIX TONS = 670.14
AC TEMP=299.7F

T-1
MIX TPH=215.8 AC SP. GR.=1.028 AC IN RECY

10:44 07/07/87 MIX #= 6
LE= 40

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	0%	0%	0%	0%
TPH	203.0	12.85	.0	.0	.0	.0
TONS	636.12	38.54	71.76	301.01	22.82	226.57
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.7%
MIX TONS = 670.14
AC TEMP=299.7F

T-1
MIX TPH=215.8 AC SP. GR.=1.028 AC IN RECY

10:49 07/07/87 MIX #= 6
LE= 40

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	0%	0%	0%	0%
TPH	203.0	12.85	.0	.0	.0	.0
TONS	636.12	38.54	71.76	301.01	22.82	226.57
MOIS%	6.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.7%
MIX TONS = 670.14
AC TEMP=299.4F

T-1
MIX TPH=215.8 AC SP. GR.=1.028 AC IN RECY

10:54 07/07/87 MIX #= 6
LE= 40

	AGG	AC	AG1	AG2	AG3	AG4
DES %	94.1%	5.9%	12%	50%	0%	38%
ACT %	94.0%	6.0%	0%	0%	0%	0%
TPH	203.0	12.85	.0	.0	.0	.0
TONS	636.12	38.54	71.76	301.01	22.82	226.57

ACCUM. PERCENT= 5.7%
TONS = 670.14

TEMP=299.2F

9 07/07/87 MIX #= 6 MIX TPH=215.8 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.0%	6.0%	0%	0%	0%	0%
	203.0	12.85	.0	.0	.0	.0
S	636.12	38.54	71.76	301.01	22.82	226.57
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.7%
TONS = 670.14

TEMP=299.2F

04 07/07/87 MIX #= 6 MIX TPH=215.8 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.0%	6.0%	0%	0%	0%	0%
	203.0	12.85	.0	.0	.0	.0
S	636.12	38.54	71.76	301.01	22.82	226.57
S%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.7%
TONS = 670.14

TEMP=299.7F

end of test 108.1

9 07/07/87 MIX #= 6 MIX TPH=211.4 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	93.8%	6.2%	10%	50%	0%	38%
	198.2	13.13	20.1	94.1	.0	71.5
	644.57	39.07	72.73	304.97	22.82	229.62
%	6.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.7%
TONS = 679.52

TEMP=300.6F

Chemical Sprinkler
ID2 Lab
ID2 Rubber

1 07/07/87 MIX #= 4 MIX TPH=196.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	94.1%	5.9%	12%	50%	0%	38%
%	94.1%	5.9%	13%	49%	0%	37%
	184.6	11.61	25.3	93.9	.0	70.7
	650.90	39.49	73.50	308.18	22.82	232.06
%	5.2%		6.0%	5.0%	4.0%	8.0%

ACCUM. PERCENT= 5.7%
TONS = 686.39

TEMP=300.5F

07/07/87 MIX #= 4 MIX TPH=211.5 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4

AC TEMP=299.9F

11:56 07/07/87 MIX #= 4

LE= .0

	AG6	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.5%	4.5%	8%	10%	58%	23%
TPH	245.5	11.49	20.5	23.7	132.9	53.0
TONS	821.08	47.52	86.48	324.74	116.26	270.94
MOIS%	5.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.4%

MIX TONS = 863.40

MIX TPH=257.0 AC SP. GR.=1.028 AC IN REC

AC TEMP=299.8F

12:01 07/07/87 MIX #= 4

LE= .0

	AG6	AC	AG1	AG2	AG3	AG4
DES %	95.8%	4.2%	8%	10%	58%	24%
ACT %	95.5%	4.5%	8%	10%	57%	23%
TPH	244.5	11.45	19.9	23.1	132.8	54.3
TONS	841.83	48.47	86.01	326.65	127.33	275.51
MOIS%	5.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.4%

MIX TONS = 884.52

MIX TPH=252.5 AC SP. GR.=1.028 AC IN REDY

AC TEMP=299.7F

12:06 07/07/87 MIX #= 4

LE= .0

	AG6	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.5%	4.5%	8%	10%	58%	23%
TPH	244.9	11.52	20.0	23.7	133.3	53.1
TONS	861.65	49.43	89.54	328.56	138.40	280.10
MOIS%	5.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.4%

MIX TONS = 905.78

T-2 Start Test 2

MIX TPH=256.4 AC SP. GR.=1.028 AC IN REDY

AC TEMP=299.7F

12:11 07/07/87 MIX #= 4

LE= .0

	AG6	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.5%	4.5%	8%	10%	58%	23%
TPH	239.7	11.41	19.8	21.8	132.9	53.8
TONS	841.24	50.38	91.07	330.46	149.47	284.68
MOIS%	5.2%		6.0%	5.0%	4.0%	8.0%

AC ACCUM. PERCENT= 5.4%

MIX TONS = 926.91

T-3

MIX TPH=251.1 AC SP. GR.=1.028 AC IN REDYC

AC TEMP=299.5F

12:16 07/07/87 MIX #= 4

LE= .0

	AG6	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.6%	4.4%	8%	10%	58%	24%

T-4

MIX TPH=258.9 AC SP. GR.=1.028 AC IN REDYC

[illegible]	51.33	92.60	332.37	160.54	289.88
5.2%		6.0%	5.0%	4.0%	8.0%

CUM. PERCENT= 5.3%
ONS = 948.12

MP=299.5F

12:21

07/07/87 MIX #= 4 MIX TPH=255.5 AC SP. GR.=1.028 AC IN RECYC
.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.5%	4.5%	8%	9%	57%	23%
243.9	11.59	18.5	22.4	132.7	53.3
922.36	52.29	94.14	334.28	171.60	293.83
5.2%		6.0%	5.0%	4.0%	8.0%

CUM. PERCENT= 5.3%
ONS = 969.14

MP=299.3F

12:24

07/07/87 MIX #= 4 MIX TPH=260.2 AC SP. GR.=1.028 AC IN RECYC
.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	8%	9%	57%	23%
248.7	11.49	18.4	22.7	132.4	53.9
923.37	52.34	94.22	334.38	172.16	294.06
5.2%		6.0%	5.0%	4.0%	8.0%

CUM. PERCENT= 5.3%
ONS = 970.43

MP=299.3F

12:26

07/07/87 MIX #= 4 MIX TPH=245.3 AC SP. GR.=1.028 AC IN RECYC
.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.5%	4.5%	8%	9%	57%	24%
234.3	10.93	19.3	20.9	126.9	54.2
943.04	53.28	95.68	336.21	182.77	298.47
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.3%
ONS = 991.30

MP=299.1F

12:31

07/07/87 MIX #= 4 MIX TPH=248.4 AC SP. GR.=1.028 AC IN RECYC
.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.5%	4.5%	6%	10%	57%	24%
237.2	11.26	14.8	22.9	126.9	52.8
962.73	54.20	97.15	338.03	193.36	302.84
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.3%
ONS = 1011.81

MP=299.0F

[illegible] MIX #= 4 MIX TPH=249.5 AC SP. GR.=1.028 AC IN RECYC

	AG1	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.6%	4.4%	8%	9%	58%	24%
TPH	2381.5	11.02	19.3	21.0	127.6	52.9
TONS	982.44	55.13	98.61	339.86	203.94	307.21
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.3%
MIX TONS = 1032.47

AC TEMP=298.8F

12:40:07/07/87 MIX #= 4 MIX TPH=246.3 AC SP. GR.=1.028 AC IN REC
LE=1.0

	AG1	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.4%	4.6%	8%	10%	57%	24%
TPH	235.04	11.23	18.6	22.4	126.9	52.8
TONS	996.92	55.81	99.68	341.18	211.67	310.41
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.3%
MIX TONS = 1047.59

AC TEMP=299.1F

12:45:07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN REC
LE=1.0

	AG1	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.6%	4.4%	0%	0%	0%	0%
TPH	237.8	11.06	.0	.0	.0	.0
TONS	1005.99	56.26	100.37	342.04	216.64	312.47
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1056.71

AC TEMP=298.9F

12:50:07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN REC
LE=1.0

	AG1	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.6%	4.4%	0%	0%	0%	0%
TPH	237.8	11.06	.0	.0	.0	.0
TONS	1005.99	56.26	100.37	342.04	216.64	312.47
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1056.71

AC TEMP=298.7F

12:55:07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN REC
LE=1.0

	AG1	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.6%	4.4%	0%	0%	0%	0%
TPH	237.8	11.06	.0	.0	.0	.0
TONS	1005.99	56.26	100.37	342.04	216.64	312.47
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1056.71

30

07/07/87 MIX #= 4 MIX TPH=248.8 AC SP. GR.=1.028 AC IN RECYC

.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	0%	0%	0%	0%
237.8	11.06	.0	.0	.0	.0
1005.99	56.26	100.37	342.04	216.64	312.47
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.2%

TONS = 1056.71

MP=298.6F

105

07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN RECYC

.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	0%	0%	0%	0%
237.8	11.06	.0	.0	.0	.0
1005.99	56.26	100.37	342.04	216.64	312.47
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.2%

TONS = 1056.71

MP=298.4F

40

07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN RECYC

.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	0%	0%	0%	0%
237.8	11.06	.0	.0	.0	.0
1005.99	56.26	100.37	342.04	216.64	312.47
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.2%

TONS = 1056.71

MP=298.3F

45

07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN RECYC

.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	0%	0%	0%	0%
237.8	11.06	.0	.0	.0	.0
1005.99	56.26	100.37	342.04	216.64	312.47
5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.2%

TONS = 1056.71

MP=298.1F

50

07/07/87 MIX #= 4 MIX TPH=248.9 AC SP. GR.=1.028 AC IN RECYC

.0

AGG	AC	AG1	AG2	AG3	AG4
95.5%	4.5%	8%	10%	58%	24%
95.6%	4.4%	0%	0%	0%	0%
237.8	11.06	.0	.0	.0	.0

AC ACCUM.%PERCENT= 5.2%
MIX TONS= 1056.71

AC TEMP=297.9F

13:25 07/07/87 MIX #= 4
LE= .0

	AG6	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.5%	8%
TPH	241.4	11.33	17.8
TONS	1014.84	56.68	101.02
MOIS%	5.5%		7.0%

AC ACCUM.%PERCENT= 5.2%
MIX TONS= 1066.49

AC TEMP=298.2F

13:30 07/07/87 MIX #= 4
LE= .0

	AG6	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.5%	8%
TPH	237.6	10.80	18.1
TONS	1033.89	57.59	102.48
MOIS%	5.5%		7.0%

AC ACCUM.%PERCENT= 5.2%
MIX TONS= 1046.58

AC TEMP=298.6F

13:35 07/07/87 MIX #= 4
LE= .0

	AG6	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.5%	8%
TPH	232.9	10.95	15.4
TONS	1053.50	59.49	103.94
MOIS%	5.5%		7.0%

AC ACCUM.%PERCENT= 5.2%
MIX TONS= 1106.88

AC TEMP=299.0F

13:40 07/07/87 MIX #= 4
LE= .0

	AG6	AC	AG1
DES %	95.5%	4.5%	8%
ACT %	95.5%	4.5%	8%
TPH	232.1	10.93	14.5
TONS	1078.60	59.40	105.41
MOIS%	5.5%		7.0%

AC ACCUM.%PERCENT= 5.2%
MIX TONS= 1126.94

AC TEMP=299.3F

13:45 07/07/87 MIX #= 4
LE= .0

T-2

MIX TPH=252.7 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	50%	24%
10%	58%	23%
22.4	127.0	52.0
342.84	221.30	314.43
5.0%	4.0%	9.0%

T-2

MIX TPH=238.4 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
10%	58%	23%
22.1	127.4	52.0
344.66	231.88	318.80
5.0%	4.0%	9.0%

T-2

MIX TPH=243.7 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
9%	58%	23%
21.5	127.6	51.7
346.47	242.47	323.18
5.0%	4.0%	9.0%

T-2

MIX TPH=243.1 AC SP. GR.=1.028 AC IN RECYC

AG2	AG3	AG4
10%	58%	24%
9%	57%	24%
20.6	126.6	53.0
348.30	253.05	327.54
5.0%	4.0%	9.0%

T-2

MIX TPH=243.3 AC SP. GR.=1.028 AC IN RECYC

[illegible]	[illegible]	[illegible]	19.2	22.8	127.3	49.0
[illegible]	[illegible]	60.[illegible]	106.88	350.12	263.64	331.94
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1147.26

T-2

AC TEMP=299.4F

13:50 07/07/87 MIX #= 4 MIX TPH=238.8 AC SP. GR.=1.028 AC IN RECYC
LE= .0

T-2

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.4%	4.6%	7%	10%	58%	23%
TPH	227.9	10.91	16.5	22.0	127.5	51.0
TONS	1111.20	61.23	108.34	351.95	274.22	336.31
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1167.43

AC TEMP=299.4F

13:55 07/07/87 MIX #= 4 MIX TPH=241.9 AC SP. GR.=1.028 AC IN RECYC
LE= .0

T-2

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.4%	4.6%	8%	10%	57%	23%
TPH	230.8	11.15	17.6	22.3	126.8	50.8
TONS	1130.44	62.13	109.81	353.77	284.81	340.70
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.2%
MIX TONS = 1187.53

AC TEMP=299.2F

14:00 07/07/87 MIX #= 4 MIX TPH=242.9 AC SP. GR.=1.028 AC IN RECYC
LE= .0

T-2

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.5%	4.5%	8%	9%	57%	22%
TPH	232.0	10.91	18.9	21.3	126.7	50.0
TONS	1149.70	63.04	111.27	355.58	295.39	345.08
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.1%
MIX TONS = 1207.68

AC TEMP=299.0F

4:05 07/07/87 MIX #= 4 MIX TPH=242.0 AC SP. GR.=1.028 AC IN RECYC
LE= .0

T-2 end Test 8

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	10%	58%	24%
ACT %	95.4%	4.6%	6%	10%	57%	23%
TPH	230.9	11.06	14.4	23.1	126.7	52.4
TONS	1169.05	63.95	112.73	357.39	305.98	349.45
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.1%
MIX TONS = 1227.92

AC TEMP=299.0F

TEMP=299.6F

35 07/07/87 MIX #= 4 MIX TPH=243.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	10%	58%	24%
%	95.4%	4.6%	8%	10%	57%	23%
	232.1	11.13	19.6	22.3	126.7	51.3
S	1286.06	69.46	121.52	368.32	369.49	375.74
S%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.1%
TONS = 1350.47

TEMP=299.0F

40 07/07/87 MIX #= 4 MIX TPH=242.7 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	10%	58%	24%
%	95.5%	4.5%	7%	9%	57%	23%
	231.8	10.99	16.8	20.4	126.9	51.8
S	1305.50	70.38	122.98	370.13	380.07	380.12
S%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.1%
TONS = 1370.82

TEMP=299.3F

45 07/07/87 MIX #= 4 MIX TPH=240.9 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	10%	58%	24%
%	95.5%	4.5%	8%	10%	58%	23%
	230.1	10.86	18.2	22.3	127.2	50.7
S	1324.87	71.29	124.44	371.94	390.66	384.50
S%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.1%
TONS = 1391.07

TEMP=299.4F

50 07/07/87 MIX #= 4 MIX TPH=242.1 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	10%	58%	24%
%	95.5%	4.5%	8%	10%	58%	23%
	231.1	10.99	18.9	22.8	127.2	52.1
S	1344.25	72.21	125.90	373.76	401.24	388.89
S%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.0%
TONS = 1411.39

TEMP=299.6F

T-3 Start Test 3

55

55 07/07/87 MIX #= 4 MIX TPH=241.1 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	10%	58%	24%
%	95.5%	4.5%	7%	9%	58%	23%
	[illegible]	10.97	15.4	20.8	127.2	52.4

TPH	240.6	10.97	15.4	20.0	127.2	52.4
TONS	1389.64	73.12	127.37	375.57	411.83	393.27
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS = 1431.51

T-3

AC TEMP=299.7F

T-3

14:56 07/07/87 MIX #= 4 MIX TPH=245.4 AC SP. GR.=1.028 AC IN REC'
LE= 0

	AGG	AC	AG1	AG2	AG3	AG4
DES%	95.5%	4.5%	8%	10%	58%	24%
ACT%	95.5%	4.5%	8%	10%	58%	24%
TPH	234.3	11.08	17.5	22.5	127.3	53.7
TONS	1365.19	73.19	127.49	375.71	412.68	393.62
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS = 1453.14

AC TEMP=299.7F

T-3

15:01 07/07/87 MIX #= 4 MIX TPH=244.9 AC SP. GR.=1.028 AC IN REC'
LE= 0

	AGG	AC	AG1	AG2	AG3	AG4
DES%	95.5%	4.5%	8%	15%	53%	24%
ACT%	95.5%	4.5%	8%	14%	52%	25%
TPH	233.9	10.97	19.6	32.4	115.9	54.8
TONS	1384.61	74.11	128.96	378.34	422.40	398.00
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS = 1453.61

AC TEMP=299.7F

T-3

15:03 07/07/87 MIX #= 4 MIX TPH=244.6 AC SP. GR.=1.028 AC IN REC'
LE= 0

	AGG	AC	AG1	AG2	AG3	AG4
DES%	95.5%	4.5%	8%	15%	53%	24%
ACT%	95.5%	4.5%	8%	14%	52%	23%
TPH	233.7	10.91	19.3	32.7	115.8	51.6
TONS	1395.75	74.63	129.79	379.90	427.91	400.50
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS = 1463.28

AC TEMP=299.7F

T-3

15:08 07/07/87 MIX #= 4 MIX TPH=231.7 AC SP. GR.=1.028 AC IN REC'
LE= 0

	AGG	AC	AG1	AG2	AG3	AG4
DES%	95.5%	4.5%	8%	15%	53%	24%
ACT%	95.5%	4.5%	9%	14%	52%	24%
TPH	221.3	10.41	18.8	30.3	108.3	50.1
TONS	1414.29	79.52	131.17	382.49	437.00	404.63
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS = 1484.99

AC TEMP=299.6F

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	0%	15%	53%	25%
	210.5	10.24	17.9	31.2	108.9	51.2
	1437.61	76.39	132.54	385.05	446.06	408.72
%	5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.0%
TONS = 1504.20

T-3

EMP=299.3F

8 07/07/87 MIX #= 4 MIX TPH=231.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	0%	0%	0%	0%
	220.9	10.31	.0	.0	.0	.0
	1439.56	76.73	133.07	386.05	449.59	410.32
%	5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.0%
TONS = 1511.11

EMP=298.8F

T-3

3 07/07/87 MIX #= 4 MIX TPH=231.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	0%	0%	0%	0%
	220.9	10.31	.0	.0	.0	.0
	1439.56	76.73	133.07	386.05	449.59	410.32
%	5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.0%
TONS = 1511.11

EMP=298.5F

T-3

8 07/07/87 MIX #= 4 MIX TPH=231.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	0%	0%	0%	0%
	220.9	10.31	.0	.0	.0	.0
	1439.56	76.73	133.07	386.05	449.59	410.32
%	5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.0%
TONS = 1511.11

EMP=298.2F

T-3

3 07/07/87 MIX #= 4 MIX TPH=229.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.6%	6%	15%	52%	24%
	210.7	10.43	13.9	30.9	106.6	49.5
	1452.02	77.32	133.98	387.76	455.56	413.06
%	5.5%		7.0%	5.0%	4.0%	9.0%

CUM. PERCENT= 5.0%
TONS = 1524.51

AC-TEMP=298.6F

T-3

15:38 07/07/87 MIX #= 4 MIX TPH=230.3 AC SP. GR.=1.028 AC IN RECYC

E= 7.0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	15%	53%	24%
ACT %	95.5%	4.5%	7%	14%	53%	24%
TPH	219.9	10.41	16.1	30.6	108.7	50.8
TONS	1470.33	78.18	135.35	390.33	464.62	417.16
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS =1543.69

AC TEMP=298.6F

T-3

15:43 07/07/87 MIX #= 4 MIX TPH=229.2 AC SP. GR.=1.028 AC IN RECYC

E= 7.0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	15%	53%	24%
ACT %	95.5%	4.5%	7%	15%	53%	24%
TPH	218.8	10.39	16.2	31.2	108.7	50.8
TONS	1468.57	78.04	136.73	392.89	473.67	421.26
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS =1562.82

AC TEMP=298.5F

T-3

15:48 07/07/87 MIX #= 4 MIX TPH=226.2 AC SP. GR.=1.028 AC IN RECYC

E= 7.0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	15%	53%	24%
ACT %	95.5%	4.5%	8%	15%	53%	23%
TPH	216.0	10.22	17.2	31.0	108.7	49.2
TONS	1506.73	79.90	138.10	395.45	482.73	425.35
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS =1580.85

AC TEMP=299.0F

T-3

15:53 07/07/87 MIX #= 4 MIX TPH=228.6 AC SP. GR.=1.028 AC IN RECYC

E= 7.0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	15%	53%	24%
ACT %	95.5%	4.5%	8%	14%	52%	23%
TPH	218.3	10.31	18.4	30.7	108.3	47.7
TONS	1524.95	80.75	139.47	398.02	491.78	429.45
MOIS%	5.5%		7.0%	5.0%	4.0%	9.0%

AC ACCUM. PERCENT= 5.0%
MIX TONS =1660.88

AC TEMP=299.3F

T-3

15:58 07/07/87 MIX #= 4 MIX TPH=229.1 AC SP. GR.=1.028 AC IN RECYC

E= 7.0

	AGG	AC	AG1	AG2	AG3	AG4
DES %	95.5%	4.5%	8%	15%	53%	24%
ACT %	95.5%	4.5%	[illegible]	[illegible]	[illegible]	[illegible]

TEMP=300.1F

T-3

3 07/07/87 MIX #= 4 MIX TPH=229.9 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	8%	15%	53%	22%
	219.6	10.29	18.2	31.7	108.6	48.67
S	1561.54	82.40	142.21	403.15	509.89	437.65
3%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.0%
TONS = 1639.21

TEMP=300.4F

T-3

08 07/07/87 MIX #= 4 MIX TPH=226.2 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	8%	15%	52%	24%
	215.9	10.28	18.2	31.0	108.5	49.8
3	1579.77	83.34	143.59	405.71	518.94	441.76
3%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.0%
TONS = 1658.29

TEMP=300.3F

T-3

13 07/07/87 MIX #= 4 MIX TPH=227.3 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	8%	14%	53%	24%
	217.0	10.26	18.4	30.3	109.0	50.5
1	1597.94	84.19	144.96	408.28	527.99	445.85
1%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 5.0%
TONS = 1677.31

TEMP=300.5F

T-3

18 07/07/87 MIX #= 4 MIX TPH=227.3 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	8%	15%	53%	24%
	217.1	10.20	17.3	30.8	109.1	50.0
3	1616.15	85.05	146.32	410.84	537.05	449.95
3%	5.5%		7.0%	5.0%	4.0%	9.0%

ACCUM. PERCENT= 4.9%
TONS = 1696.39

TEMP=300.5F

T-3

23 07/07/87 MIX #= 4 MIX TPH=228.9 AC SP. GR.=1.028 AC IN RECYC
.0

	AGG	AC	AG1	AG2	AG3	AG4

ACT %	95.5%	4.5%	8%	15%	53%	24%
TPH	218.7	10.22	16.9	31.5	108.8	23%
TONS	1634.23	85.90	147.69	413.40	546.10	47.8
MOIS%	5.5%		7.0%	5.0%	4.0%	454.05
AC ACCUM. PERCENT=		4.9%				9.0%
MIX TONS = 1715.36						

T-3

AC TEMP=300.5F

T-3

6:28 07/07/87 MIX #= 4 MIX TPH=226.5 AC SP. GR.=1.028 AC IN RECYC

	AGG	AC	AG1	AG2	AG3	AG4
ES %	95.5%	4.5%	8%	15%	53%	24%
CT %	95.5%	4.5%	8%	14%	52%	24%
PH	216.3	10.25	17.3	30.7	108.1	51.0
ONS	1651.32	86.71	149.00	415.84	554.70	457.96
OIS%	5.5%		7.0%	5.0%	4.0%	9.0%
C ACCUM. PERCENT=		4.9%				
X TONS = 1733.10						

END OF TEST 3

T-4

33 07/07/87 MIX #= 4 MIX TPH=206.8 AC SP. GR.=1.028 AC IN RECYC

	AGG	AC	AG1	AG2	AG3	AG4
6 %	95.5%	4.5%	8%	15%	53%	24%
T %	95.5%	4.5%	6%	14%	52%	23%
H	197.5	9.31	12.8	27.9	101.1	45.0
NS	1668.08	87.52	150.28	418.25	563.17	461.79
S%	5.5%		7.0%	5.0%	4.0%	9.0%
ACCUM. PERCENT=		4.9%				
X TONS = 1751.20						

TEMP=301.8F

38 07/07/87 MIX #= 4 MIX TPH=209.9 AC SP. GR.=1.028 AC IN RECYC

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	7%	15%	53%	24%
	200.5	9.37	14.8	29.7	101.5	46.3
S	1684.66	88.30	151.55	420.64	571.61	465.61
S%	5.5%		7.0%	5.0%	4.0%	9.0%
ACCUM. PERCENT=		4.9%				
TONS = 1769.57						

TEMP=301.8F

3 07/07/87 MIX #= 4 MIX TPH=209.6 AC SP. GR.=1.028 AC IN RECYC

	AGG	AC	AG1	AG2	AG3	AG4
%	95.5%	4.5%	8%	15%	53%	24%
%	95.5%	4.5%	8%	15%	53%	24%
	200.2	9.39	16.7	29.1	101.5	47.7
	1701.44	89.09	152.82	423.03	580.04	469.41
%	5.5%		7.0%	5.0%	4.0%	9.0%
CCUM. PERCENT=		4.9%				
TONS = 1786.04						

EMP=301.7F