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.

AP-42 Section Number: 9.7

Reference Number: 23

Title: Alta Vista Gin - PM-10 And Total Particulate Testing, Battery Condenser, Lint Cleaner, & Motes Trash Cyclones

AIRx Testing

AIRx Testing

November 1994

AP-42 Section 9.7
Reference 23
Report Sect. 4
Reference 15

ALTA VISTA GIN
5854 South San Diego Street
Mendota, CA 93640

Attn: Lloyd Hendrickson

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APCD—SOUTHERN REGION

PM10 & TOTAL PARTICULATE TESTING BATTERY CONDENSER, LINT CLEANER & MOTES TRASH CYCLONES

NOVEMBER 3 & 4, 1994

Prepared By:

AIRx TESTING
2175 Goodyear Avenue Unit #105
Ventura, CA 93003

Job Number
1060

Laboratory Report Number
294-140

Test Team Leader
Cam Donnahoo

Results Verified By:
Tom Porter
Partner

December 29, 1994

AIRx TESTING

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PARTICULATE EMISSION SUMMARY

BATTERY CONDENSER CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0020	0.0019	0.0026	*0.0022*
lb/hr	0.12	0.13	0.18	*0.14*
lb/bale	0.01	0.01	0.01	*0.01*
Particule Size Distribution				
+10μ (%)	30.5	74.4	24.9	*43.3*
+10μ (lb/hr)	0.04	0.10	0.04	*0.06*
+10μ (lb/bale)	<0.01	<0.01	<0.01	*<0.01*
-10μ (%)	69.5	25.6	75.1	*56.7*
-10μ (lb/hr)	0.08	0.03	0.13	*0.08* x2 = .16
-10μ (lb/bale)	<0.01	<0.01	<0.01	*<0.01* x2 = <.02
Average Bales/hr	23.3	22.3	23.6	*23.1*

MOTES CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0304	0.0267	0.0262	*0.0278*
lb/hr	1.00	0.87	0.81	*0.89*
lb/bale	0.04	0.04	0.03	*0.04*
Particule Size Distribution				
+10μ (%)	51.7	34.2	50.8	*45.6*
+10μ (lb/hr)	0.52	0.30	0.41	*0.41*
+10μ (lb/bale)	0.02	0.01	0.02	*0.02*
-10μ (%)	48.3	65.8	49.2	*54.4*
-10μ (lb/hr)	0.48	0.57	0.40	*0.48* x3 = 1.44
-10μ (lb/bale)	0.02	0.02	0.02	*0.02* x3 = .06
Average Bales/hr	22.4	23.6	23.2	*23.1*

AIR X TESTING

PARTICULATE EMISSION SUMMARY

LINT CLEANER CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0080	0.0098	0.0041	*0.0073*
lb/hr	0.27	0.33	0.13	*0.24*
lb/bale	0.02	0.01	0.01	*0.01*
Particule Size Distribution				
+10μ (%)	55.5	44.6	57.4	*52.5*
+10μ (lb/hr)	0.15	0.15	0.08	*0.13*
+10μ (lb/bale)	0.01	0.01	<0.01	*<0.01*
-10μ (%)	44.5	55.4	42.6	*47.5*
-10μ (lb/hr)	0.12	0.18	0.06	*0.12 x 6 = .72*
-10μ (lb/bale)	0.01	0.01	<0.01	*0.01 x 6 = .06*
Average Bales/hr	11.6	23.6	25.5	*20.2*

AIR X TESTING

I. INTRODUCTION

INTRODUCTION

On November 3 & 4, 1994, AIRx Testing performed source emission tests for Total and PM-10 particulate matter on the Battery Condenser, Lint Cleaner and Motes Trash Cyclones. The cyclones are located at Alta Vista Gin, 5854 South San Diego Street, Mendota, California. Sampling was done in triplicate for total particulate and PM-10 particule size distribution. Production rates, in bales per hour, were taken by Alta Vista personnel. No problems were incountered during the sampling. The exhaust stacks were candy canes attached to the top of the cyclones and continued in a vertical position. The testing was conducted with two (2) ports. The Lint Cleaner Cyclone duct was 30 inches in diameter and the ports were located 72 inches upstream and 240 inches downstream from the nearest disturbance. A total of 12 sample points were taken (6 per port). The Motes cyclone was 26 inches in diameter and the ports were located 50 inches upstream and 240 inches downstream from the nearest disturbance. The Battery Condenser cyclone was 35 inches in diameter and the ports were located 72 inches upstream and 240 inches downstream from the nearest disturbance. A total of 12 sample points were taken (6 per port).

SAMPLING AND ANALYTICAL PROCEDURES

STACK GAS ANALYSIS: The oxygen and carbon dioxide content of the exhaust gases were assumed to be ambient air. Oxygen = 20.9% and Carbon Dioxide = 0.05%.

STACK GAS VELOCITY: The stack gas velocity was determined using an "S" type pitot tube connected to a magnehelic gauge. The "S" type pitot was used to determine the stack velocity profile for each run. A total of 12 (6 points per port) traverse points were utilized on each duct.

The stack temperature was determined using a thermocouple and an indicating pyrometer. The proportion of water was determined gravimetrically and the dry molecular weight of the stack gas determined by E.P.A. Method 3. Stack velocities and gas volumetric flow rate were calculated using E.P.A. Method 2.

TOTAL PARTICULATE EMISSIONS: A CARB Method 5 sampling train was utilized to determine the total particulate emission from the cyclones. The sample train consisted of a stainless steel nozzle, a heated stainless steel probe, a heated glass fiber filter and cooled impingers. After the weight is obtained from the filter, probe and nozzle rinses; the total solids in the impingers is added to the front-end catch to satisfy SJVUAPCD rules.

PARTICULE SIZE DISTRIBUTION: A sample was taken isokinetically from the stack using a GII cascade impactor. A modified CARB Method 501 was utilized. The impactor consisted of two (2) slotted discs, a back up filter and cooled impingers. The noxxle, preseparator cyclone and the first two (2) discs are +10µ and the backup filter, probe and impingers are -10µ. The total weights obtained from each fraction were added together to obtain the total particulate weight. The total weight was used to determine the % of the +10µ and the -10µ fraction. The total weight obtained from the total particulate runs are used to determine the +10µ and the -10µ results reported in grains/dscf, lb/hr and lb/bale.

LEAK CHECKS: Leak rates were conducted on the sampling train and the pitot tubes before and after each test. The leak check for the sampling train was done at the nozzle. Any leak rate greater than 0.02 cfm was corrected for in the volume calculations.

All calculations for lb/hr were done by using the flow rate of the stack gas. All values were calculated by using SJVUAPCD standard conditions (60°F & 29.92 in Hg).

All glassware was inspected before and after each run to insure that no breakage had occured during the sampling. No problems were encountered during the sampling.

If you have any questions concerning the above results please contact the undersigned at 805-644-1099.

Respectfully submitted,
AIRx Testing

Tom Porter
Partner

cc California Cotton Ginners Association
Attn: Roger Isom

II. WET TEST METHODS DATA SUMMARIES

BATTERY CONDENSER
CYCLONE

FIELD DATA SUMMARY
TOTAL PARTICULATE
BATTERY CONDENSER CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	0.0	0.8	0.6
Vm - Gas volume, meter cond., dcf	38.786	40.670	43.719
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	29.65	29.65	29.65
Pg - Stack static pressure, in. H20	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H20	1.377	1.482	1.560
Tm - Absolute meter temperature, °R	552.1	554.9	557.5
Vm(std) - Standard sample gas vol., dscf	34.7712	36.2834	38.8275
Bws - Water vapor part in gas stream	0.0	0.1	0.1
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %.	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.844	28.833	28.836
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.333	0.367	0.369
Ts - Absolute stack Temp. °R	536.5	534.7	530.3
A - Area of stack, square feet	6.68	6.68	6.68
Qstd - Volumetric flow rate, dscfm	7225	7976	8054
An - Area of nozzel, square feet	0.0005275	0.0005275	0.0005275
ø - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	101.6	96.0	101.8

AIRX TESTING

FIELD DATA SUMMARY
PM10 PARTICULATE
BATTERY CONDENSER CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	31.825	35.095	32.829
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	29.65	29.65	29.65
Pg - Stack static pressure, in. H20	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H20	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	539.9	544.4	547.1
Vm(std) - Standard sample gas vol., dscf	29.6063	32.3785	30.1402
Bws - Water vapor part in gas stream	0.0	0.1	0.1
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.844	28.833	28.836
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.317	0.333	0.367
Ts - Absolute stack Temp. °R	536.5	534.7	531.8
A - Area of stack, square feet	6.68	6.68	6.68
Qstd - Volumetric flow rate, dscfm	6874	7231	8000
An - Area of nozzel, square feet	0.0004276	0.0004276	0.0004276
ø - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	112.2	116.6	98.1

AIR TESTING

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **1**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.0	g		
Vlc	Water Condensate Volume	**0.0**	**ml**		
Vm	Metered Sample Gas Volume	**38.786**	**dcf**		
Lp	Avg. Leak Rate	0.005	cf		
Vn	Leak Corrected Sample Gas Volume	38.786	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.377**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	92.1	deg. F	**552.1**	**deg. R**
Vm(std)	Sample Gas Volume	**34.7712**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	34.7712	scf		
Vw(std)	Water Vapor Volume	0.0000	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.333**	**in. H20**		
Ts	Stack Gas Temperature, Average	**76.5**	deg. F	**536.5**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	in. dia.
Vs	Stack Gas Velocity	18.76	ft/sec		
Qa	Actual Flow Rate	7,522	cfm		
Qad	Actual Flow Rate, Dry	7,522	dcfm		
Q(std)	Stack Gas Flow Rate	**7,225**	**dscfm**		
An	Nozzle Area	**0.0005275**	**sq ft**	0.311	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**101.59**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Battery Cond.**	Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.8	g		
Vlc	Water Condensate Volume	**0.8**	**ml**		
Vm	Metered Sample Gas Volume	**40.670**	**dcf**		
Lp	Avg. Leak Rate	0.001	cf		
Vn	Leak Corrected Sample Gas Volume	40.670	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.027**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.482**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	94.9	deg. F	**554.9**	**deg. R**
Vm(std)	Sample Gas Volume	**36.2834**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	36.3206	scf		
Vw(std)	Water Vapor Volume	0.0372	scf		
Bws	Water Content of Stack Gas	**0.001**		**0.102**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.833**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.367**	**in. H20**		
Ts	Stack Gas Temperature, Average	**74.7**	deg. F	**534.7**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	in. dia.
Vs	Stack Gas Velocity	20.67	ft/sec		
Qa	Actual Flow Rate	8,285	cfm		
Qad	Actual Flow Rate, Dry	8,276	dcfm		
Q(std)	Stack Gas Flow Rate	**7,976**	**dscfm**		
An	Nozzle Area	**0.0005275**	**sq ft**	0.311	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**96.02**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **3**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.6	g		
Vlc	Water Condensate Volume	**0.6**	**ml**		
Vm	Metered Sample Gas Volume	**43.719**	**dcf**		
Lp	Avg. Leak Rate	0.008	cf		
Vn	Leak Corrected Sample Gas Volume	43.719	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.027**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.560**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	97.5	deg. F	**557.5**	**deg. R**
Vm(std)	Sample Gas Volume	**38.8275**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	38.8554	scf		
Vw(std)	Water Vapor Volume	0.0279	scf		
Bws	*Water Content of Stack Gas*	**0.001**		**0.072**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.836**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.369**	**in. H20**		
Ts	Stack Gas Temperature, Average	**70.3**	deg. F	**530.3**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	in. dia.
Vs	Stack Gas Velocity	20.69	ft/sec		
Qa	Actual Flow Rate	8,295	cfm		
Qad	Actual Flow Rate, Dry	8,289	dcfm		
Q(std)	Stack Gas Flow Rate	**8,054**	**dscfm**		
An	Nozzle Area	**0.0005275**	**sq ft**	0.311	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**101.77**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **Run #1 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**31.825**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	31.825	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	79.9	deg. F	**539.9**	**deg. R**
Vm(std)	Sample Gas Volume	**29.6063**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	29.6063	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.317**	**in. H20**		
Ts	Stack Gas Temperature, Average	**76.5**	deg. F	**536.5**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	in. dia.
Vs	Stack Gas Velocity	17.85	ft/sec		
Qa	Actual Flow Rate	7,157	cfm		
Qad	Actual Flow Rate, Dry	7,157	dcfm		
Q(std)	Stack Gas Flow Rate	**6,874**	**dscfm**		
An	Nozzle Area	**0.0004276**	**sq ft**	0.280	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**112.16**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**35.095**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	35.095	dcf		
Y	*Dry Gas Meter Calibration Factor*	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	*in. Hg*		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	84.4	deg. F	**544.4**	**deg. R**
Vm(std)	Sample Gas Volume	**32.3785**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	32.4115	scf		
Bws	Water Content of Stack Gas	**0.001**		**0.102**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.833**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.333**	**in. H20**		
Ts	Stack Gas Temperature, Average	**74.7**	deg. F	**534.7**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	*in. dia.*
Vs	Stack Gas Velocity	18.74	ft/sec		
Qa	Actual Flow Rate	7,511	cfm		
Qad	Actual Flow Rate, Dry	7,503	dcfm		
Q(std)	Stack Gas Flow Rate	**7,231**	**dscfm**		
An	Nozzle Area	**0.0004276**	**sq ft**	0.280	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**116.61**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Battery Cond.**	Run: **Run #3 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**32.829**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	32.829	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	87.1	deg. F	**547.1**	**deg. R**
Vm(std)	Sample Gas Volume	**30.1402**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	30.1619	scf		
Bws	Water Content of Stack Gas	**0.001**		**0.072**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.836**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.367**	**in. H20**		
Ts	Stack Gas Temperature, Average	**71.8**	deg. F	**531.8**	**deg. R**
As	Area of Stack	**6.68**	**sq ft**	35.0	in. dia.
Vs	Stack Gas Velocity	20.61	ft/sec		
Qa	Actual Flow Rate	8,262	cfm		
Qad	Actual Flow Rate, Dry	8,256	dcfm		
Q(std)	Stack Gas Flow Rate	**8,000**	**dscfm**		
An	Nozzle Area	**0.0004276**	**sq ft**	0.280	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**98.11**	**%**		

AIRx Testing - 1994

MOTES
CYCLONE

FIELD DATA SUMMARY
TOTAL PARTICULATE
MOTES CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	7.7	2.3	0.0
Vm - Gas volume, meter cond., dcf	45.738	44.419	44.183
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	29.82	29.85	29.85
Pg - Stack static pressure, in. H2O	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H2O	1.979	1.979	1.700
Tm - Absolute meter temperature, °R	537.3	540.4	548.3
Vm(std) - Standard sample gas vol., dscf	42.4359	41.0180	40.1804
Bws - Water vapor part in gas stream	0.8	0.3	0.0
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.753	28.816	28.844
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.313	0.313	0.297
Ts - Absolute stack Temp. °R	509.9	522.8	527.9
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	3835	3807	3599
An - Area of nozzel, square feet	0.0007467	0.0006492	0.0006492
ø - Sampling time, minutes	60	60	60
i - isokinetic variation, percent	91.1	102.0	105.7

AIR TESTING

FIELD DATA SUMMARY
PM10 PARTICULATE
MOTES CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	31.950	35.000	32.961
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	29.82	29.82	29.82
Pg - Stack static pressure, in. H20	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H20	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	519.4	535.0	540.7
Vm(std) - Standard sample gas vol., dscf	31.0724	33.0445	30.7957
Bws - Water vapor part in gas stream	0.8	0.3	0.0
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.753	28.816	28.844
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.266	0.313	0.313
Ts - Absolute stack Temp. °R	509.9	523.2	527.9
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	3261	3804	3795
An - Area of nozzel, square feet	0.0007670	0.0004276	0.0004276
ø - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	76.3	124.8	116.6

AIR TESTING

Client: **Alta Vista Gin**	Date: **11/4/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Moles**	Run: **1**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	7.7	g		
Vlc	Water Condensate Volume	**7.7**	**ml**		
Vm	Metered Sample Gas Volume	**45.738**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	45.738	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.82**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.82	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.979**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	77.3	deg. F	**537.3**	**deg. R**
Vm(std)	Sample Gas Volume	**42.4359**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	42.7941	scf		
Vw(std)	Water Vapor Volume	0.3582	scf		
Bws	Water Content of Stack Gas	**0.008**		**0.837**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.753**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.313**	**in. H20**		
Ts	Stack Gas Temperature, Average	**49.9**	deg. F	**509.9**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	17.20	ft/sec		
Qa	Actual Flow Rate	3,805	cfm		
Qad	Actual Flow Rate, Dry	3,773	dcfm		
Q(std)	Stack Gas Flow Rate	**3,835**	**dscfm**		
An	Nozzle Area	**0.0007467**	**sq ft**	0.370	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**91.07**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	2.3	g		
Vlc	Water Condensate Volume	**2.3**	**ml**		
Vm	Metered Sample Gas Volume	**44.419**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	44.419	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.85**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.85	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.979**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	80.4	deg. F	**540.4**	**deg. R**
Vm(std)	Sample Gas Volume	**41.0180**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	41.1250	scf		
Vw(std)	Water Vapor Volume	0.1070	scf		
Bws	Water Content of Stack Gas	**0.003**		**0.260**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.816**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.313**	**in. H20**		
Ts	Stack Gas Temperature, Average	**62.8**	deg. F	**522.8**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	17.39	ft/sec		
Qa	Actual Flow Rate	3,847	cfm		
Qad	Actual Flow Rate, Dry	3,837	dcfm		
Q(std)	Stack Gas Flow Rate	**3,807**	**dscfm**		
An	Nozzle Area	**0.0006492**	**sq ft**	0.345	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**101.99**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **3**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.0	g		
Vlc	Water Condensate Volume	**0.0**	**ml**		
Vm	Metered Sample Gas Volume	**44.183**	**dcf**		
Lp	Avg. Leak Rate	0.003	cf		
Vn	Leak Corrected Sample Gas Volume	44.183	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.85**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.85	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.700**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	88.3	deg. F	**548.3**	**deg. R**
Vm(std)	Sample Gas Volume	**40.1804**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	40.1804	scf		
Vw(std)	Water Vapor Volume	0.0000	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.297**	**in. H20**		
Ts	Stack Gas Temperature, Average	**67.9**	deg. F	**527.9**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	16.55	ft/sec		
Qa	Actual Flow Rate	3,662	cfm		
Qad	Actual Flow Rate, Dry	3,662	dcfm		
Q(std)	Stack Gas Flow Rate	**3,599**	**dscfm**		
An	Nozzle Area	**0.0006492**	**sq ft**	0.345	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**105.69**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **Run #1 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**31.950**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	31.950	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.82**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.82	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	59.4	deg. F	**519.4**	**deg. R**
Vm(std)	Sample Gas Volume	**31.0724**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	31.3346	scf		
Bws	Water Content of Stack Gas	**0.008**		**0.837**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.753**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.266**	**in. H20**		
Ts	Stack Gas Temperature, Average	**49.9**	deg. F	**509.9**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	14.63	ft/sec		
Qa	Actual Flow Rate	3,236	cfm		
Qad	Actual Flow Rate, Dry	3,209	dcfm		
Q(std)	Stack Gas Flow Rate	**3,261**	**dscfm**		
An	Nozzle Area	**0.000767**	**sq ft**	0.375	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**76.34**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/4/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Moles**	Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**35.000**	**dcf**		
Lp	Avg. Leak Rate	0.001	*cf*		
Vn	Leak Corrected Sample Gas Volume	35.000	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.82**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.82	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	75.0	deg. F	**535.0**	**deg. R**
Vm(std)	Sample Gas Volume	**33.0445**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	33.1307	scf		
Bws	Water Content of Stack Gas	**0.003**		**0.260**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.816**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.313**	**in. H20**		
Ts	Stack Gas Temperature, Average	**63.2**	deg. F	**523.2**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	17.40	ft/sec		
Qa	Actual Flow Rate	3,850	cfm		
Qad	Actual Flow Rate, Dry	3,840	dcfm		
Q(std)	Stack Gas Flow Rate	**3,804**	**dscfm**		
An	Nozzle Area	**0.0004276**	**sq ft**	0.280	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	*Isokinetics*	**124.85**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **Run #3 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**32.961**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	32.961	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.82**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.82	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	80.7	deg. F	**540.7**	**deg. R**
Vm(std)	Sample Gas Volume	**30.7957**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	30.7957	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.313**	**in. H20**		
Ts	Stack Gas Temperature, Average	**67.9**	deg. F	**527.9**	**deg. R**
As	Area of Stack	**3.69**	**sq ft**	26.0	in. dia.
Vs	Stack Gas Velocity	17.47	ft/sec		
Qa	Actual Flow Rate	3,865	cfm		
Qad	Actual Flow Rate, Dry	3,865	dcfm		
Q(std)	Stack Gas Flow Rate	**3,795**	**dscfm**		
An	Nozzle Area	**0.0004276**	**sq ft**	0.280	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**116.63**	**%**		

AIRx Testing - 1994

FIELD DATA SUMMARY
TOTAL PARTICULATE
LINT CLEANER CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	0.2	0.0	0.2
Vm - Gas volume, meter cond., dcf	45.350	44.649	45.224
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	29.65	29.65	29.65
Pg - Stack static pressure, in. H20	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H20	1.854	1.986	1.832
Tm - Absolute meter temperature, °R	520.1	547.3	552.3
Vm(std) - Standard sample gas vol., dscf	43.2047	40.4355	40.5731
Bws - Water vapor part in gas stream	<0.1	0.0	<0.1
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.842	28.844	28.842
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.241	0.245	0.236
Ts - Absolute stack Temp. °R	521.8	534.2	537.7
A - Area of stack, square feet	4.91	4.91	4.91
Qstd - Volumetric flow rate, dscfm	3898	3913	3768
An - Area of nozzel, square feet	0.0009621	0.0009168	0.0009168
ø - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	94.2	92.2	96.1

AIR TESTING

PM10 PARTICULATE
LINT CLEANER CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	34.296	32.863	34.049
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	29.65	29.65	29.65
Pg - Stack static pressure, in. H2O	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H2O	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	521.0	540.0	540.7
Vm(std) - Standard sample gas vol., dscf	33.0608	30.5696	31.4712
Bws - Water vapor part in gas stream	<0.1	0.0	<0.1
CO2 - Dry concentration, volume %	0.1	0.1	0.1
O2 - Dry concentration, volume %	20.9	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.842	28.844	28.842
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.229	0.241	0.245
Ts - Absolute stack Temp. °R	521.5	534.2	537.1
A - Area of stack, square feet	4.91	4.91	4.91
Qstd - Volumetric flow rate, dscfm	3707	3853	3902
An - Area of nozzel, square feet	0.0007670	0.0007670	0.0007670
ø - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	95.1	84.6	86.0

AIR TESTING

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **1**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.2	g		
Vlc	Water Condensate Volume	**0.2**	**ml**		
Vm	Metered Sample Gas Volume	**45.350**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	45.350	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.854**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	60.1	deg. F	**520.1**	**deg. R**
Vm(std)	Sample Gas Volume	**43.2047**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	43.2140	scf		
Vw(std)	Water Vapor Volume	0.0093	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.022**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.842**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.241**	**in. H20**		
Ts	Stack Gas Temperature, Average	**61.8**	deg. F	**521.8**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	13.40	ft/sec		
Qa	Actual Flow Rate	3,948	cfm		
Qad	Actual Flow Rate, Dry	3,947	dcfm		
Q(std)	Stack Gas Flow Rate	**3,898**	**dscfm**		
An	Nozzle Area	**0.0009621**	**sq ft**	0.420	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**94.25**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Lint Cleaner**	Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.0	g		
Vlc	Water Condensate Volume	**0.0**	**ml**		
Vm	Metered Sample Gas Volume	**44.649**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	44.649	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	***in. Hg***		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.986**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	87.3	deg. F	**547.3**	**deg. R**
Vm(std)	Sample Gas Volume	**40.4355**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	40.4355	scf		
Vw(std)	Water Vapor Volume	0.0000	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.245**	**in. H20**		
Ts	Stack Gas Temperature, Average	**74.2**	deg. F	**534.2**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	13.77	ft/sec		
Qa	Actual Flow Rate	4,057	cfm		
Qad	Actual Flow Rate, Dry	4,057	dcfm		
Q(std)	Stack Gas Flow Rate	**3,913**	**dscfm**		
An	Nozzle Area	**0.0009168**	**sq ft**	0.410	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**92.21**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Lint Cleaner**	Run: **3**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.2	g		
Vlc	Water Condensate Volume	**0.2**	**ml**		
Vm	Metered Sample Gas Volume	**45.224**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	45.224	dcf		
Y	Dry Gas Meter Calibration Factor	**0.957**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.832**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	92.3	deg. F	**552.3**	**deg. R**
Vm(std)	Sample Gas Volume	**40.5731**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	40.5824	scf		
Vw(std)	Water Vapor Volume	0.0093	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.023**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.842**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.236**	**in. H20**		
Ts	Stack Gas Temperature, Average	**77.7**	deg. F	**537.7**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	13.35	ft/sec		
Qa	Actual Flow Rate	3,933	cfm		
Qad	Actual Flow Rate, Dry	3,932	dcfm		
Q(std)	Stack Gas Flow Rate	**3,768**	**dscfm**		
An	Nozzle Area	**0.0009168**	**sq ft**	0.410	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**96.08**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **Run #1 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**34.296**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	34.296	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.07**	**in. H20**		
Ps	Stack Pressure, Absolute	29.64	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	61.0	deg. F	**521.0**	**deg. R**
Vm(std)	Sample Gas Volume	**33.0608**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	33.0681	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.022**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.842**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.229**	**in. H20**		
Ts	Stack Gas Temperature, Average	**61.5**	deg. F	**521.5**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	12.74	ft/sec		
Qa	Actual Flow Rate	3,753	cfm		
Qad	Actual Flow Rate, Dry	3,752	dcfm		
Q(std)	Stack Gas Flow Rate	**3,707**	**dscfm**		
An	Nozzle Area	**0.000767**	**sq ft**	0.375	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**95.13**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Lint Cleaner**	Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**32.863**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	32.863	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	80.0	deg. F	**540.0**	**deg. R**
Vm(std)	Sample Gas Volume	**30.5696**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	30.5696	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.000**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.844**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.241**	**in. H20**		
Ts	Stack Gas Temperature, Average	**74.2**	deg. F	**534.2**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	13.56	ft/sec		
Qa	Actual Flow Rate	3,994	cfm		
Qad	Actual Flow Rate, Dry	3,994	dcfm		
Q(std)	Stack Gas Flow Rate	**3,853**	**dscfm**		
An	Nozzle Area	**0.000767**	**sq ft**	0.375	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**84.63**	**%**		

AIRx Testing - 1994

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **Run #3 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	**34.049**	**dcf**		
Lp	Avg. Leak Rate	0.007	cf		
Vn	Leak Corrected Sample Gas Volume	34.049	dcf		
Y	Dry Gas Meter Calibration Factor	**0.972**			
Pbar	Barometric Pressure	**29.65**	**in. Hg**		
Pg	Static Pressure	**-0.02**	**in. H20**		
Ps	Stack Pressure, Absolute	29.65	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	**1.000**	**in. H20**		
Tm	Dry Gas Meter Temperature, Average	83.4	deg. F	**543.4**	**deg. R**
Vm(std)	Sample Gas Volume	**31.4712**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	31.4785	scf		
Bws	Water Content of Stack Gas	**0.000**		**0.023**	**%**
CO2	Carbon Dioxide, Dry	**0.1**	**%**		
O2	Oxygen, Dry	**20.9**	**%**		
N2	Nitrogen, Dry	79.1	%		
Md	Molecular Wt. of Stack Gas, Dry	**28.844**	**lb/lb mole**		
Ms	Molecular Wt. of Stack Gas, Wet	**28.842**	**lb/lb mole**		
Cp	*Pitot Calibration Factor*	**0.833**			
Del. P	Velocity Head, Average Square Root	**0.245**	**in. H20**		
Ts	Stack Gas Temperature, Average	**77.1**	deg. F	**537.1**	**deg. R**
As	Area of Stack	**4.91**	**sq ft**	30.0	in. dia.
Vs	Stack Gas Velocity	13.81	ft/sec		
Qa	Actual Flow Rate	4,068	cfm		
Qad	Actual Flow Rate, Dry	4,067	dcfm		
Q(std)	Stack Gas Flow Rate	**3.902**	**dscfm**		
An	Nozzle Area	**0.000767**	**sq ft**	0.375	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**86.04**	**%**		

AIRx Testing - 1994

BTC ENVIRONMENTAL
EPA methods 2, 3, 4, 5, 6, 8

CONSTANTS & CONVERSIONS

Tstd = 60, 68, or 70 °F
Pstd = 29.92 in. Hg
R = 21.85(in. Hg-cu ft/lb mole-°R)
Dw = 0.9982(g/ml)
MW(H2O) = 18.0 lb/lb mole
MW(Sulfur) = 32.03 lb/lb mole
M(H2SO4) = 98.08 lb/lb mole
MW(SO2) = 64.06 lb/lb mole
K(H2SO4) = 0.5 mg-g mole/g-meq
K(SO2) = 0.5 mg-g mole/g-meq

1 in. Hg = 13.6 in. H2O
1 lb = 453.6 g
1 lb = 7000 grain
1 g = 15.432 grain
1 mg = 0.001 g
1 hr = 60 min.
1 part/vol X = 1*10^6 ppmv X
1 bbl = 42 gal
M = 1000
La = 0.02 cfm

Kp = 85.49(ft/sec(sqrt{lb/lb mole-in.Hg/°R-in. H2O})
Kw,[cu ft/g-°R] = R / (453.6*MW(H2O)*Pstd)
Kf,[scf-ppm/lb mole] = R * (Tstd+460) * (1*10^6) / Pstd

INTERMEDIATE CALCULATIONS

F,[scf/MMBtu] = F Factor * (Tstd + 460) / 528
Ph,[in. Hg] = Pbar + (ΔH / 13.6)
N2,[%] = 100 - (O2% + CO2%)
Vlc,[ml] = Ww / Dw
Qa,[cfm] = 60 * Vs * As
Qad,[dcfm] = Qa * (1 - Bws)

CFR 40 - EPA EQUATIONS

eq. 2-8 T[°R] = T[°F]+460
eq. 2-6 Ps, [in. Hg] = Pbar+(Pg/13.6)
eq. 5-3 Bws, [%] = Vw(std) / { Vw(std) + Vm(std) }
eq. 3-2 Md, [lb/lb-mole] = 0.44*CO2%+0.32*O2%+0.28*(N2%+CO%)
eq. 2-5 Ms, [lb/lb mol] = Md*(1-Bws)+(MW(H2O)*Bws)
eq. 5-2 Vw(std), [scf] = Ww * Kw * (Tstd+460)
eq. 5-1 Vn, [cf] = Vm - ((Lp-La) * Theta)
eq. 5-1 Vm(std), [sdcf] = Vm * Y * ((Tstd+460) / (Tm+460)) * Ph / Pstd
eq. 2-9 Vs, [ft./sec.] = Kp*Cp*(ΔP*(Ts+460)/(Ps*Ms))^0.5
eq. 2-10 Qstd, [dscfm] =Qad*(Tstd+460)*Ps/((Ts+460)*Pstd)
eq. 5-8 I,[%] =100*(Ts+460)*Vm(std)*Pstd/(60*Vs*Theta*An*Ps*(1-Bws)*(Tstd+460))
eq. 5-6 Cx, [grain/dscf] = Wx,g*15.432/Vm(std)
eq. 8-2,3 Wx, [mg] = (Vt-Vtb)*N(std)*(Vsoln/Valq)*MWx*Kx
Cx, [grain/dscf] = Wx,mg*0.001*15.432/Vm(std)
CWx, [grain/scf] = Cx*(1-Bws)
CCx, [grain/dscf @ 12% CO2] = Cx*12.0/CO2%
CWCx, [grain/scf @ 12% CO2%] = CCx
CPx, [ppmv dry] = Cx*Kf/(MWx*7000)
CPCx, [ppmv @ N% O2] = CPX* ((20.9-N%)/(20.9-O2%))
CFx, [lb/hr] = Cx*Q(std)*60/7000
CEx, [lb/MMBtu] = F*(Cx/7000)*(20.9/(20.9-O2%))
CBx, [lb/bbl] = CEx*(Fuel Btu/MM)*(Fuel lb/gal)*42
CEsx, [lb S/MMBtu] = CEx*(MW(S) / MWx)

Where x represents, Particulate, Sulfuric Acid, Sulfate, or Sulfur Dioxide respectively.

III. WET TEST METHODS CALCULATIONS

BATTERY CONDENSER
CYCLONE

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Battery Cond.**	Run: 1

CALCULATED EMISSION RESULTS

Particulate Weight	0.0044	g
Particulate Emissions	0.0020	grain/dscf
Particulate Flow Rate	0.12	lb/hr
Particulate Flow Rate	0.01	lb/bale
+10μ Particulate	30.5	%
+10μ Particulate	0.04	lb/hr
+10μ Particulate	0.00	lb/bale
-10μ Particulate	69.5	%
-10μ Particulate	0.08	lb/hr
-10μ Particulate	0.00	lb/bale

AIRx Testing -1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Battery Cond.**	Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0045	g
Particulate Emissions	0.0019	grain/dscf
Particulate Flow Rate	0.13	lb/hr
Particulate Flow Rate	0.01	lb/bale
+10μ Particulate	74.4	%
+10μ Particulate	0.10	lb/hr
+10μ Particulate	0.00	lb/bale
-10μ Particulate	25.6	%
-10μ Particulate	0.03	lb/hr
-10μ Particulate	0.00	lb/bale

AIRx Testing -1994

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Battery Cond.**	Run: **3**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0065	g
Particulate Emissions	0.0026	grain/dscf
Particulate Flow Rate	0.18	lb/hr
Particulate Flow Rate	0.01	lb/bale
+10μ Particulate	24.9	%
+10μ Particulate	0.04	lb/hr
+10μ Particulate	0.00	lb/bale
-10μ Particulate	75.1	%
-10μ Particulate	0.13	lb/hr
-10μ Particulate	0.01	lb/bale

AIRx Testing -1994

MOTES
CYCLONE

Client: **Alta Vista Gin**	Date: **11/4/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Motes**	Run: 1

CALCULATED EMISSION RESULTS

Particulate Weight	0.0836	g
Particulate Emissions	0.0304	grain/dscf ✓
Particulate Flow Rate	1.00	lb/hr ✓
Particulate Flow Rate	0.04	lb/bale
+10μ Particulate	51.7	%
+10μ Particulate	0.52	lb/hr
+10μ Particulate	0.02	lb/bale
-10μ Particulate	48.3	%
-10μ Particulate	0.48	lb/hr
-10μ Particulate	0.02	lb/bale

AIRx Testing -1994

Client: **Alta Vista Gin**	Date: **11/4/94**
Site: **Mendota**	Type: *T std = 60 F*
Unit: **Motes**	Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0710	g
Particulate Emissions	0.0267	grain/dscf
Particulate Flow Rate	0.87	lb/hr
Particulate Flow Rate	0.04	lb/bale
+10μ Particulate	34.2	%
+10μ Particulate	0.30	lb/hr
+10μ Particulate	0.01	lb/bale
-10μ Particulate	65.8	%
-10μ Particulate	0.57	lb/hr
-10μ Particulate	0.02	lb/bale

AIRx Testing -1994

Client: **Alta Vista Gin**	Date: **11/4/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Motes**	Run: **3**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0682	g
Particulate Emissions	0.0262	grain/dscf
Particulate Flow Rate	0.81	lb/hr
Particulate Flow Rate	0.03	lb/bale
+10μ Particulate	50.8	%
+10μ Particulate	0.41	lb/hr
+10μ Particulate	0.02	lb/bale
-10μ Particulate	49.2	%
-10μ Particulate	0.40	lb/hr
-10μ Particulate	0.02	lb/bale

AIRx Testing -1994

LINT CLEANER
CYCLONE

Client: **Alta Vista Gin**	Date: **11/3/94**
Site: **Mendota**	Type: ***T std = 60 F***
Unit: **Lint Cleaner**	Run: **1**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0225	g
Particulate Emissions	0.0080	grain/dscf
Particulate Flow Rate	0.27	lb/hr
Particulate Flow Rate	0.02	lb/bale
+10μ Particulate	55.5	%
+10μ Particulate	0.15	lb/hr
+10μ Particulate	0.01	lb/bale
-10μ Particulate	44.5	%
-10μ Particulate	0.12	lb/hr
-10μ Particulate	0.01	lb/bale

AIRx Testing -1994

Client: Alta Vista Gin
Site: Mendota
Unit: Lint Cleaner

Date: 11/3/94
Type: *T std = 60 F*
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.0258	g
Particulate Emissions	0.0098	grain/dscf
Particulate Flow Rate	0.33	lb/hr
Particulate Flow Rate	0.01	lb/bale
+10μ Particulate	44.6	%
+10μ Particulate	0.15	lb/hr
+10μ Particulate	0.01	lb/bale
-10μ Particulate	55.4	%
-10μ Particulate	0.18	lb/hr
-10μ Particulate	0.01	lb/bale

AIRx Testing -1994

Client: **Alta Vista Gin**	Date: 11/3/94
Site: **Mendota**	Type: *T std = 60 F*
Unit: **Lint Cleaner**	Run: 3

CALCULATED EMISSION RESULTS

Particulate Weight	0.0107	g
Particulate Emissions	0.0041	grain/dscf
Particulate Flow Rate	0.13	lb/hr
Particulate Flow Rate	0.01	lb/bale
+10μ Particulate	57.4	%
+10μ Particulate	0.08	lb/hr
+10μ Particulate	0.00	lb/bale
-10μ Particulate	42.6	%
-10μ Particulate	0.06	lb/hr
-10μ Particulate	0.00	lb/bale

AIRx Testing -1994

V. LABORATORY ANALYSIS

BATTERY CONDENSER
CYCLONE

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **1**

Imp. #1:	gross	579.8
	tare	581.6
	final	-1.8
Imp. #2:	gross	573.6
	tare	574.6
	final	-1.0
Imp. #3:	gross	475.2
	tare	475.3
	final	-0.1
Imp. #4:	gross	654.3
	tare	651.4
	final	2.9
	Total:	0.0

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **2**

Imp. #1:	gross	572.9
	tare	579.9
	final	-7.0
Imp. #2:	gross	564.1
	tare	564.7
	final	-0.6
Imp. #3:	gross	467.5
	tare	467.5
	final	0.0
Imp. #4:	gross	588.6
	tare	580.2
	final	8.4
	Total:	0.8

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Battery Cond.**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **3**

Imp. #1:	gross	621.2
	tare	626.1
	final	-4.9
Imp. #2:	gross	583.3
	tare	584.3
	final	-1.0
Imp. #3:	gross	476.5
	tare	475.5
	final	1.0
Imp. #4:	gross	657.1
	tare	651.6
	final	5.5
	Total:	0.6

AIRx Testing - 1994

MOTES
CYCLONE

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **1**

Imp. #1:	gross	592.2
	tare	592.7
	final	-0.5
Imp. #2:	gross	581.1
	tare	578.6
	final	2.5
Imp. #3:	gross	470.6
	tare	467.2
	final	3.4
Imp. #4:	gross	582.9
	tare	580.6
	final	2.3
	Total:	7.7

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Moles**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **2**

Imp. #1:	gross	578.3
	tare	581.3
	final	-3.0
Imp. #2:	gross	572.6
	tare	571.3
	final	1.3
Imp. #3:	gross	478.4
	tare	476.5
	final	1.9
Imp. #4:	gross	653.8
	tare	651.7
	final	2.1

Total: 2.3

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Motes**

Date: **11/4/94**
Type: ***T std = 60 F***
Run: **3**

Imp. #1:	gross	611.7
	tare	615.1
	final	-3.4
Imp. #2:	gross	590.7
	tare	591.1
	final	-0.4
Imp. #3:	gross	469.5
	tare	469.3
	final	0.2
Imp. #4:	gross	586.5
	tare	582.9
	final	3.6
	Total:	0.0

AIRx Testing - 1994

LINT CLEANER
CYCLONE

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **1**

Imp. #1:	gross	626.3
	tare	633.1
	final	-6.8
Imp. #2:	gross	584.3
	tare	587.0
	final	-2.7
Imp. #3:	gross	466.8
	tare	468.2
	final	-1.4
Imp. #4:	gross	593.4
	tare	582.3
	final	11.1

Total: 0.2

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **2**

Imp. #1:	gross	599.1
	tare	600.3
	final	-1.2
Imp. #2:	gross	574.8
	tare	577.4
	final	-2.6
Imp. #3:	gross	478.9
	tare	477.1
	final	1.8
Imp. #4:	gross	654.4
	tare	652.4
	final	2.0

Total: 0.0

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Alta Vista Gin**
Site: **Mendota**
Unit: **Lint Cleaner**

Date: **11/3/94**
Type: ***T std = 60 F***
Run: **3**

Imp. #1:	gross	579.7
	tare	582.1
	final	-2.4
Imp. #2:	gross	558.8
	tare	556.3
	final	2.5
Imp. #3:	gross	466.2
	tare	466.5
	final	-0.3
Imp. #4:	gross	580.8
	tare	580.4
	final	0.4
	Total:	0.2

AIRx Testing - 1994

BATTERY CONDENSER
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 1

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5838 gms. Tare: 0.5813 gms. Net: **0.0025** gms.

Probe Rinse -
Acetone: 60 ml * 1E-05 gms./ml = Net: **-0.0008** gms.

DI Water: 65 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 79.1404 gms. Tare: 79.1364 gms. Net: **0.0040** gms.

Impinger Catch -
DI Water: 250 ml * 6E-06 gms./ml = Net: **-0.0014** gms.

Total: 250 ml Aliquot: 250 ml

Gross: 77.3430 gms. Tare: 77.3426 gms. Net: **-0.0010** gms. ← 0 for calc. purposes

Total Particulate Weight = ~~0.0044~~ 0.0053 **gms.**

Blanks same as Stratford

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 2

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5834 gms. Tare: 0.5806 gms. Net: **0.0028** gms.

Probe Rinse -
Acetone: 70 ml * 1E-05 gms./ml = Net: **-0.0009** gms.

DI Water: 70 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 80.9190 gms. Tare: 80.9162 gms. Net: **0.0028** gms.

Impinger Catch -
DI Water: 225 ml * 6E-06 gms./ml = Net: **-0.0012** gms.

Total: 225 ml Aliquot: 225 ml

Gross: 78.3426 gms. Tare: 78.3412 gms. Net: **0.0002** gms.

Total Particulate Weight = 0.0045 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 3

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5819 gms. Tare: 0.5799 gms. Net: **0.0020** gms.

Probe Rinse -
Acetone: 75 ml * 1E-05 gms./ml = Net: **-0.0010** gms.

DI Water: 75 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 76.3064 gms. Tare: 76.3002 gms. Net: **0.0062** gms.

Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: **-0.0017** gms.

Total: 300 ml Aliquot: 300 ml

Gross: 80.0136 gms. Tare: 80.0123 gms. Net: **-0.0003** gms. ← 0 for calc. purposes

Total Particulate Weight = 0.006~~8~~8 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 1

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-51) Gross: 0.0866 gms. Tare: 0.0880 gms. Net: **-0.0014** gms.
Filter (F-52) Gross: 0.0864 gms. Tare: 0.0880 gms. Net: **-0.0016** gms.

+10 µ Rinse -
Acetone: 65 ml * 1E-05 gm/ml = Net: **-0.0008** gms.
DI Water: 65 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 79.2810 gms. Tare: 79.2763 gms. Net: **0.0047** gms.

+10µ Total Weight = 0.0005 gms.

Filter (E-26) Gross: 0.1091 gms. Tare: 0.1090 gms. Net: **0.0001** gms.

-10 µ Rinse
DI Water: 330 ml * 6E-06 gm/ml = Net: **-0.0018** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 380 ml Aliquot: 380 ml
Gross: 80.2871 gms. Tare: 80.2836 gms. Net: **0.0035** gms.

-10µ Total Weight = 0.0011 gms.

Total Weight = 0.0016 gms.

+ 10 µ 30.5 %
- 10 µ 69.5 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 2

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-85) Gross: 0.0860 gms. Tare: 0.0857 gms. Net: **0.0003** gms.
Filter (F-86) Gross: 0.0862 gms. Tare: 0.0858 gms. Net: **0.0004** gms.

+10 µ Rinse -
Acetone: 75 ml * 1E-05 gm/ml = Net: **-0.0010** gms.
DI Water: 75 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 78.0380 gms. Tare: 78.0333 gms. Net: **0.0047** gms.

+10µ Total Weight = 0.0040 gms.

Filter (E-43) Gross: 0.1122 gms. Tare: 0.1116 gms. Net: **0.0006** gms.

-10 µ Rinse
DI Water: 285 ml * 6E-06 gm/ml = Net: **-0.0016** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 335 ml Aliquot: 335 ml
Gross: 80.5504 gms. Tare: 80.5474 gms. Net: **0.0030** gms.

-10µ Total Weight = 0.0014 gms.

Total Weight = 0.0054 gms.

+ 10 µ 74.4 %
- 10 µ 25.6 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Battery Condenser
Run : 3

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-99) Gross: 0.0872 gms. Tare: 0.0871 gms. Net: **0.0001** gms.
Filter (F-100) Gross: 0.0868 gms. Tare: 0.0866 gms. Net: **0.0002** gms.

+10 µ Rinse -
Acetone: 85 ml * 1E-05 gm/ml = Net: **-0.0011** gms.
DI Water: 85 ml * 6E-06 gm/ml = Net: **-0.0005** gms.
Gross: 80.8180 gms. Tare: 80.8150 gms. Net: **0.0030** gms.

+10µ Total Weight = 0.0017 gms.

Filter (E-50) Gross: 0.1140 gms. Tare: 0.1135 gms. Net: **0.0005** gms.

-10 µ Rinse
DI Water: 295 ml * 6E-06 gm/ml = Net: **-0.0016** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 345 ml Aliquot: 345 ml
Gross: 80.3258 gms. Tare: 80.3188 gms. Net: **0.0070** gms.

-10µ Total Weight = 0.0052 gms.

Total Weight = 0.0069 gms.

+ 10 µ 24.9 %
- 10 µ 75.1 %

MOTES
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 1

Date : 11/4/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.6160 gms. Tare: 0.5859 gms. Net: **0.0301** gms.

Probe Rinse -
Acetone: 90 ml * 1E-05 gms./ml = Net: **-0.0012** gms.

DI Water: 90 ml * 6E-06 gms./ml = Net: **-0.0005** gms.

Gross: 3.9860 gms. Tare: 3.9584 gms. Net: **0.0276** gms.

Impinger Catch -
DI Water: 275 ml * 6E-06 gms./ml = Net: **-0.0015** gms.

Total: 275 ml Aliquot: 275 ml

Gross: 4.0760 gms. Tare: 4.0469 gms. Net: **0.0276** gms.

Total Particulate Weight = 0.0836 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 2

Date : 11/4/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.6270 gms. Tare: 0.5821 gms. Net: **0.0449** gms.

Probe Rinse -
Acetone: 75 ml * 1E-05 gms./ml = Net: **-0.0010** gms.

DI Water: 75 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 4.0854 gms. Tare: 4.0570 gms. Net: **0.0284** gms.

Impinger Catch -
DI Water: 275 ml * 6E-06 gms./ml = Net: **-0.0015** gms.

Total: 275 ml Aliquot: 275 ml

Gross: 3.9592 gms. Tare: 3.9586 gms. Net: **-0.0009** gms. ← 0 for calc. purposes

Total Particulate Weight = 0.071~~0~~9 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 3

Date : 11/4/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.6186 gms. Tare: 0.5799 gms. Net: **0.0387** gms.

Probe Rinse -
Acetone: 60 ml * 1E-05 gms./ml = Net: **-0.0008** gms.

DI Water: 65 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 4.0534 gms. Tare: 4.0207 gms. Net: **0.0327** gms.

Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: **-0.0017** gms.

Total: 300 ml Aliquot: 300 ml

Gross: 4.0262 gms. Tare: 4.0266 gms. Net: **-0.0021** gms. ← 0 for calc. purposes

Total Particulate Weight = 0.0702 ~~**0.0682**~~ **gms.**

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 1

Date : 11/4/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-71) Gross: 0.0880 gms. Tare: 0.0866 gms. Net: **0.0014** gms.
Filter (F-72) Gross: 0.0870 gms. Tare: 0.0860 gms. Net: **0.0010** gms.

+10 µ Rinse -
Acetone: 75 ml * 1E-05 gm/ml = Net: **-0.0010** gms.
DI Water: 75 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 4.0534 gms. Tare: 4.0320 gms. Net: **0.0214** gms.

+10µ Total Weight = 0.0224 gms.

Filter (E-36) Gross: 0.1276 gms. Tare: 0.1099 gms. Net: **0.0177** gms.

-10 µ Rinse
DI Water: 330 ml * 6E-06 gm/ml = Net: **-0.0018** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 380 ml Aliquot: 380 ml
Gross: 4.0766 gms. Tare: 4.0709 gms. Net: **0.0057** gms.

-10µ Total Weight = 0.0209 gms.

Total Weight = 0.0433 gms.

+ 10 µ 51.7 %
- 10 µ 48.3 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 2

Date : 11/4/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-47) Gross: 0.0880 gms. Tare: 0.0865 gms. Net: **0.0015** gms.
Filter (F-48) Gross: 0.0891 gms. Tare: 0.0871 gms. Net: **0.0020** gms.

+10 µ Rinse -
Acetone: 80 ml * 1E-05 gm/ml = Net: **-0.0010** gms.
DI Water: 80 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 4.0538 gms. Tare: 4.0460 gms. Net: **0.0078** gms.

+10µ Total Weight = 0.0098 gms.

Filter (E-24) Gross: 0.1227 gms. Tare: 0.1092 gms. Net: **0.0135** gms.

-10 µ Rinse
DI Water: 330 ml * 6E-06 gm/ml = Net: **-0.0018** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 380 ml Aliquot: 380 ml
Gross: 4.1670 gms. Tare: 4.1592 gms. Net: **0.0078** gms.

-10µ Total Weight = 0.0188 gms.

Total Weight = 0.0286 gms.

+ 10 µ 34.2 %
- 10 µ 65.8 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Motes
Run : 3

Date : 11/4/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-89) Gross: 0.0892 gms. Tare: 0.0867 gms. Net: **0.0025** gms.
Filter (F-90) Gross: 0.0908 gms. Tare: 0.0878 gms. Net: **0.0030** gms.

+10 µ Rinse -
Acetone: 80 ml * 1E-05 gm/ml = Net: **-0.0010** gms.
DI Water: 80 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 4.0218 gms. Tare: 4.0090 gms. Net: **0.0128** gms.

+10µ Total Weight = 0.0168 gms.

Filter (E-45) Gross: 0.1276 gms. Tare: 0.1112 gms. Net: **0.0164** gms.

-10 µ Rinse
DI Water: 360 ml * 6E-06 gm/ml = Net: **-0.0020** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 410 ml Aliquot: 410 ml
Gross: 4.0880 gms. Tare: 4.0855 gms. Net: **0.0025** gms.

-10µ Total Weight = 0.0163 gms.

Total Weight = 0.0331 gms.

+ 10 µ 50.8 %
- 10 µ 49.2 %

LINT CLEANER
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 1

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5923 gms. Tare: 0.5805 gms. Net: **0.0118** gms.

Probe Rinse -
Acetone: 85 ml * 1E-05 gms./ml = Net: **-0.0011** gms.

DI Water: 90 ml * 6E-06 gms./ml = Net: **-0.0005** gms.

Gross: 79.5752 gms. Tare: 79.5614 gms. Net: **0.0138** gms.

Impinger Catch -
DI Water: 350 ml * 6E-06 gms./ml = Net: **-0.0019** gms.

Total: 350 ml Aliquot: 350 ml

Gross: 76.9658 gms. Tare: 76.9654 gms. Net: **-0.0015** gms.

Total Particulate Weight = 0.0240 ~~0.0225~~ **gms.**

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 2

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5996 gms. Tare: 0.5860 gms. Net: **0.0136** gms.

Probe Rinse -
Acetone: 60 ml * 1E-05 gms./ml = Net: **-0.0008** gms.

DI Water: 65 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 79.3450 gms. Tare: 79.3306 gms. Net: **0.0144** gms.

Impinger Catch -
DI Water: 275 ml * 6E-06 gms./ml = Net: **-0.0015** gms.

Total: 275 ml Aliquot: 275 ml

Gross: 80.0055 gms. Tare: 80.0050 gms. Net: **-0.0010** gms. ← 0 for calc. purposes

Total Particulate Weight = 0.02~~5~~6 8 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 3

Date : 11/3/94
Job #: 1060
Lab #: 292-140

BLANKS

Acetone
Gross: 4.1584 gms. Tare: 4.1558 gms. Volume: 200 ml Residue: 0.0026 gms.

DI Water
Gross: 4.0301 gms. Tare: 4.0290 gms. Volume: 200 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.5932 gms. Tare: 0.5864 gms. Net: **0.0068** gms.

Probe Rinse -
Acetone: 75 ml * 1E-05 gms./ml = Net: **-0.0010** gms.

DI Water: 75 ml * 6E-06 gms./ml = Net: **-0.0004** gms.

Gross: 77.3499 gms. Tare: 77.3431 gms. Net: **0.0068** gms.

Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: **-0.0017** gms.

Total: 300 ml Aliquot: 300 ml

Gross: 80.4292 gms. Tare: 80.4291 gms. Net: **-0.0016** gms. ← 0 for calc. purposes

Total Particulate Weight = ~~**0.0107**~~ 0.0122 **gms.**

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 1

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-105) Gross: 0.0879 gms. Tare: 0.0889 gms. Net: **-0.0010** gms.
Filter (F-106) Gross: 0.0862 gms. Tare: 0.0874 gms. Net: **-0.0012** gms.

+10 µ Rinse -
Acetone: 65 ml * 1E-05 gm/ml = Net: **-0.0008** gms.
DI Water: 70 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 4.1466 gms. Tare: 4.1334 gms. Net: **0.0132** gms.

+10µ Total Weight = 0.0098 gms.

Filter (E-53) Gross: 0.1182 gms. Tare: 0.1145 gms. Net: **0.0037** gms.

-10 µ Rinse
DI Water: 315 ml * 6E-06 gm/ml = Net: **-0.0017** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 365 ml Aliquot: 365 ml
Gross: 4.0359 gms. Tare: 4.0294 gms. Net: **0.0065** gms.

-10µ Total Weight = 0.0078 gms.

Total Weight = 0.0176 gms.

+ 10 µ 55.5 %
- 10 µ 44.5 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 2

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-77) Gross: 0.0857 gms. Tare: 0.0855 gms. Net: **0.0002** gms.
Filter (F-78) Gross: 0.0872 gms. Tare: 0.0873 gms. Net: **-0.0001** gms.

+10 µ Rinse -
Acetone: 90 ml * 1E-05 gm/ml = Net: **-0.0012** gms.
DI Water: 90 ml * 6E-06 gm/ml = Net: **-0.0005** gms.
Gross: 3.9285 gms. Tare: 3.9190 gms. Net: **0.0095** gms.

+10µ Total Weight = 0.0079 gms.

Filter (E-39) Gross: 0.1168 gms. Tare: 0.1116 gms. Net: **0.0052** gms.

-10 µ Rinse
DI Water: 325 ml * 6E-06 gm/ml = Net: **-0.0018** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 375 ml Aliquot: 375 ml
Gross: 80.7287 gms. Tare: 80.7216 gms. Net: **0.0071** gms.

-10µ Total Weight = 0.0099 gms.

Total Weight = 0.0178 gms.

+ 10 µ 44.6 %
- 10 µ 55.4 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Alta Vista
Site : Mendota
Unit : Lint Cleaner
Run : 3

Date : 11/3/94
Job #: 1060
Lab #: 294-140

BLANKS

Acetone — Volume: 200 ml
Gross: 4.1584 gms. Tare: 4.1558 gms. Residue: 0.0026 gms.

DI Water — Volume: 200 ml
Gross: 4.0301 gms. Tare: 4.0290 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter (F-91) Gross: 0.0876 gms. Tare: 0.0866 gms. Net: **0.0010** gms.
Filter (F-92) Gross: 0.0879 gms. Tare: 0.0867 gms. Net: **0.0012** gms.

+10 µ Rinse -
Acetone: 70 ml * 1E-05 gm/ml = Net: **-0.0009** gms.
DI Water: 70 ml * 6E-06 gm/ml = Net: **-0.0004** gms.
Gross: 80.8902 gms. Tare: 80.8796 gms. Net: **0.0106** gms.

+10µ Total Weight = 0.0115 gms.

Filter (E-46) Gross: 0.1163 gms. Tare: 0.1113 gms. Net: **0.0050** gms.

-10 µ Rinse
DI Water: 275 ml * 6E-06 gm/ml = Net: **-0.0015** gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: **-0.0007** gms.
Total: 325 ml Aliquot: 325 ml
Gross: 80.1050 gms. Tare: 80.0993 gms. Net: **0.0057** gms.

-10µ Total Weight = 0.0085 gms.

Total Weight = 0.0200 gms.

+ 10 µ 57.4 %
- 10 µ 42.6 %

BATTERY CONDENSER
CYCLONE

Wt. Tare

WEIGHT SHEET

Client : Alta Vista
Site :
Unit : [illegible]

Date :
Job# :
Lab# : 294-140

#	Sample ID	Final	Tare
11	Probe 125	79.1402	79.1361
		~~79.1415~~	.1366
		79.1405	
19	Impr. 250	~~77.3364~~	77.3424
		77.3428	77.3427
		77.3433	
1	Probe 140	~~80.9186~~	80.9162
		80.9190	.9163
		80.9191	
7	Impr. 1 225	78.3426	78.3410
		78.3427	.3413
17	Probe 150	~~76.3024~~	76.3000
		76.3061	.3004
		76.3066	
13	Impr. 300	80.0127	~~80.0117~~
		80.0136	.0125
		80.0137	.0121
7	R1 C17	0.5838/.5838	0.5813
0	R2 C18	0.5833/.5835	0.5806
9	R3 C19	0.5817/.5821	0.5799

Wt. Tare

WEIGHT SHEET

Client : Niles Vista
Site :
Unit : Battery

Date : 11/3
Job# :
Lab# : 294-140

#	Sample ID	Final	Tare
21 1	+10	~~79.2791~~	79.2761
	130	79.2712	.2765
R1		79.2809	
20 2	-10	80.2870	80.2834
	360	80.2812	.2834
4 3	+10	78.0360	78.0331
	150	78.0381	.0335
R2			
15 4	-10	80.5505	80.5472
	335	80.5501	.5477
3 5	+10	80.8178	80.8147
	170	~~80.8173~~	.8152
R3		80.8132	
5 6	-10	80.3257	80.3186
	345	80.3260	.3191
7	R1 F51	0.0866/.0865	0.0880
	F52	0.0863/.0864	0.0880
	E26	0.1091/.1090	0.1090
8	R2 F85	0.0861/.0860	0.0857
	F86	0.0862/.0865	0.0858
	E43	0.1124/.1120	0.1116
9	R3 F99	0.0873/.0871	0.0871
	F100	0.0868/.0869	0.0866
	E50	0.1139/.1142	0.1135

MOTES
CYCLONE

Wt. Tare

WEIGHT SHEET

Client : ALTAVista
Site :
Unit : Metals

Date : 1-31
Job# : 294-140
Lab# :

#	Sample ID	Final	Tare	
42	Probe 180 R-1	3.9460 3.9460	3.9582 3.9585	X
80	Imps 275	4.0478 4.0473	~~4.0465~~ 4.0471 4.0467	X
62	Probe 150 R-2	4.0454 4.0454	4.0570 4.0570	X
60	Imps 275	3.9594 3.9589	~~3.9578~~ 3.9586 3.9586	X
58	Probe 175 R-3	4.0533 4.0534	4.0206 ~~4.0213~~ 4.0208	X
68	Imps 300	~~4.0269~~ 4.0261 4.0264	~~4.0256~~ 4.0257 4.0266	X
	R1 C14	0.6157/.6162	0.5859	✓
	R2 C15	0.6271/.6270	0.5821	✓
	R3 C16	0.6185/.6187	0.5799	✓

Wt. Tare

WEIGHT SHEET

Client : ALTA Vista
Site :
Unit : Mixed

Date : 11-4
Job# : 294-140
Lab# :

#	Sample ID	Final	Tare	
54	R-1 +10 15°	~~4.0546~~	4.0319	
		4.0533	4.0321	
		4.0534		
46	R-1 -10 360	~~4.0778~~	~~4.0703~~	
		4.0766	4.0710	
		4.0767	4.0708	
48	R-2 +10 160	4.0540	4.0456	
		4.0537	4.0464	
			4.0460	
74	R-2 -10 360	~~4.1687~~	4.1590	
		4.1671	4.1597	
		4.1670		
34	R-3 +10 160	~~4.0230~~	~~4.0077~~	
		4.0216	4.0089	
		4.0216	4.0091	
56	R-3 -10 410	~~4.0894~~	~~4.0848~~	
		4.0878	4.0857	
		4.0872	4.0853 .0881	
	R1 F71	0.0884/.0880	0.0866	
	F72	0.0870/.0871	0.0860	
	E36	0.1276/.1275	0.1099	
	R2 F47	0.0880/.0881	0.0865	
	F48	0.0870/.0872	0.0871	
	E27	0.1278/.1276	0.1092	
	R3 F89	0.0891/.0893	0.0867	
	F90	0.0967/.0968	0.0878	
	E45	0.1275/.1274	0.1112	

LINT CLEANER
CYCLONE

Wt. Tare

WEIGHT SHEET

Client : Alta Vista
Site :
Unit : Light Cover

Date :
Job# :
Lab# : 299-140

#	Sample ID	Final	Tare
10	Probe 125	79.5757	79.5613
		79.5751	.5616
R1		79.5753	
14	Temp 350	76.9657	76.9655
		76.9655	.9651
12	Probe 125	79.3423	79.3307
		79.3451	.3305
R2		79.3449	
16	Temp 275	80.0057	80.0051
		80.0053	.0050
6	Probe 150	77.3498	77.3432
		~~77.3515~~	.3431
R3		77.3500	
9	Temp 300	80.4295	80.4291
		80.4290	.4291
7	R1 C11	0.5924 / 0.5922	0.5805
8	R2 C12	0.5996 / .5996	0.5860
9	R3 C13	0.5932 / .5933	0.5864

Wt. Tare

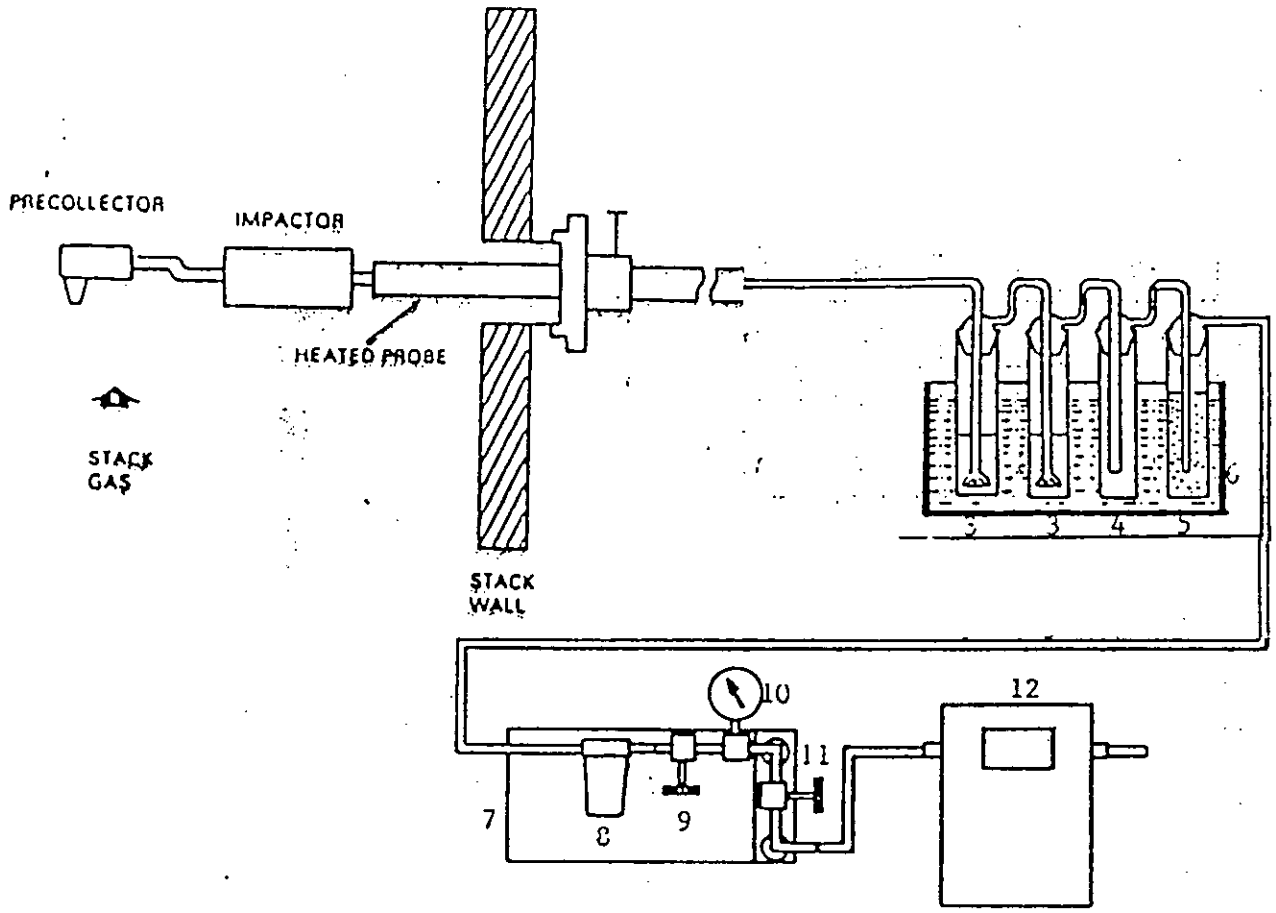
WEIGHT SHEET

Client : AHA Vista
Site :
Unit : Unit Cleaning

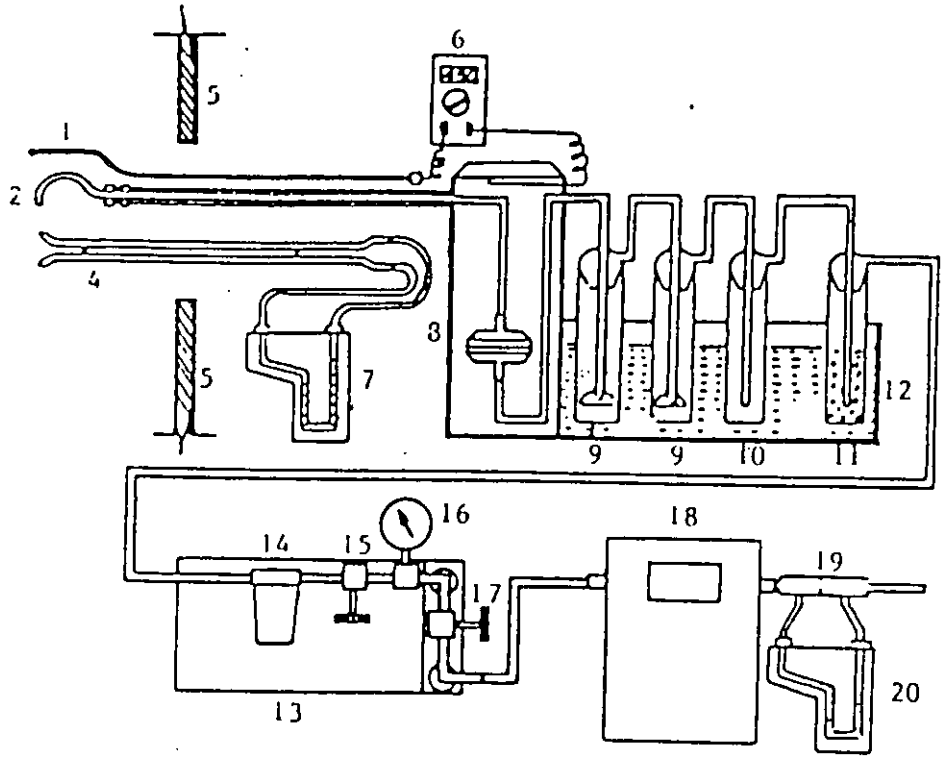
Date : 11/3
Job# :
Lab# : [illegible]

#	Sample ID	Final	Tare
63	+10	(4.1464)	[illegible]
	135	~~4.1473~~	1.1335
R1		(4.1468)	
68	-10	(4.0[illegible])	4.0296
	365	4.0376	.0273
		(4.0[illegible])	
45	+10	3.9283	3.9191
	180	3.9287	.9190
R2			
8	-10	80.7288	80.7216
	375	80.7276	.7216
2	+10	80.8904	80.8799
	140	~~80.8913~~	.8794
R3		80.8879	
18	-10	80.1052	80.0994
	325	80.1048	.0992
7 R1	F105	0.0879/.0879	0.0889
	F106	0.0861/.0862	0.0874
	E53	0.1184/.1182	0.1145
8 R2	F77	0.0858/.0856	0.0855
	F78	0.0871/.0873	0.0873
	E39	0.1169/.1168	0.1116
9 R3	F91	0.0876/.0877	0.0866
	F92	0.0879/.0879	0.0867
	E46	0.1161/0.1165	0.1113

PM-10 PARTICULATE SAMPLING TRAIN



1. Stack Wall
2. Probe
3. Impinger with 100 ml of H_2O
4. Empty Bubbler
5. Bubbler with Silica Gel
6. Ice Bath
7. Sealed Pump (Leak Free)
8. Filter for Pump
9. Metering Valve
10. Vacuum Gauge
11. By-pass Valve
12. Temperature Compensated Dry Gas Meter



1. Temperature Sensor
2. Nozzle
3. Glass lined Stainless Steel Probe-Heated
4. S-type Pitot Tube
5. Stack Wall
6. Temperature Sensor Meter
7. Pitot Tube Inclined Manometer
8. Heated Box with Filter
9. Impinger with 100 ml H_2O
10. Empty Bubbler
11. Bubbler with Silica Gel
12. Ice Bath
13. Sealed Pump (Leak Free)
14. Filter for Pump
15. Metering Valve
16. Vacuum Gauge
17. By-pass Valve
18. Temperature Compensated Dry Gas Meter
19. Orifice
20. Orifice Inclined Manometer

Particulate Sampling Train Set-up with Heated Probe and Heated Filter

VII. RAW DATA

BATTERY CONDENSER
CYCLONE

Plant:	ALTA VISTA	Filter:	C-917	Box Heat:	—
Location:	Mendota	Am Temp:	56	Nozzel:	.311
Unit:	Battery Cond	P.Bar:	29.65	Prob Heat:	0
Date:	11/3/95	Pitot:	1.1	Wind Vel:	[illegible]
Run#:	1 M-5	Pyro:	1.1	Static Ps:	-0.07
Cold Box:	A	Mag ΔP:	M-1	O2:	20.9
Meter #:	~~[illegible]~~ A	Map ΔH:	M-9	CO2:	0.0
Meter Fac:	.9577	%.1/20:	0.03		

Stack Dia: 35 sine
"A"
"B"

Imp	Gross	Tare	Final
1	579.8	581.6	
2	573.6	574.6	
3	475.2	475.3	
4	654.6	651.4	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1	1.56		2:16	0.0	70	.035	.34	199.501	91	97	
2	5.18			5	71	.04	.38	201.8	91	92	
3	10.51			10	78	.09	.87	203.9	90	90	
4	19.9			15	78	.22	2.13	206.3	90	91	4
5	30.3			20	78	.17	1.64	211.1	91	94	
6	33.9			25	78	.14	1.35	211.6	91	92	
7			3:15	30	78	.02	1.93	217.8	91	91	
8			3:19	35	73	.035	.34	220.3	93	92	
9				40	77	.08	.77	221.9	91	92	
10				45	78	.31	3.0	225.0	91	93	8
11				50	79	.22	2.13	228.9	91	91	
12				55	78	.17	1.64	234.2	98	95	
1			3:49	60				238.287			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.25	ΔP	.13	CFM:	0.002	IN.HG	26
ΔP	.25	ΔP	.13	CFM:	0.005	IN.HG	10
ΔH	.37	ΔH	[illegible]				
ΔH	.37	ΔH	[illegible]				

Notes: 9.68

Plant:	ALTA VISTA	Filter:	C-18	Box Heat:	on
Location:	ALCUDIA	Am Temp:	63	Nozzel:	.311
Unit:	[illegible]	P. Bar:	29.65	Prob Heat:	on
Date:	11/3/94	Pitot:	#1	Wind Vel:	[illegible]
Run #:	R-2	Pyro:	#1	Static Ps:	-.017
Cold Box:	3	Mag ΔP:	[illegible]	O2:	20.4
Meter #:	A	Map ΔH:	111-9	CO2:	0.0
Meter Fac:	.9578	% H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1	572.9	579.9	
2	564.1	564.7	
3	467.5	467.5	
4	580.6	580.2	

	Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			4:00	0.0	69	.025	.24	238.531	91	91	
2				5	70	.035	.31	240.4	96	93	
3				10	77	.11	1.06	242.7	93	94	
4				15	77	.30	2.90	245.9	94	97	
5				20	77	.35	3.38	248.5	94	98	4
6				25	78	.18	1.74	255.7	95	94	
7			4:30	30	75	.05	.48	259.5	95	94	
8			4:35	35	74	.05	.49	261.3	95	95	
9				40	75	.2	1.93	262.4	95	96	
10				45	75	.22	2.13	268.5	95	95	
11				50	75	.17	1.65	272.1	97	96	
12				55	74	.15	1.45	276.5	97	97	
1			5:05	60				279.201			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.22	ΔP	.1	CFM:	<0.002	IN.HG	7
ΔP	.22	ΔP	.1	CFM:	<0.001	IN.HG	7
ΔH	.26	ΔH	.22				
ΔH	.26	ΔH	.21				

Notes: 9.68

Plant:	ALTA VISTA	Filter:	C-18	Box Heat:	on
Location:	Mendota	Am Temp:	65	Nozzel:	.311
Unit:	Battery Cond.	P. Bar:	29.65	Prob Heat:	on
Date:	11/3/91	Pitot:	#1	Wind Vel:	N.A.
Run #:	M-5 3	Pyro:	#1	Static Ps:	-.007
Cold Box:		Mag ΔP:	MP10	O2:	20.9
Meter #:	A	Map ΔH:	M-9	CO2:	0.0
Meter Fac:	.9572	% H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1	621.2	626.1	
2	583.3	584.3	
3	476.5	475.5	
4	697.7	651.6	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			5:19	0.0	71	.01	.38	279.281	98	98	
2				5	70	.01	.38	281.6	97	98	
3				10	69	.01	1.06	285.3	97	97	2
4				15	71	.32	3.09	287.0	97	97	4
5				20	71	.3	2.90	290.3	97	95	
6				25	71	.25	2.42	297.6	98	98	
7			5:49	30	72	.09	.09	302.8	96	100	
8			550	35	68	.04	.38	304.7	98	100	
9				40	69	.08	.77	307.7	97	98	
10				45	69	.25	2.42	309.5	97	97	6
11				50	70	.27	2.61	312.9	96	97	
12				55	70	.23	2.22	317.1	98	98	
1				60				323.000			
2			6:20								
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.37	ΔP	.10	CFM:	0.002	IN.HG	26
ΔP	.54	ΔP	.10	CFM:	0.008	IN.HG	10
ΔH	.19	ΔH	.30				
ΔH	.19	ΔH	.30				

Notes: 9.68

Plant:	ALTA VISTA	Filter:	826, 852, 851	Box Heat:	on
Location:	Mendota	Am Temp:	76	Nozzel:	.28
Unit:	BATH Cond.	P. Bar:	29.65	Prob Heat:	on
Date:	11/3/95	Pitot:	#1 .83	Wind Vol:	Auto
Run#:	#1 Pm-10	Pyro:	#1 1.0	Static Ps:	0.02
Cold Box:	0	Mag ΔP:	M-	O2:	20.9
Meter #:	B	Map ΔH:	M-2	CO2:	0.05
Meter Fac:	.9723	%.H2O:	0.03		
	ΔH 2.0111				

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			21.16	0.0	70	.07	1.0	280.245	71	72	2
2				2.75	71	.015		283.3	75	72	
3				4.5	78	.014		285.9	78	73	
4				7.5	78	.25		288.4	79	75	
5				16.5	75	.18		291.7	81	77	
6				24	78	.11		294.0	81	83	
7				29.5	78	.103		296.6	82	79	
8				32	75	.03		298.7	84	79	
9				34.5	79	.06		301.3	85	80	
10				38.25	78	.19		304.5	86	86	
11				46	79	.11		306.7	87	81	
12				52.5	78	.11		310.4	88	83	
1				60				312.070			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.25	ΔP	.13	CFM:	60.002	IN.HG	19
ΔP	.25	ΔP	.13	CFM:	0.0005	IN.HG	7
ΔH	.37	ΔH	.01				
ΔH	.37	ΔH	.01				

Notes: _____

97

000101

Plant:	ALTA VISTA	Filter:	F113, F86, F83	Box Heat:	on
Location:	Hildmann	Am Temp:	63	Nozzel:	.28
Unit:	Baghouse Cold.	P. Bar:	29.65	Prob Heat:	on
Date:	11/3/94	Pitot:	#1	Wind Vel:	Cam
Run#:	2 PM-10	Pyro:	#1	Static Ps:	-0.07
Cold Box:	2	Mag ΔP:	MANO	O2:	20.9
Meter #:	B	Map ΔH:	M-1	CO2:	0.03
Meter Fac:	.9773	% H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1				0.0	69	.17	1.0	313.165	83	79	4
2				2.75	70	.22		316.10	83	78	
3				9.75	77	.31		318.9	81	79	
4				16.5	77	.08		321.8	80	85	
5				23	77	.035		323.5	86	81	
6				24.5	78	.07		327.8	87	87	4
7				26.5	75	.11		330.4	85	83	
8				32	74	.17		332.5	86	83	
9				38	75	.22		335.0	88	83	
10				45	75	.09		337.7	89	81	
11				48	75	.04		342.2	90	85	
12				54	74	.035		345.8	92	91	
1			5.04	60				348.260			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.22	ΔP	.1	CFM:	0.002	IN.HG	23
ΔP	.22	ΔP	.1	CFM:	0.007	IN.HG	8
ΔH	.26	ΔH	.22				
ΔH	.26	ΔH	.22				

Notes: _____

98

0.0072

Plant:	AUGUSTA	Filter:	2-50, 1995/100	Box Heat:	on
Location:	[illegible]	Am Temp:	65	Nozzel:	.28
Unit:	Battery Point	P.Bar:	29.65	Prob Heat:	on
Date:	11/13/11	Pitot:	#1	Wind Vel:	Calm
Run#:	PM-10 3	Pyro:	#1	Static Ps:	-0.07
Cold Box:	11	Mag ΔP:	MAND	O2:	20.9
Meter #:	13	Map ΔH:	MAN 1	CO2:	0.05
Meter Fac:	.9723	%.H2O:	0.07		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			5.19	0.0	74	.15	1.0	348.228	85	82	
2				2.75	70	.17		351.0	85	81	
3				6.25	69	.22		353.5	87	82	3
4				11.5	71	.2		356.7	84	88	
5				20.5	71	.05		358.4	88	84	
6				23	71	.05		362.1	91	86	
7				25.5	72	.18		364.0	90	85	
8				31	085	.35		367.0	91	86	
9				39.25	69	.30		370.1	87	92	
10				48	69	.11		372.4	93	87	
11				54	.76	.035		374.0	93	88	
12				58	70	.025		377.6	94	88	
1				60				381.057			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.37	ΔP	.110	CFM:	0.002	IN.HG	7
ΔP	.37	ΔP	.110	CFM:	0.002	IN.HG	10
ΔH	.19	ΔH	.3				
ΔH	.19	ΔH	.3				

Notes: _____

COTTON GIN SOURCE TEST DATA

Date: 11/3/94

GINNING PROCESS - Battery Cond.

RUN # 1

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			2:46				
	10250	508	2:47				
	1	510	2:50				
	2	501	2:52				
	3	494	2:54				
	4	473	2:57				
	5	493	2:59				
	6	497	3:01				
	7	505	3:04				
	8	522	3:10				
	9	495	3:13				
	10260	519	3:15				
	2	502	320				
	3	519	323				
	4	514	326				
	5	512	3:28				
	6	518	3:30				
	7	503	3:33				
	8	514	3:35				
	9	498	3:38				
	10270	500	3:40				
	1	495	3:43				
	2	531	3:45				
	3	519	3:48				
		End	3:49				
	23	11612	60 min				

A. TOTAL LINT GINNED (lbs.)	11612
B. TOTAL STANDARDS BALES (A/500)	23.224
C. TIME (hrs.)	1.00
D. TOTAL STD. BALES PER HOUR (B/C)	23.2

100

COTTON GIN SOURCE TEST DATA

Date: 11/3/94

GINNING PROCESS - Battery cond.

RUN # 2

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			4:00				
	10278	532	4:03				
	9	498	4:06				
	10280	493	4:09				
	1	477	4:12				
	2	513	4:14				
	3	494	4:17				
	4	487	4:19				
	5	507	4:22				
	6	512	4:25				
	7	507	4:27				
	8	519	4:30				
	10291	517	4:38				
	2	488	4:40				
	3	512	4:43				
	4	513	4:45				
	5	508	4:48				
	6	519	4:50				
	7	513	4:53				
	8	516	4:56				
	9	504	4:58				
	10300	511	5:01				
	1	506	5:03				
		End	5:05				
	22	11,116	60 min				

A. TOTAL LINT GINNED (lbs.)	11,116
B. TOTAL STANDARDS BALES (A/500)	22.232
C. TIME (hrs.)	1.00
D. TOTAL STD. BALES PER HOUR (B/C)	22.3

101

COTTON GIN SOURCE TEST DATA

Date: 11/3/94

RUN # 3

GINNING PROCESS - Battery Condi

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			5:19				
	10308	536	5:21				
	9	507	5:24				
	10310	506	5:27				
	1	503	5:30				
	2	519	5:33				
	3	516	5:36				
	4	512	5:38				
	5	513	5:41				
	6	514	5:44				
	7	510	5:46				
	8	510	5:49				
	9	503	5:52				
	10320	524	5:54				
	1	529	5:57				
	2	513	6:00				
	3	526	6:03				
	4	513	6:06				
	5	513	6:08				
	6	517	6:11				
	7	495	6:13				
	8	502	6:15				
	9	498	6:17				
	10330	501	6:19				
		[illegible]	6:20				
	23	11782	60 min				

A. TOTAL LINT GINNED (lbs.)	11782
B. TOTAL STANDARDS BALES (A/500)	23.564
C. TIME (hrs.)	1
D. TOTAL STD. BALES PER HOUR (B/C)	[illegible]

MOTES
CYCLONE

Plant:	AUGUSTA	Filter:	C-14	Box Heat:	on
Location:	Mondovi	Am Temp:	42	Nozzel:	.37
Unit:	Motor	P. Bar:	29.82	Prob Heat:	on
Date:	8/11/94	Pitot:	#1 .837	Wind Vel:	Calm
Run #:	1	Pyro:	#1 1.0	Static Ps:	-0.02
Cold Box:	1	Mag ΔP:	M-2	O2:	20.9
Meter #:	A	Map ΔH:	M-9	CO2:	0.03
Meter Fac:	.9572	% H2O:	0.02		

Stack Dia: 26
"A"
"B"

Imp	Gross	Tare	Final
1	592.2	592.7	
2	580.1	578.6	
3	470.6	467.2	
4	582.9	580.6	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			6:50	0.0	46	.10	1.93	322.1889	47	42	2
2				5	45	.12	2.32	327.4	45	48	
3				80	45	.12	2.32	329.9	48	45	
4				15	118	.15	2.90	336.2	52	48	
5				20	50	.15	2.9	340.3	59	53	3
6				25	51	.15	2.9	341.9	59	57	
7				30	53	.15	2.9	349.7	60	59	3
8				35	52	.07	1.35	354.7	63	78	
9				40	50	.07	1.35	357.7	65	80	
10				45	50	.05	.96	361.1	67	68	
11				50	52	.05	.96	363.5	70	71	
12				55	54	.05	.96	366.2	71	70	
1			7:50	60				368.927			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.75	ΔP	1.0	CFM: 0.000 / IN.HG	20
ΔP	.75	ΔP	1.0	CFM: 0.000 / IN.HG	16
ΔH	.26	ΔH	1.7		
ΔH	.26	ΔH	1.7		

Notes: 19.34

Plant:	ATHALISTA	Filter:	C-15	Box Heat:	[illegible]
Location:	MONTANA	Am Temp:	50	Nozzel:	[illegible]
Unit:	MOTOR	P.Bar:	29.65	Prob Heat:	[illegible]
Date:	11/14/94	Pitot:	[illegible]	Wind Vel:	Calm
Run#:	2	Pyro:	[illegible]	Static Ps:	[illegible]
Cold Box:	1	Mag ΔP:	[illegible]	O2:	20.9
Meter #:	B	Map ΔH:	[illegible]	CO2:	0.05
Meter Fac:	.9572	% H2O:	0.09		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1	578.3	581.3	
2	572.6	577.3	
3	478.9	476.5	
4	653.8	651.7	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			8:00	0.0	56	.1	1.93	369.100	74	75	
2				5	58	.15	2.90	373.6	77	76	
3				10	66	.15	2.90	376.11	77	76	5
4				15	60	.15	2.90	380.12	77	77	
5				20	65	.15	2.91	384.12	78	79	
6				25	62	.12	2.32	388.3	79	79	
7				30	63	.12	2.32	392.6	81	80	
8				35	64	.07	1.35	397.6	82	83	
9				40	65	.07	1.35	400.0	83	87	
10				45	68	.05	.96	405.0	84	88	
11				50	69	.05	.96	407.3	84	84	
12				55	65	.05	.96	411.3	85	84	
1			9:00	60	/			413.519			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.65	ΔP	.95	CFM:	0.002	IN.HG	21
ΔP	.65	ΔP	.95	CFM:	0.000	IN.HG	10
ΔH	.85	ΔH	.7				
ΔH	.85	ΔH	.7				

Notes: 19.34

Plant:	DELTA VISTA	Filter:	C-16	Box Heat:	on
Location:	MONROVIA	Am Temp:	64	Nozzel:	.345
Unit:	MOTOR	P.Bar:	29.86	Prob Heat:	on
Date:	11/11/94	Pitot:	#1	Wind Vol:	Con
Run#:	3 M-5	Pyro:	#1	Static Ps:	-0.07
Cold Box:	F	Mag ΔP:	M2	O2:	20.9%
Meter #:	D	Map ΔH:	M-9	CO2:	0.0%
Meter Fac:	.9572	%.H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1	611.7	615.1	
2	590.1	591.1	
3	469.5	469.3	
4	580.5	582.9	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			9:15	0.0	61	.05	.96	413.722	88	88	
2				5	61	.15	2.9	416.5	85	85	2
3				10	67	.15	2.9	420.7	86	91	
4				15	68	.17	3.29	425.4	88	86	2
5				20	69	.15	2.9	430.6	88	87	
6				25	69	.09	1.74	436.2	88	87	3
7				30	69	.07	1.35	438.5	89	87	
8				35	69	.07	1.35	442.6	88	89	
9				40	69	.07	1.35	446.6	89	88	
10				45	69	.05	.96	449.7	89	91	
11				50	69	.05	.96	452.5	90	97	
12				55	69	.05	.96	455.0	90	92	
1			10:15	60				457.905			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.90	ΔP	1.05	CFM:	0.002	IN,HG	29
ΔP	.10	ΔP	1.05	CFM:	0.003	IN,HG	10
ΔH	1.0	ΔH	3.0				
ΔH	1.0	ΔH	3.0				

Notes: 19.34

0.00637

Plant:	ALTA VISTA	Filter:	E-36, F71, F72	Box Heat:	on
Location:	MONROVIA	Am Temp:	42	Nozzel:	.375
Unit:	MIOTA	P.Bar:	29.52	Prob Heat:	on
Date:	11/14/91	Pitot:	#1 .833	Wind Vol:	Calc
Run#:	1PM-16	Pyro:	1 1.0	Static Ps:	-0.05
Cold Box:	2	Mag ΔP:	M-2	O2:	20.9
Meter #:	B	Map ΔH:	M-1	CO2:	0.05
Meter Fac:	.9723	%.H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			6:50	0.0	46	.05	1.0	381.282	45	45	3
2				3.75	45	.07		384.3	49	47	
3				7.5	48	.1		386.0	48	50	
4				11.25	48	.12		389.0	51	51	
5				15.25	50	.12		392.4	56	55	2
6				27.25	51	.12		394.9	62	58	
7				33.75	53	.1		397.4	63	59	2
8				37.5	52	.07		399.7	63	66	
9				41.25	50	.05		402.2	68	69	
10				48	50	.05		405.7	71	66	
11				51.75	52	.05		407.8	68	72	
12				55.5	54	.05		410.5	74	70	
1			7:50	60				413.232			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.75	ΔP	1.0	CFM:	0.000	IN.HG	5
ΔP	.75	ΔP	1.0	CFM:	0.000	IN.HG	5
ΔH	.36	ΔH	1.2				
ΔH	.36	ΔH	1.2				

Notes: _____

0.00260

Plant:	ARTA VISTA	Filter:	E.21-E48-F17	Box Heat:	0
Location:	Mandalay	Am Temp:	50	Nozzel:	.1280
Unit:	Mono-1	P.Bar:	29.85	Prob Heat:	0
Date:	11/11/94	Pitot:	#1	Wind Vel:	Calm
Run#:	2 PM-10	Pyro:	#1	Static Ps:	-0.07
Cold Box:	#1	Mag ΔP:	M-2	O2:	20.9
Meter #:	B	Map ΔH:	M-9	CO2:	0.05
Meter Fac:	.99222	%.H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			8:09	0.0	56	.10	1.0	413.510	69	67	
2				5	66	.12		417.4	67	71	3
3				10.5	66	.12		419.6	77	68	
4				16	61	.15		422.4	71	69	
5				22.5	60	.15		425.5	71	75	
6				29	62	.15		428.3	72	73	
7				35.5	63	.15		431.1	75	75	
8				42	64	.07		433.0	81	76	
9				46	64	.07		436.6	81	77	3
10				50	68	.05		440.8	83	78	
11				53.25	68	.05		442.3	83	78	
12				56.5	65	.05		444.4	79	84	
1			9:04	60				445.810			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	1.65	ΔP	.75	CFM:	0.02	IN.HG	21
ΔP	1.65	ΔP	.75	CFM:	0.001	IN.HG	7
ΔH	.85	ΔH	.71				
ΔH	.85	ΔH	.7				

Notes: _____

Plant:	ALTA VISTA	Filter:	E4/5, F8 9, F90	Box Heat:	on
Location:	Mendota	Am Temp:	69	Nozzel:	280
Unit:	MOTORS	P. Bar:	29.87	Prob Heat:	off
Date:	11/4/93	Pitot:	#1	Wind Vel:	Calm
Run #:	PM#3	Pyro:	#1	Static Ps:	-0.02
Cold Box:	2	Mag ΔP:	M-2	O2:	20.9
Meter #:	B	Mag ΔH:	M-9	CO2:	0.05
Meter Fac:	.9727	Σ.1/20:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			9:15	0.0	64	.1	1.0	449.635	79	75	3
2				5	64	.15		451.8	78	74	
3				11.5	67	.15		454.6	80	75	
4				18	68	.15		457.4	81	76	3
5				24.5	69	.15		460.0	82	77	
6				31	69	.12		463.1	83	77	3
7				36.5	69	.12		464.6	78	87	
8				42	69	.07		468.3	75	81	
9				46	69	.07		471.1	86	80	
10				50	69	.05		473.9	86	80	
11				53.75	69	.05		476.5	87	82	
12				56.5	69	.05		479.1	87	83	
1			10:15	60				482.996			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.10	ΔP	.05	CFM:	0.002	IN.HG	27
ΔP	.10	ΔP	.05	CFM:	0.000	IN.HG	10
ΔH	1.0	ΔH	.3				
ΔH	1.0	ΔH	.3				

Notes: _____

COTTON GIN SOURCE TEST DATA

Date: 11/4/94

GINNING PROCESS - MOTES

RUN # 1

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			6:50				
	10567	524	6:51				
	8	522	6:54				
	9	517	6:56				
	10570	526	6:59				
	1	497	7:01				
	2	519	7:04				
	3	495	7:07				
	4	549	7:11				
	5	527	7:19				
	6	507	7:22				
	7	492	7:24				
	8	503	7:27				
	9	501	7:29				
	10580	488	7:31				
	1	504	7:32				
	2	504	7:35				
	3	510	7:37				
	4	522	7:40				
	5	493	7:42				
	6	511	7:45				
	7	500	7:47				
	8	488	7:50				
		End	7:50				
	22 BALES	11199	60 min				

A. TOTAL LINT GINNED (lbs.)	11199
B. TOTAL STANDARDS BALES (A/500)	22.398
C. TIME (hrs.)	1.00
D. TOTAL STD. BALES PER HOUR (B/C)	22.4

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COTTON GIN SOURCE TEST DATA

Date: 11/14/94

GINNING PROCESS - MOTES

RUN # 2

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			8:04				
	10595	501	8:07				
	6	521	8:09				
	7	505	8:12				
	8	519	8:14				
	9	520	8:17				
	10600	525	8:19				
	1	525	8:22				
	2	508	8:24				
	3	500	8:27				
	4	526	8:29				
	5	512	8:32				
	6	519	8:34				
	7	513	8:37				
	8	515	8:39				
	9	517	8:42				
	10610	524	8:44				
	1	512	8:47				
	2	515	8:50				
	3	508	8:52				
	4	505	8:55				
	5	509	8:57				
	6	503	9:00				
	7	494	9:02				
		End	9:04				
	23 BALES	11796	60 MIN				

A. TOTAL LINT GINNED (lbs.)	11796
B. TOTAL STANDARDS BALES (A/500)	23.596
C. TIME (hrs.)	1.00
D. TOTAL STD. BALES PER HOUR (B/C)	23.6

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COTTON GIN SOURCE TEST DATA

Date: 11/4/94

GINNING PROCESS - MOTES

RUN # 3

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			9:15				
	10623	518	9:18				
	4	494	9:20				
	5	501	9:23				
	6	486	9:25				
	7	504	9:28				
	8	495	9:31				
	9	505	9:34				
	10630	512	9:36				
	1	501	9:39				
	2	505	9:41				
	3	506	9:44				
	4	504	9:46				
	5	494	9:49				
	6	506	9:51				
	7	501	9:54				
	8	513	9:56				
	9	494	9:59				
	10640	503	10:01				
	1	512	10:04				
	2	509	10:07				
	3	525	10:09				
	4	523	10:12				
	5	504	10:14				
		End	10:15				
	23 bales	11617	60 min				

A. TOTAL LINT GINNED (lbs.)	11617
B. TOTAL STANDARDS BALES (A/500)	23.238
C. TIME (hrs.)	1.00
D. TOTAL STD. BALES PER HOUR (B/C)	23.2

112

Plant:	ALTA VISTA GLASS	Filter:	C-11	Box Heat:	—
Location:	Meldora	Am Temp:	43	Nozzel:	0.420
Unit:	Cint Chrome	P. Bar:	29.65	Prob Heat:	—
Date:	11/13/91	Pitot:	# 1 .833	Wind Vel:	[illegible]
Run #:	1	Pyro:	# 1 1.0	Static Ps:	-0.02
Cold Box:	5	Mag ΔP:	[illegible]	O2:	20.9
Meter #:	A	Map ΔH:	[illegible]	CO2:	0.0
Meter Fac:	.9572 ΔH@ 1.7813	% H2O:	0.0		

Stack Dia: 30
"A" 6'
"B" 12'

	Imp	Gross	Tare	Final
626.3	1	[illegible]	632.1	
584.3	2	[illegible]	587.0	
	3	466.8	468.2	
	4	580.4	582.3	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1	.54		7.00	0.0	57	.03	.95	63.655	44	47	
2	1.74			5	55	.04	1.27	66.5	44	45	
3	3.0			10	57	.04	1.27	68.9	47	46	3
4	4.6			15	60	.03	1.11	71.9	50	50	
5	6.5		7.25	20	61	.04	1.27	74.4	54	53	
6	9.23		10.49	25	50	.06	1.69	78.7	59	58	
7	16.7			30	62	.07	2.21	82.9	63	64	
8	19.5			35	67	.07	2.20	86.0	65	64	
9	21.4			40	66	.06	2.53	90.0	68	68	4
10	22.9			45	68	.0855	2.46	95.6	73	72	
11	24.3			50	69	.09	2.84	99.7	75	74	11.5
12	25.4			55	69	.08	2.53	105.7	80	78	
1			11.28	60				109.005			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	0.63	ΔP	0.49	CFM:	<0.001	IN.HG	23
ΔP	0.63	ΔP	0.49	CFM:	<0.002	IN.HG	7
ΔH	0.15	ΔH	0.22				
ΔH	0.15	ΔH	.22				

Notes: 31.63

Plant:	ALTAVISTA	Filter:	C-12	Box Heat:	on
Location:	MEMPHIS	Am Temp:		Nozzel:	.170
Unit:	[illegible]	P.Bar:	29.65	Prob Heat:	on
Date:	11/3/1991	Pitot:	.84	Wind Vel:	Calc
Run #:	2 PM 5	Pyro:	1.1	Static Ps:	-0.07
Cold Box:	1	Mag ΔP:	N/A	O2:	20.9
Meter #:	A	Map ΔH:	N/A	CO2:	0.0
Meter Fac:	.9512	%.H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

KFB

Imp	Gross	Tare	Final
1	599.1	600.3	
2	574.8	577.4	
3	~~499~~	477.1	
4	654.4	652.4	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			11:45	0.0	71	.035	1.10	105.130	83	83	3
2				5	73	.04	1.26	112.4	85	85	
3				10	73	.035	1.10	114.9	86	85	
4				15	74	.04	1.26	117.7	86	85	
5				20	75	.05	1.58	120.5	86	87	
6				25	74	.06	1.89	124.2	87	89	1
7				30	75	.07	2.21	127.0	89	89	6
8				35	74	.07	2.21	132.2	88	89	8
9				40	74	.08	2.53	135.7	89	89	7
10				45	75	.08	2.55	137.2	89	89	
11				50	76	.1	3.167	142.6	88	90	8
12				55	74	.08	2.53	146.9	91	89	
1			12:45	60				153.779			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.13	ΔP	.27	CFM:	<0.001	IN.HG	27
ΔP	.13	ΔP	.27	CFM:	0.000	IN.HG	10
ΔH	.25	ΔH	.43				
ΔH	.25	ΔH	.43				

Notes: 31 163

Plant:	ALGA VIET	Filter:	C-13	Box Heat:	0
Location:	Mendota	Am Temp:		Nozzel:	.410
Unit:	Line	P. Bar:	29.65	Prob Heat:	0
Date:	11/3/91	Pitot:	#1	Wind Vel:	calm
Run #:	3 M-5	Pyro:	#1	Static Ps:	-0.02
Cold Box:	5	Mag ΔP:	~~M1~~ + MANO	O2:	20.0
Meter #:	B	Map ΔH:	M-9	CO2:	0.03
Meter Fac:	.9572	% H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1	579.7	580.1	
2	558.8	556.3	
3	466.7	466.5	
4	580.8	580.4	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			104	0.0	74	.03	.95	153.925	90	90	
2				5	79	.035	1.11	156.9	90	90	
3				10	79	.035	1.11	160.0	90	90	
4				15	81	.04	1.26	162.7	90	92	
5				20	79	.04	1.26	165.6	91	92	
6				25	78	.05	1.58	170.1	91	92	
7				30	77	.06	1.90	172.6	92	91	2
8				35	77	.07	2.24	176.1	93	93	
9				40	77	.08	2.53	180.2	94	96	
10				45	77	.085	2.68	185.4	99	98	
11				50	77	.09	2.84	190.5	100	95	
12				55	77	.08	2.57	194.8	97	96	
1			2.04	60				199.149			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.15	ΔP	.38	CFM:	<0.002
ΔP	.15	ΔP	.38	CFM:	0.000
ΔH	1.65	ΔH	1.3	IN.HG	22
ΔH	1.65	ΔH	1.3	IN.HG	5

Notes: 31.63

0.0022

Plant:	ALTAVISTA	Filter:	653 - FIOS FIOC	Box Heat:	On
Location:	MEADOWA	Am Temp:	43	Nozzel:	375
Unit:	Unit Cleaner	P. Bar:	29.65	Prob Heat:	On
Date:	11/3/91	Pitot:	#1	Wind Vel:	Calm
Run#:	#1 Pm-10	Pyro:	#1	Static Ps:	-0.07
Cold Box:	2	Mag ΔP:	[illegible]	O2:	20.9
Meter #:	B	Map ΔH:	[illegible]	CO2:	0.05
Meter Fac:	.9732 / AHR .0111	%.H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			7:00	0.0	57	.07	1.0	178.239	46	46	
2				2.75	55	.03		180.8	48	47	
3				6.25	57	.035		182.4	52	50	
4				10	60	.04		186.9	55	53	
5			7:25	14.25	61	.04		188.9	58	56	
6			10:49	18.5	50	.04		192.2	63	56	
7				22.75	62	.05		196.5	62	64	
8				27.5	66	.06		197.3	66	69	
9				32.75	66	.07		200.0	67	69	
10				38.5	68	.08		200.0	73	70	
11				44.75	70	.09		206.1	75	72	
12				51.75	69	0.11		210.1	78	75	
1			11:28	60			1.0	212.535			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	0.63	ΔP	.49	CFM:	<0.02	IN.HG	4
ΔP	0.63	ΔP	.49	CFM:	0.00	IN.HG	7
ΔH	.15	ΔH	.22				
ΔH	0.15	ΔH	.22				

Notes: _____

Plant:	ALTA VISTA	Filter:	F39-F78 F77	Box Heat:	—
Location:	[illegible]	Am Temp:		Nozzel:	.375
Unit:	[illegible]	P. Bar:	29.65	Prob Heat:	0
Date:	11/3/94	Pitot:	#1	Wind Vel:	Calc
Run #:	2 PM-10	Pyro:	#1	Static Ps:	-0.07
Cold Box:	4	Mag ΔP:	Manual	O2:	20.9
Meter #:	13	Map ΔH:	M-1	CO2:	0.05
Meter Fac:	.9723	% H2O:	0.03		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			11.2	0.0	71	.03	1.0	212.707	75	73	4
2				2.75	73	.011		215.8	74	72	
3				6.75	75	.011		218.5	79	76	
4				10.75	74	.035		220.9	81	77	
5				14.5	75	.011		223.9	83	78	
6				18.5	74	.06		226.0	84	78	3
7				23.5	75	.07		228.3	84	79	
8				27	74	.07		232.5	85	79	
9				31.5	74	.08		234.9	85	79	
10				40.5	75	.085		237.0	80	85	
11				46.75	76	.09		239.5	86	80	
12				53.75	74	.08		242.8	86	81	
1			12.45	60				245.570			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.13	ΔP	.27	CFM:	0.002	IN.HG	20
ΔP	.13	ΔP	.27	CFM:	0.000	IN.HG	5
ΔH	.75	ΔH	.13				
ΔH	.75	ΔH	.13				

Notes: _____

0.00063

Plant:	APIAVISTA	Filter:	E-46, F92.F91	Box Heat:	0
Location:	MONROA	Am Temp:		Nozzel:	.375
Unit:	1 [illegible]	P.Bar:	29.65	Prob Heat:	0
Date:	11/3/04	Pitot:	#1	Wind Vel:	Calm
Run #:	3 PM-10	Pyro:	#1	Static Ps:	-0.02
Cold Box:	2	Mag ΔP:	MAND	O2:	20.9
Meter #:	A	Map ΔH:	M-9	CO2:	0.05
Meter Fac:	.9572	%.H2O:	0.05		

Stack Dia: _____
"A" _____
"B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vac.
1			1.04	0.0	74	.035	1.0	245.708	77	80	
2				7.75	79	.04		2[illegible]86	80	76	
3				6.75	79	.035		252.3	81	77	
4				10.25	81	.04		256.0	83	78	
5				14.75	79	.05		258.3	84	80	
6				18.75	78	.06		262.0	86	81	
7				23.75	77	.07		263.3	87	82	4
8				27.75	77	.07		265.4	87	83	
9				31.75	77	.08		268.6	89	84	
10				40.75	77	.08		271.7	90	85	
11				46.75	70	.1		276.5	90	85	
12				53.5	77	.08		277.4	86	91	
1				60				279.757			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP	.45	ΔP	.38	CFM:	<0.002	IN.HG	26
ΔP	.45	ΔP	.38	CFM:	0.007	IN.HG	13
ΔH	1.65	ΔH	1.5				
ΔH	1.65	ΔH	1.5				

Notes: _____

COTTON GIN SOURCE TEST DATA

Date: 11/3/94

GINNING PROCESS - Lint Cleaner

RUN # 1

	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME
START			7:00				
	10159	512	7:07				
	10160	507	7:05				
	1	410	7:08				
	3	431	11:07				
	4	505	11:10				
	5	466	11:12				
	6	522	11:15				
	7	466	11:18				
	8	522	11:20				
	9	450	11:23				
	10170	506	11:25				
	1	495	11:28				
		End	11:28				
	12 Bales	5824	60 min				

A. TOTAL LINT GINNED (lbs.)	5,824
B. TOTAL STANDARDS BALES (A/500)	11.648
C. TIME (hrs.)	1:00
D. TOTAL STD. BALES PER HOUR (B/C)	11.6

120

COTTON GIN SOURCE TEST DATA

Date: 11/3/94

RUN # 2

GINNING PROCESS - Lint Cleaner

	BALE #	BALE WT.	TIME
START			11:45
	10179	516	11:48
	10180	513	11:51
	1	509	11:53
	2	494	11:56
	3	492	11:58
	4	512	12:00
	5	523	12:03
	6	504	12:06
	7	504	12:09
	8	517	12:12
	9	519	12:14
	10190	509	12:17
	1	507	12:19
	2	526	12:22
	3	511	12:24
	4	503	12:27
	5	526	12:29
	6	511	12:32
	7	503	12:34
	8	529	12:37
	9	512	12:39
	10200	522	12:42
	1	525	12:44
		End	12:45
	23 BALES	11787	60 MIN.

	BALE #	BALE WT.	TIME

A. TOTAL LINT GINNED (lbs.)	11787
B. TOTAL STANDARDS BALES (A/500)	23.574
C. TIME (hrs.)	1:00
D. TOTAL STD. BALES PER HOUR (B/C)	23.6

COTTON GIN SOURCE TEST DATA

Date: 11/5/94

GINNING PROCESS - Lint Cleaner

RUN # 3

	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			1:04				
	10209	506	1:05				
	10210	517	1:07				
	1	509	1:09				
	2	520	1:11				
	3	510	1:14				
	4	529	1:17				
	5	498	1:19				
	6	522	1:22				
	7	507	1:24				
	8	511	1:26				
	9	490	1:29				
	10220	511	1:31				
	1	494	1:34				
	2	523	1:36				
	3	493	1:39				
	4	523	1:41				
	5	506	1:43				
	6	519	1:46				
	7	504	1:48				
	8	537	1:51				
	9	509	1:53				
	10230	518	1:56				
	1	508	1:58				
	2	494	2:01				
	3	500	2:03				
			2:04				
	25 bale	12761	60 min				

A. TOTAL LINT GINNED (lbs.)	12761
B. TOTAL STANDARDS BALES (A/500)	25.522
C. TIME (hrs.)	1:00
D. TOTAL STD. BALES PER HOUR (B/C)	[illegible]

VIII. QUALITY ASSURANCE

DRY GAS METER CALIBRATION

Date: 6/22/94 Unit: A

Ambient Conditions

Temp: 70 F/C

Baro: 29.95 in.Hg

ORIFICE MANOMETER SETTING D,H	GAS VOL WET TEST METER V,w	GAS VOL DRY GAS METER Vb,	wet test tw	Temperature Dry IN TD, IN	Dry Out Tdo,	Ave f Td,	Time e min	Y	DH@Y
1.0	5	274.432	70	82	81	81.75	9.31	0.9436	1.9027
		269.029	70	82	82				
2.0	5	279.920	70	82	82	82.25	6.36	0.9605	1.7743
		274.620	70	82	83				
3.0	5	288.434	70	83	83	83.00	5.2	0.9606	1.7767
		283.140	70	83	83				
4.0	5	293.947	70	83	83	83.50	4.37	0.9640	1.6715
		288.680	70	84	84				
								0.957	1.7812756

Calibration by: K.K

Reviewed by: _____

Meter Factor: 0.9572

Delta H: 1.7813

Equations:

Y= (Vw*Pb)*(Td+460))/Vdt-Vdb)+(DelH/13.6))*(((Wt+wt)/2)+460))

Del H = (0.0317*Del)*(((((WT+Wt)/2)+460)*e)/Vw)^2)/((Pb*(Td+460)

DRY GAS METER CALIBRATION

Date: 8/17/94 Unit: B

Ambient Conditions

Temp: 70 F/C

Baro: 29.82 in.Hg

ORIFICE MANOMETER SETTING D,H	GAS VOL WET TEST METER V,w	GAS VOL DRY GAS METER Vb,	wet test tw	Temperature Dry IN TD, IN	Dry Out Tdo,	Ave f Td,	Time e min	Y	DH@Y
1.0	5	045.253	70	79	75	76.50	9.73	0.9530	2.1078
		039.955	70	77	75				
2.0	5	039.717	70	79	75	76.25	6.8	0.9696	2.0599
		034.525	70	77	74				
3.0	5	034.215	70	79	74	76.00	5.36	0.9804	1.9207
		029.095	70	77	74				
5.0	5	028.680	70	79	74	76.25	4.33	0.9863	2.0881
		023.613	70	76	76				
								0.972	2.044125

Calibration by: K.K

Reviewed by: CD

Meter Factor: 0.9723

Delta H: 2.0441

Equations:

Y= (Vw*Pb)*(Td+460))/Vdt-Vdb)+(DelH/13.6))*(((Wt+wt)/2)+460))

Del H = (0.0317*Del)*(((((WT+Wt)/2)+460)*e)/Vw)^2)/((Pb*(Td+460)

PITOT TUBE CALIBRATION

Ambient Conditions

DATE: 7/13/94

UNIT NUMBER: 1

TEMPERATURE 68 F

RH: 0.00 %

BAROMETER: 29.93 in. hg.

Run #	Velocity fpm	ΔP (std) in. H2O	ΔP (s) in. H2O		Cp(s)	| Dev |	Cp(s)	| Dev |
			A	B	A	A	B	B
1	3327	*0.69*	*0.94*	*0.90*	0.848	0.001	0.867	0.002
2		*0.69*	*0.95*	*0.91*	0.844	0.003	0.862	0.003
3		*0.69*	*0.94*	*0.90*	0.848	0.001	0.867	0.002
Avg		0.69	0.94	0.90	~0.847	0.002*	~0.865	0.002*

AVERAGE: (Cp(s)A+Cp(s)B)/2 0.856

| ~Cp(s)A-~Cp(s)B | = 0.019 *

1	3278	*0.67*	*0.96*	*0.92*	0.827	0.000	0.827	0.000
2		*0.67*	*0.96*	*0.92*	0.827	0.000	0.827	0.000
3		*0.67*	*0.96*	*0.92*	0.827	0.000	0.827	0.000
Avg		0.67	0.96	0.92	~0.827	0.000*	~0.827	0.000*

AVERAGE: (Cp(s)A+Cp(s)B)/2 0.827

| ~Cp(s)A-~Cp(s)B | = 0.000 *

1	3229	*0.65*	*0.96*	*0.90*	0.815	0.000	0.815	0.000
2		*0.65*	*0.96*	*0.91*	0.815	0.000	0.815	0.000
3		*0.65*	*0.96*	*0.90*	0.815	0.000	0.815	0.000
Avg		0.65	0.96	0.90	~0.815	0.000*	~0.815	0.000*

AVERAGE: (Cp(s)A+Cp(s)B)/2 0.815

|~Cp(s)A-~Cp(s)B | = 0.000 *

PITOT CALIBRATION VALUE: 0.833

~ Denotes average value

* Denotes values which must be ≤ to 0.01 for calibration to be valid.

Calibrated by: KK *Reviewed by:* CD

BTC Environmental, Inc. - 1989

THERMO COUPLE CALIBRATION

Date: 6/28/94 Unit: 1

Point	* Standard Temperature *Tsld*	Pyrometer Temperature *Tpyr*	** Error % *(Tsld-Tpyr)/Tsld*
	deg. F	deg. F	
1 Ambient	70.0 70.0	70.0 70.0	0.00%
2 Ice	32.0 32.0	32.0 32.0	0.00%
3 Boil	212.0 212.0	212.0 212.0	0.00%
4 Oil	0.0	0.0	0.00%

Std. Corr. Factor 1.000

Calibration by: KK

Reviewed by: D

* Standard ID: _____

** in deg. K

STAINLESS
PROBE & NOZZEL UNIT
6/20/94

Nozzle ID	S-34	Nozzle ID	S-35	Nozzle ID	S-36
Point		Point		Point	
1	0.295	1	0.311	1	0.310
2	0.295	2	0.311	2	0.309
3	0.296	3	0.311	3	0.310
4	0.295	4	0.311	4	0.306
5	0.295	5	0.311	5	0.305
6	0.294	6	0.311	6	0.306
7	0.295	7	0.311	7	0.304
8	0.295	8	0.311	8	0.305
Average	0.295	Average	0.311	Average	0.307

Nozzle ID	HAST-37	Nozzle ID	S-40	Nozzle ID	S-49
Point		Point		Point	
1	0.370	1	0.420	1	0.410
2	0.370	2	0.420	2	0.410
3	0.370	3	0.420	3	0.410
4	0.369	4	0.419	4	0.410
5	0.370	5	0.418	5	0.408
6	0.370	6	0.419	6	0.408
7	0.370	7	0.420	7	0.410
8	0.370	8	0.420	8	0.410
Average	0.370	Average	0.420	Average	0.410

Nozzle ID		Nozzle ID		Nozzle ID	
Point		Point		Point	
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
Average	#DIV/0!	Average	#DIV/0!	Average	#DIV/0!

PM-10
NOZZLE DATA
6/28/94

Nozzle ID	PM-1	Nozzle ID	PM-2	Nozzle ID	PM-3
Point		Point		Point	
1	0.152	1	0.190	1	0.218
2	0.150	2	0.190	2	0.218
3	0.151	3	0.191	3	0.218
4	0.152	4	0.191	4	0.218
5	0.152	5	0.191	5	0.218
6	0.151	6	0.190	6	0.217
7	0.152	7	0.191	7	0.217
8	0.152	8	0.191	8	0.218
Average	0.152	Average	0.191	Average	0.218

Nozzle ID	PM-4	Nozzle ID	PM-5	Nozzle ID	PM-6
Point		Point		Point	
1	0.280	1	0.374	1	0.500
2	0.279	2	0.375	2	0.500
3	0.280	3	0.375	3	0.499
4	0.280	4	0.375	4	0.500
5	0.279	5	0.374	5	0.500
6	0.280	6	0.375	6	0.500
7	0.280	7	0.375	7	0.500
8	0.280	8	0.375	8	0.500
Average	0.280	Average	0.375	Average	0.500

Nozzle ID	IMP-19	Nozzle ID		Nozzle ID	
Point		Point		Point	
1	0.181	1		1	
2	0.180	2		2	
3	0.181	3		3	
4	0.181	4		4	
5	0.181	5		5	
6	0.181	6		6	
7	0.180	7		7	
8	0.181	8		8	
Average	0.181	Average	#DIV/0!	Average	#DIV/0!

MAGNEHELIC CALIBRATION

DATE: 6/21/94
GAGE ID # M-9
RANGE 0-5 in. H20

REFERENCE ID # M-9

SCHEULED CALIBRATION:

SEMI ANNUAL	XXX
BI-MONTHLY	
OTHER	

LEAK CHECK :

System:	† Set @ 10 in. H20	vacuum 10 in. P F	pressure 10 in. P F
Point:	†† Set @ 90 % FS in. H20	vacuum in. P F	pressure in. P F

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	1.00	0.99	1.000%
	1.00	1.00	0.000%
	1.00	1.00	0.000%
average	1.00	1.00	** 0.333%
2	2.00	2.00	0.000%
	2.00	2.00	0.000%
	2.00	2.01	0.500%
average	2.00	2.00	** 0.167%
3	3.00	3.00	0.000%
	3.00	3.01	0.333%
	3.00	3.01	0.333%
average	3.00	3.01	** 0.222%
4	4.00	4.00	0.000%
	4.00	4.00	0.000%
	4.00	4.00	0.000%
average	4.00	4.00	** 0.000%
5	5.00	5.00	0.000%
	5.00	5.00	0.000%
	5.00	5.00	0.000%
average	5.00	5.00	** 0.000%

STANDARD CORRECTION FACTOR	0.999
AVERAGE DEVIATION	0.001
STANDARD DEVIATION	0.003
95% CONFIDENCE INTERVAL	0.007
PRECISION(within +/- 3%)	-1.00

† If pressure or vacuum decreases by more than 1 in. in 5 minutes then remove from service.
†† If pressure or vacuum decreases by more than 5% in 5 minutes then remove from service.
** These values must be within +/- 5% before the magnehelic can be put into operation.

Calibration by: KK *Reviewed by:* _____

MAGNEHELIC CALIBRATION

DATE: 6/21/94
GAGE ID # M-7
RANGE 0-5 in. H20

SCHEULED CALIBRATION:
SEMI ANNUAL [XXX]
BI-MONTHLY [ ]
OTHER [ ]

REFERENCE ID # M-7

LEAK CHECK :

System:	† Set @ 10 in. H20	vacuum 10 in. P F	pressure 10 in. P F
Point:	†† Set @ 90 % FS in. H20	vacuum in. P F	pressure in. P F

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	1.00	0.99	1.000%
	1.00	1.00	0.000%
	1.00	1.00	0.000%
average	1.00	1.00	** 0.333%
2	2.00	2.00	0.000%
	2.00	2.00	0.000%
	2.00	2.00	0.000%
average	2.00	2.00	** 0.000%
3	3.00	3.00	0.000%
	3.00	3.01	0.333%
	3.00	3.01	0.333%
average	3.00	3.01	** 0.222%
4	4.00	4.00	0.000%
	4.00	4.00	0.000%
	4.00	4.00	0.000%
average	4.00	4.00	** 0.000%
5	5.00	5.00	0.000%
	5.00	5.00	0.000%
	5.00	5.01	0.200%
average	5.00	5.00	** 0.067%

STANDARD CORRECTION FACTOR	0.999
AVERAGE DEVIATION	0.001
STANDARD DEVIATION	0.003
95% CONFIDENCE INTERVAL	0.007
PRECISION(within +/- 3%)	-1.00

† If pressure or vacuum decreases by more than 1 in. in 5 minutes then remove from service.
†† If pressure or vacuum decreases by more than 5% in 5 minutes then remove from service.
** These values must be within +/- 5% before the magnehelic can be put into operation.

Calibration by: KK *Reviewed by:* _____

BTC Environmental, Inc. - 1989

MAGNEHELIC CALIBRATION

DATE: 6/27/94
GAGE ID # M-2
RANGE 0-2 in. H20

REFERENCE ID # M-2

SCHEULED CALIBRATION:
SEMI ANNUAL [XXX]
BI-MONTHLY [ ]
OTHER [ ]

LEAK CHECK :

System:	† Set @ 10 in. H20	vacuum 10 in. P F	pressure 10 in. P F
Point:	†† Set @ 90 % FS in. H20	vacuum in. P F	pressure in. P F

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	0.25	0.25	0.000%
	0.25	0.25	0.000%
	0.25	0.25	0.000%
average	0.25	0.25	** 0.000%
2	0.50	0.49	2.000%
	0.50	0.49	2.000%
	0.50	0.50	0.000%
average	0.50	0.49	** 1.333%
3	1.00	1.00	0.000%
	1.00	1.00	0.000%
	1.00	1.00	0.000%
average	1.00	1.00	** 0.000%
4	1.50	1.50	0.000%
	1.50	1.50	0.000%
	1.50	1.49	0.667%
average	1.50	1.50	** 0.222%
5	2.00	2.00	0.000%
	2.00	1.99	0.500%
	2.00	1.99	0.500%
average	2.00	1.99	** 0.333%

STANDARD CORRECTION FACTOR	1.005
AVERAGE DEVIATION	0.004
STANDARD DEVIATION	0.007
95% CONFIDENCE INTERVAL	0.017
PRECISION(within +/- 3%)	-1.00

† If pressure or vacuum decreases by more than 1 in. in 5 minutes then remove from service.
†† If pressure or vacuum decreases by more than 5% in 5 minutes then remove from service.
** These values must be within +/- 5% before the magnehelic can be put into operation.

Calibration by: KK *Reviewed by:* _____

BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095

CHAIN OF CUSTODY RECORD

BILL TO Company: ATRX
Address:
Phone #: ( ) Contact:

PROJ. NO.: 294-140
PROJECT NAME: ALTA Vista (Dry Cleaner)
SAMPLERS (Signature):

	NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Total Volatile	Carbon Wash					REMARKS	CHECK IF RUSH
P-	1	11-3		X		R-1 Probe 175	1	X							
P-	2					R-1 Imps 350		X							
P-	3					R-1 Filter C-11			X						
P-	4					R-2 Probe 125		X							
P-	5					R-2 Imps 275		X							
P-	6					R2 Filter C-12			X						
P-	7					R-3 Probe 150		X							
P-	8					R-3 Imps 300		X							
P-	9					R-3 Filter C-13			X						

The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME / ADDRESS / PHONE NO.

WHITE COPY _____ CANARY COPY _____ PINK COPY _____

BIC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095

CHAIN OF CUSTODY RECORD

BILL TO Company: AIRX
Address:
Phone #: ( ) Contact:

PROJ. NO. 294-140 PROJECT NAME ALTA Vista (Battery Condenser)

SAMPLERS: (Signature)

	NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Total Weight	Gross Weight					REMARKS	CHECK IF RUSH
P-	10	11-3		X		R-1 Probe 125	1	X							
P-	11					R-1 Imps 250		X							
P-	12					R-1 Filter C-147			X						
P-	13					R-2 Probe 140		X							
P-	14					R-2 Imps 225		X							
P-	15					R-2 Filter C-18			X						
P-	16					R-3 Probe 150		X							
P-	17					R-3 Imps 300		X							
P-	18					R-3 Filter C-149			X						

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Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME / ADDRESS / PHONE NO.

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BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095

CHAIN OF CUSTODY RECORD

BILL TO Company:
Address: ATRX
Phone #: ( ) Contact:

PROJ. NO.: 294-140
PROJECT NAME: ALTA Vista (Motes)
SAMPLERS: (Signature)

	NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Total Weight	Gross Weight					REMARKS	CHECK IF RUSH
P-	19	11-9		X		R-1 Probe 180	1	X							
P-	20					R-1 Imps 275		X							
P-	21					R-1 Filter C-14			X						
P-	22					R-2 Probe 150		X							
P-	23					R-2 Imps 275		X							
P-	24					R-2 Filter C-185			X						
P-	25					R-3 Probe 125		X							
P-	26					R-3 Imps 300		X							
P-	27					R-3 Filter C-186			X						
	28					Acetone Blank 100		X							
	29					DI Blank 150		X							

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Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME / ADDRESS / PHONE NO.

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BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax _____
Company _____
Address _____
Phone _____ Contact _____

BILL TO:
P.O.#
Company _____
Address _____
Phone _____ Contact _____

PROJ. NO: 294140
PROJECT NAME: ALTA VISTA (Lint Cleaner.

SAMPLERS: (Signature)

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	CONTAINER #	TYPE	ANALYSIS	REMARKS
1	11-3		X		Front ½ +10 R-1					1	P		
2					Back ½ -10					1			
3					F-[illegible]105 -10								
4					F-[illegible]106 -10								
5					E-[illegible]53 -10								
6					Front ½ +10 R-2								
7					Back ½ -10								
8					F-[illegible]85 -10								
9					F-[illegible]86 -10								
10					E-[illegible]13 -10								
11					Front ½ +10 R-3								
12					Back ½ -10								
13					F-[illegible]99 -10								
14					F-[illegible]100 -10								
15					E-[illegible]50 -10								

CHECK ONE BOX:
DISPOSE SAMPLES ☐
RETURN SAMPLES ☐

The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

TURN AROUND TIME

24 Hr.		5 Day	
48 Hr.		Standard	
72 Hr.		Other	

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BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax _____
Company _____
Address _____
Phone _____ Contact _____

BILL TO: P.O.# _____
Company _____
Address _____
Phone _____ Contact _____

PROJ. NO: 294-140
PROJECT NAME: ALTA Vista (BATTERY CONDENSER)

SAMPLERS: (Signature)

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

ANALYSIS

REMARKS

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	CONTAINER #	TYPE
16	11-3		X		Front ½ +10 R-1					1	P
17					Back ½ -10						
18					F-51 -10						
19					F-52 -10						
20					E-26 -10 ✓						
21					Front ½ +10 R-2						
22					Back ½ -10						
23					F-77 -10						
24					F-78 -10						
25					E-39 -10 ✓						
26					Front ½ +10 R-3						
27					Back ½ -10						
28					F-91 -10						
29					F-92 -10						
30					E-46 -10 ✓						

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RETURN SAMPLES ☐

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Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

TURN AROUND TIME

24 Hr.		5 Day	
48 Hr.		Standard	
72 Hr.		Other	

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BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax _____
Company _____
Address _____
Phone _____ Contact _____

BILL TO:
P.O.#
Company _____
Address _____
Phone _____ Contact _____

PROJ. NO: 294-140
PROJECT NAME: ALTA VISTA (MOTES)

SAMPLERS: (Signature)

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

ANALYSIS

REMARKS

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	CONTAINER #	TYPE
31	11-4		X		Front 1/2 +10 R-1					1	P
32					Back 1/2 -10						
33					F-71 -10						
34					F-72 -10						
35					E-36 -10						
36					Front 1/2 +10 R-2						
37					Back 1/2 -10						
38					F-47 -10						
39					F-48 -10						
40					E-24						
41					Front 1/2						
42					Back 1/2						
43					F-						
44					F-						
45											

CHECK ONE BOX:
DISPOSE SAMPLES
RETURN SAMPLES

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Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		
38					

TURN AROUND TIME
24 Hr. 5 Day
48 Hr. Standard
72 Hr. Other

WHITE COPY _____ CANARY COPY _____ PINK COPY _____