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DOS PALOS COOP GIN

7870 West Hutchins
Dos Palos, CA 93620

Attn: Bill Wilson

AP-42 Section	<u>9.7</u>
Reference	<u>24</u>
Report Sect.	<u>4</u>
Reference	<u>16</u>

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JAN 03 1994

San Joaquin Valley Unified
Air Pollution Control District

**PM10 & TOTAL PARTICULATE TESTING
UNLOADING, DRYER #2, OVERFLOW,
BATTERY CONDENSER & MOTES CYCLONES**

OCTOBER 31 - NOVEMBER 2, 1994

Prepared By:

AIRx TESTING

2175 Goodyear Avenue Unit #105
Ventura, CA 93003

Job Number
4033

Laboratory Report Number
294-139

Test Team Leader
Cam Donnahoo

Results Verified By:
Tom Porter
Partner

December 23, 1994



AIR_x TESTING

January 4, 1995

Dos Palos COOP Gin
7870 W. Hutchins
Dos Palos, CA 93620

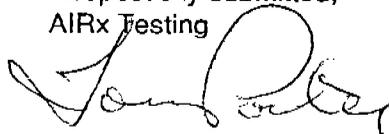
ATTN: Bill Wilson

RE: Addendum to Cyclone Source Emission Testing - Report No. 294-139

An error was found in our spread sheet for calculating the lb/hr. Please find enclosed the revised data and summary sheets with the new values. I hope that this has not caused you any inconvenience or delays.

If you have any questions or comments regarding the above comments, please contact the undersigned at (805) 644-1099.

Respectfully submitted,
AIR_x Testing



Tom Porter
Partner

cc: California Cotton Ginners Association
Attn: Roger Isom

SJVUAPCD
Attn: John Cadrett

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NO. REGION

PARTICULATE EMISSION SUMMARY

UNLOADING CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0598	0.0910	0.0734	<i>0.0747</i>
lb/hr	2.52	3.93	3.08	<i>3.18</i>
lb/bale	0.06	0.09	0.09	<i>0.08</i>
Particulate Size Distribution				
+10 μ (%)	66.4	58.4	67.3	<i>64.0</i>
+10 μ (lb/hr)	1.67	2.29	2.07	<i>2.01</i>
+10 μ (lb/bale)	0.04	<0.01	0.06	<i>0.03</i>
-10 μ (%)	33.6	41.6	32.7	<i>36.0</i>
-10 μ (lb/hr)	0.85	1.63	1.01	<i>1.16</i>
-10 μ (lb/bale)	0.02	<0.01	0.03	<i>0.02</i>
Average Bales/hr	40.3	45.2	33.8	<i>39.8</i>

OVERFLOW CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0338	0.0481	0.0697	<i>0.0505</i>
lb/hr	1.65	2.28	3.18	<i>2.37</i>
lb/bale	0.05	0.05	0.09	<i>0.06</i>
Particulate Size Distribution				
+10 μ (%)	57.6	66.2	80.1	<i>68.0</i>
+10 μ (lb/hr)	0.95	1.51	2.54	<i>1.67</i>
+10 μ (lb/bale)	0.03	0.04	0.07	<i>0.05</i>
-10 μ (%)	42.4	33.8	19.9	<i>32.0</i>
-10 μ (lb/hr)	0.70	0.77	0.63	<i>0.70</i>
-10 μ (lb/bale)	0.02	0.02	0.02	<i>0.02</i>
Average Bales/hr	33.3	43.0	35.0	<i>37.1</i>

PARTICULATE EMISSION SUMMARY

MOTES CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0113	0.0170	0.0122	<i>0.0135</i>
lb/hr	0.74	1.09	0.78	<i>0.87</i>
lb/bale	0.02	0.02	0.03	<i>0.02</i>
Particulate Size Distribution				
+10 μ (%)	65.2	64.1	11.2	<i>46.8</i>
+10 μ (lb/hr)	0.48	0.70	0.09	<i>0.42</i>
+10 μ (lb/bale)	0.01	0.02	<0.01	<i>0.01</i>
-10 μ (%)	34.8	35.9	88.8	<i>53.2</i>
-10 μ (lb/hr)	0.26	0.39	0.69	<i>0.45</i>
-10 μ (lb/bale)	<0.01	<0.01	0.03	<i>0.01</i>
Average Bales/hr	42.9	46.8	24.2	<i>38.0</i>

DRYER #2 CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0283	0.0240	0.0221	<i>0.0248</i>
lb/hr	1.00	0.86	0.77	<i>0.88</i>
lb/bale	0.04	0.02	0.02	<i>0.03</i>
Particulate Size Distribution				
+10 μ (%)	57.6	75.9	60.0	<i>64.5</i>
+10 μ (lb/hr)	0.57	0.66	0.46	<i>0.56</i>
+10 μ (lb/bale)	0.02	0.02	0.01	<i>0.02</i>
-10 μ (%)	42.4	24.1	40.0	<i>35.5</i>
-10 μ (lb/hr)	0.42	0.21	0.31	<i>0.31</i>
-10 μ (lb/bale)	0.02	<0.01	<0.01	<i>0.01</i>
Average Bales/hr	26.5	38.4	41.6	<i>35.5</i>

PARTICULATE EMISSION SUMMARY

BATTERY CONDENSER CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0073	0.0027	0.0039	<i>0.0046</i>
lb/hr	0.36	0.13	0.21	<i>0.23</i>
lb/bale	<0.01	<0.01	<0.01	<i><0.01</i>
Particulate Size Distribution				
+10 μ (%)	88.0	9.0	66.6	<i>54.5</i>
+10 μ (lb/hr)	0.32	0.01	0.14	<i>0.16</i>
+10 μ (lb/bale)	<0.01	<0.01	<0.01	<i><0.01</i>
-10 μ (%)	12.0	91.0	33.4	<i>45.5</i>
-10 μ (lb/hr)	0.04	0.12	0.07	<i>0.08</i>
-10 μ (lb/bale)	<0.01	<0.01	<0.01	<i><0.01</i>
Average Bales/hr	45.4	45.0	44.6	<i>45.0</i>

Client: Dos Palos Gln
Site: Dos Palos
Unit: Unloading

Date: 10/31/94
Type: T std = 60 F
Run: 1

CALCULATED EMISSION RESULTS

Particulate Weight	0.1493	g
Particulate Emissions	0.0598	grain/dscf
Particulate Flow Rate	2.52	lb/hr
Particulate Flow Rate	0.063	lb/bale
+10 μ Particulate	66.4	%
+10 μ Particulate	1.67	lb/hr
+10 μ Particulate	0.042	lb/bale
-10 μ Particulate	33.6	%
-10 μ Particulate	0.85	lb/hr
-10 μ Particulate	0.021	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Unloading

Date: 10/31/94
Type: T std = 60 F
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.2275	g
Particulate Emissions	0.0910	grain/dscf
Particulate Flow Rate	3.93	lb/hr
Particulate Flow Rate	0.087	lb/bale
+10 μ Particulate	58.4	%
+10 μ Particulate	2.29	lb/hr
+10 μ Particulate	0.002	lb/bale
-10 μ Particulate	41.6	%
-10 μ Particulate	1.63	lb/hr
-10 μ Particulate	0.001	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Unloading

Date: 10/31/94
Type: T std = 60 F
Run: 3

CALCULATED EMISSION RESULTS

Particulate Weight	0.1826	g
Particulate Emissions	0.0734	grain/dscf
Particulate Flow Rate	3.08	lb/hr
Particulate Flow Rate	0.091	lb/bale
+10 μ Particulate	67.3	%
+10 μ Particulate	2.07	lb/hr
+10 μ Particulate	0.061	lb/bale
-10 μ Particulate	32.7	%
-10 μ Particulate	1.01	lb/hr
-10 μ Particulate	0.030	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Over Flow

Date: 10/31/94
Type: T std = 60 F
Run: 1

CALCULATED EMISSION RESULTS

Particulate Weight	0.0888	g
Particulate Emissions	0.0338	grain/dscf
Particulate Flow Rate	1.65	lb/hr
Particulate Flow Rate	0.049	lb/bale
+10 μ Particulate	57.6	%
+10 μ Particulate	0.95	lb/hr
+10 μ Particulate	0.028	lb/bale
-10 μ Particulate	42.4	%
-10 μ Particulate	0.70	lb/hr
-10 μ Particulate	0.021	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Over Flow

Date: 10/31/94
Type: T std = 60 F
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.1211	g
Particulate Emissions	0.0481	grain/dscf
Particulate Flow Rate	2.28	lb/hr
Particulate Flow Rate	0.053	lb/bale
+10 μ Particulate	66.2	%
+10 μ Particulate	1.51	lb/hr
+10 μ Particulate	0.035	lb/bale
-10 μ Particulate	33.8	%
-10 μ Particulate	0.77	lb/hr
-10 μ Particulate	0.018	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Over Flow

Date: 10/31/94
Type: T std = 60 F
Run: 3

CALCULATED EMISSION RESULTS

Particulate Weight	0.1695	g
Particulate Emissions	0.0697	grain/dscf
Particulate Flow Rate	3.18	lb/hr
Particulate Flow Rate	0.091	lb/bale
+10 μ Particulate	80.1	%
+10 μ Particulate	2.54	lb/hr
+10 μ Particulate	0.073	lb/bale
-10 μ Particulate	19.9	%
-10 μ Particulate	0.63	lb/hr
-10 μ Particulate	0.018	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Motes

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0279	g
Particulate Emissions	0.0113	grain/dscf
Particulate Flow Rate	0.74	lb/hr
Particulate Flow Rate	0.017	lb/bale
+10 μ Particulate	65.2	%
+10 μ Particulate	0.48	lb/hr
+10 μ Particulate	0.011	lb/bale
-10 μ Particulate	34.8	%
-10 μ Particulate	0.26	lb/hr
-10 μ Particulate	0.006	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Motes

Date: 11/1/94
Type: T std = 60 F
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.0458	g
Particulate Emissions	0.0170	grain/dscf
Particulate Flow Rate	1.09	lb/hr
Particulate Flow Rate	0.023	lb/bale
+10 μ Particulate	64.1	%
+10 μ Particulate	0.70	lb/hr
+10 μ Particulate	0.015	lb/bale
-10 μ Particulate	35.9	%
-10 μ Particulate	0.39	lb/hr
-10 μ Particulate	0.008	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Motes

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0311	g
Particulate Emissions	0.0122	grain/dscf
Particulate Flow Rate	0.78	lb/hr
Particulate Flow Rate	0.032	lb/bale
+10 μ Particulate	11.2	%
+10 μ Particulate	0.09	lb/hr
+10 μ Particulate	0.004	lb/bale
-10 μ Particulate	88.8	%
-10 μ Particulate	0.69	lb/hr
-10 μ Particulate	0.029	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Dryer #2

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0602	g
Particulate Emissions	0.0283	grain/dscf
Particulate Flow Rate	1.00	lb/hr
Particulate Flow Rate	0.038	lb/bale
+10 μ Particulate	57.6	%
+10 μ Particulate	0.57	lb/hr
+10 μ Particulate	0.022	lb/bale
-10 μ Particulate	42.4	%
-10 μ Particulate	0.42	lb/hr
-10 μ Particulate	0.016	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Dryer #2

Date: 11/1/94
Type: T std = 60 F
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.0521	g
Particulate Emissions	0.0240	grain/dscf
Particulate Flow Rate	0.86	lb/hr
Particulate Flow Rate	0.023	lb/bale
+10 μ Particulate	75.9	%
+10 μ Particulate	0.66	lb/hr
+10 μ Particulate	0.017	lb/bale
-10 μ Particulate	24.1	%
-10 μ Particulate	0.21	lb/hr
-10 μ Particulate	0.005	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Dryer #2

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0497	g
Particulate Emissions	0.0221	grain/dscf
Particulate Flow Rate	0.77	lb/hr
Particulate Flow Rate	0.019	lb/bale
+10 μ Particulate	60.0	%
+10 μ Particulate	0.46	lb/hr
+10 μ Particulate	0.011	lb/bale
-10 μ Particulate	40.0	%
-10 μ Particulate	0.31	lb/hr
-10 μ Particulate	0.007	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Battery Cond.

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0149	g
Particulate Emissions	0.0073	grain/dscf
Particulate Flow Rate	0.36	lb/hr
Particulate Flow Rate	0.008	lb/bale
+10 μ Particulate	88.0	%
+10 μ Particulate	0.32	lb/hr
+10 μ Particulate	0.007	lb/bale
-10 μ Particulate	12.0	%
-10 μ Particulate	0.04	lb/hr
-10 μ Particulate	0.001	lb/bale

AIRx Testing -1994

Client: Dos Palos Gln
Site: Dos Palos
Unit: Battery Cond.

Date: 11/1/94
Type: T std = 60 F
Run: 2

CALCULATED EMISSION RESULTS

Particulate Weight	0.0061	g
Particulate Emissions	0.0027	grain/dscf
Particulate Flow Rate	0.13	lb/hr
Particulate Flow Rate	0.003	lb/bale
+10 μ Particulate	9.0	%
+10 μ Particulate	0.01	lb/hr
+10 μ Particulate	0.000	lb/bale
-10 μ Particulate	91.0	%
-10 μ Particulate	0.12	lb/hr
-10 μ Particulate	0.003	lb/bale

AIRx Testing -1994

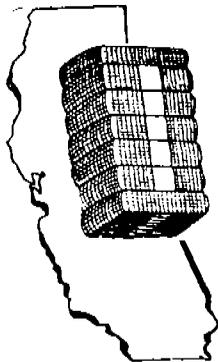
Client: Dos Palos Gln
Site: Dos Palos
Unit: Battery Cond.

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0087	g
Particulate Emissions	0.0039	grain/dscf
Particulate Flow Rate	0.21	lb/hr
Particulate Flow Rate	0.005	lb/bale
+10 μ Particulate	66.6	%
+10 μ Particulate	0.14	lb/hr
+10 μ Particulate	0.003	lb/bale
-10 μ Particulate	33.4	%
-10 μ Particulate	0.07	lb/hr
-10 μ Particulate	0.002	lb/bale

AIRx Testing -1994



CALIFORNIA COTTON GINNERS ASSOCIATION

1900 N. Gateway Blvd. - Suite 156
Fresno Airport Center
Fresno, California 93727
Telephone 209 / 252-0684
Fax 209 / 252 - 0551

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JAN 03 1994

San Joaquin Valley Air
Pollution Control

SAN JOAQUIN VALLEY
UNIFIED A.P.C.D.
NO. REGION

December 28, 1994

Mr. John Cadrett
SAN JOAQUIN VALLEY UNIFIED A.P.C.D.
Northern Region
4230 Kiernan Ave., Suite 130
Modesto, CA 95356-9321

Re: Source Test Results - Dos Palos Coop Gin #1
ATC# - 1030030101

Dear John,

Enclosed is a copy of the source test results for Dos Palos Coop Gin #1. These tests were conducted on October 31 through November 2, 1994 at the Dos Palos Coop Gin #1, located at 7870 W. Hutchins, Dos Palos, California. We have just received these results and are reviewing them ourselves. Once you have completed your review, please forward to Anthony Mendez, as these results will be used in an application for emission reduction credits.

These results should satisfy any and all requirements of Authority to Construct #1030030101 for Gin #1. We would ask that you forward this to the responsible air quality inspector so that a permit to operate may be issued. If you have any questions regarding this testing, please feel free to contact me at (209)252-0684 or Mr. Bill Wilson at (209)387-4151.

Sincerely,

Roger A. Isom
Director of Technical Services

c: Bill Wilson, DOS PALOS COOP
Anthony Mendez, SJVUAPCD - Northern Region



100% COTTON

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PARTICULATE EMISSION SUMMARY

UNLOADING CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0598	0.0910	0.0734	0.0747
lb/hr	6.29	9.82	7.66	7.92
lb/bale	0.16	0.22	0.23	0.20
Particulate Size Distribution				
+10 μ (%)	66.4	58.4	67.3	64.0
+10 μ (lb/hr)	4.18	5.73	5.15	5.02
+10 μ (lb/bale)	0.10	0.01	0.15	0.09
-10 μ (%)	33.6	41.6	32.7	36.0
-10 μ (lb/hr)	2.11	4.09	2.50	2.90
-10 μ (lb/bale)	0.05	0.01	0.07	0.04
Average Bales/hr	40.3	45.2	33.8	39.8

OVERFLOW CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0338	0.0481	0.0697	0.0505
lb/hr	4.32	5.73	7.72	5.92
lb/bale	0.13	0.13	0.22	0.16
Particulate Size Distribution				
+10 μ (%)	57.6	66.2	80.1	68.0
+10 μ (lb/hr)	2.49	3.80	6.19	4.16
+10 μ (lb/bale)	0.08	0.09	0.18	0.11
-10 μ (%)	42.4	33.8	19.9	32.0
-10 μ (lb/hr)	1.83	1.94	1.54	1.77
-10 μ (lb/bale)	0.06	0.04	0.04	0.05
Average Bales/hr	33.3	43.0	35.0	37.1

PARTICULATE EMISSION SUMMARY

MOTES CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0113	0.0170	0.0122	0.0135
lb/hr	1.83	2.95	1.99	2.26
lb/bale	0.04	0.06	0.08	0.06
Particulate Size Distribution				
+10 μ (%)	65.2	64.1	11.2	46.8
+10 μ (lb/hr)	1.19	1.89	0.22	1.10
+10 μ (lb/bale)	0.03	0.04	0.01	0.03
-10 μ (%)	34.8	35.9	88.8	53.2
-10 μ (lb/hr)	0.64	1.06	1.77	1.16
-10 μ (lb/bale)	0.02	0.02	0.07	0.04
Average Bales/hr	42.9	46.8	24.2	38.0

DRYER #2 CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0283	0.0240	0.0221	0.0248
lb/hr	2.12	1.88	1.73	1.91
lb/bale	0.08	0.05	0.04	0.06
Particulate Size Distribution				
+10 μ (%)	57.6	75.9	60.0	64.5
+10 μ (lb/hr)	1.22	1.42	1.04	1.23
+10 μ (lb/bale)	0.05	0.04	0.02	0.04
-10 μ (%)	42.4	24.1	40.0	35.5
-10 μ (lb/hr)	0.90	0.45	0.69	0.68
-10 μ (lb/bale)	0.03	0.01	0.02	0.02
Average Bales/hr	26.5	38.4	41.6	35.5

PARTICULATE EMISSION SUMMARY

BATTERY CONDENSER CYCLONE

	Run #1	Run #2	Run #3	Average
Total Particulate				
gr/DSCF	0.0073	0.0027	0.0039	0.0046
lb/hr	0.74	0.31	0.46	0.50
lb/bale	0.02	0.01	0.01	0.01
Particulate Size Distribution				
+10μ (%)	88.0	9.0	66.6	54.5
+10μ (lb/hr)	0.65	0.03	0.31	0.33
+10μ (lb/bale)	0.01	<0.01	0.01	0.01
-10μ (%)	12.0	91.0	33.4	45.5
-10μ (lb/hr)	0.09	0.28	0.15	0.18
-10μ (lb/bale)	<0.01	0.01	<0.01	<0.01
Average Bales/hr	45.4	45.0	44.6	45.0

I. INTRODUCTION

INTRODUCTION

On October 31- November 2, 1994, AIRx Testing performed source emissions tests for Total and PM-10 particulate matter on the Unloading, Dryer #2, Overflow, Battery Condenser and Motes Cyclones. The cyclones are located at the Dos Palos Gin, 7870 West Huchins, Dos Palos, California. Sampling was done in triplicate for total particulate and PM-10 particulate size distribution. Production rates, in bales per hour, were taken by Dos Palos personnel. No problems were encountered 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 Battery Condenser Cyclone duct was 30 inches in diameter and the ports were located 64 inches upstream and 240 inches downstream from the nearest disturbance. A total of 12 sample points were taken (6 per port). All the other cyclones were 26 inches in diameter and the ports were located 62 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 Gill 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 nozzle, preseparator cyclone and the first two (2) discs are +10 μ and the backup filter, probe and impingers are -10 μ . 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 +10 μ and the -10 μ fraction. The total weight obtained from the total particulate runs are used to determine the +10 μ and the -10 μ results reported in grains/dscf, lb/hr and lb/bale.

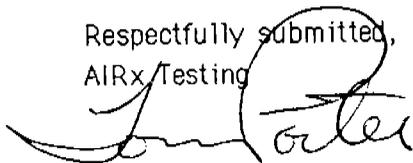
LEAK CHECKS: Leak rates were conducted on the sampling train and the pitot tubes before and after each test. The leak check for the sampling train was done at the nozzle. Any leak rate greater than 0.02 cfm was corrected for in the volume calculations.

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 occurred during the sampling. No problems were encountered during the sampling.

If you have any questions concerning the above results please contact the undersigned at 805-644-1095.

Respectfully submitted,
AIRx Testing



Tom Porter
Partner

cc California Cotton Ginners Association
Attn: Roger Isom

II. WET TEST METHODS DATA SUMMARIES

UNLOADING
CYCLONE

**FIELD DATA SUMMARY
PM10 PARTICULATE
UNLOADING CYCLONE**

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	30.875	34.122	31.887
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	30.05	30.05	30.05
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	525.2	538.2	545.7
Vm(std) - Standard sample gas vol., dscf	29.9242	32.2725	29.7441
Bws - Water vapor part in gas stream	0.8	0.2	1.6
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	28.752	28.822	28.671
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.344	0.409	0.416
Ts - Absolute stack Temp. °R	533.1	541.4	546.6
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	4134	4902	4912
An - Area of nozzle, square feet	0.0004276	0.0004276	0.0004276
t - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	104.0	94.6	87.0

4649.3

**FIELD DATA SUMMARY
TOTAL PARTICULATE
UNLOADING CYCLONE**

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	7.1	1.8	13.4
Vm - Gas volume, meter cond., dcf	40.473	42.067	42.250
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	30.05	30.05	30.05
Pg - Stack static pressure, in. H2O	-0.02	-0.02	-0.02
ΔH - Avg. meter press. diff., in. H2O	1.671	1.650	1.613
Tm - Absolute meter temperature, °R	527.7	547.1	552.5
Vm(std) - Standard sample gas vol., dscf	38.4975	38.5946	38.3761
Bws - Water vapor part in gas stream	0.8	0.2	1.6
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	28.752	28.821	28.671
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.409	0.420	0.415
Ts - Absolute stack Temp. °R	533.0	541.4	546.4
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	4914	5036	4892
An - Area of nozzle, square feet	0.0005275	0.0005140	0.0005140
\bar{t} - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	91.2	91.6	93.8

49473

OVERFLOW
CYCLONE

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Unloading**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **1**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	7.1	g		
Vlc	Water Condensate Volume	7.1	ml		
Vm	Metered Sample Gas Volume	40.473	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	40.473	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.671	in. H2O		
Tm	Dry Gas Meter Temperature, Average	67.7	deg. F	527.7	deg. R
Vm(std)	Sample Gas Volume	38.4975	dscf		
Vm(wet)	Sample Gas Volume, Wet	38.8278	scf		
Vw(std)	Water Vapor Volume	0.3303	scf		
Bws	Water Content of Stack Gas	0.009		0.851	%
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	28.752	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.409	in. H2O		
Ts	Stack Gas Temperature, Average	73.0	deg. F	533.0	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	22.87	ft/sec		
Qa	Actual Flow Rate	5,059	cfm		
Qad	Actual Flow Rate, Dry	5,015	dcfm		
Q(std)	Stack Gas Flow Rate	4,914	dscfm		
An	Nozzle Area	0.0005275	sq ft	0.311	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	91.25	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Unloading**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	1.8	g		
Vlc	Water Condensate Volume	1.8	ml		
Vm	Metered Sample Gas Volume	42.067	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	42.067	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.650	in. H2O		
Tm	Dry Gas Meter Temperature, Average	87.1	deg. F	547.1	deg. R
Vm(std)	Sample Gas Volume	38.5946	dscf		
Vm(wet)	Sample Gas Volume, Wet	38.6784	scf		
Vw(std)	Water Vapor Volume	0.0837	scf		
Bws	Water Content of Stack Gas	0.002		0.216	%
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	28.821	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.420	in. H2O		
Ts	Stack Gas Temperature, Average	81.4	deg. F	541.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	23.65	ft/sec		
Qa	Actual Flow Rate	5,232	cfm		
Qad	Actual Flow Rate, Dry	5,221	dcfm		
Q(std)	Stack Gas Flow Rate	5,036	dscfm		
An	Nozzle Area	0.000514	sq ft	0.307	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	91.62	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Unloading**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **3**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	13.4	g		
Vlc	Water Condensate Volume	13.4	ml		
Vm	Metered Sample Gas Volume	42.250	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	42.250	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.613	in. H2O		
Tm	Dry Gas Meter Temperature, Average	92.5	deg. F	552.5	deg. R
Vm(std)	Sample Gas Volume	38.3761	dscf		
Vm(wet)	Sample Gas Volume, Wet	38.9994	scf		
Vw(std)	Water Vapor Volume	0.6233	scf		
Bws	Water Content of Stack Gas	0.016		1.598	%
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	28.671	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.415	in. H2O		
Ts	Stack Gas Temperature, Average	86.4	deg. F	546.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	23.52	ft/sec		
Qa	Actual Flow Rate	5,202	cfm		
Qad	Actual Flow Rate, Dry	5,119	dcfm		
Q(std)	Stack Gas Flow Rate	4,892	dscfm		
An	Nozzle Area	0.000514	sq ft	0.307	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	93.77	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Unloading**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #1 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	30.875	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	30.875	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	65.2	deg. F	525.2	deg. R
Vm(std)	Sample Gas Volume	29.9242	dscf		
Vm(wet)	Sample Gas Volume, Wet	30.1811	scf		
Bws	Water Content of Stack Gas	0.009		0.851	%
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	28.752	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.344	in. H2O		
Ts	Stack Gas Temperature, Average	73.1	deg. F	533.1	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	19.24	ft/sec		
Qa	Actual Flow Rate	4,256	cfm		
Qad	Actual Flow Rate, Dry	4,219	dcfm		
Q(std)	Stack Gas Flow Rate	4,134	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	104.03	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Unloading**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	34.122	dcf		
Lp	Avg. Leak Rate	0.004	cf		
Vn	Leak Corrected Sample Gas Volume	34.122	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	78.2	deg. F	538.2	deg. R
Vm(std)	Sample Gas Volume	32.2725	dscf		
Vm(wet)	Sample Gas Volume, Wet	32.3371	scf		
Bws	Water Content of Stack Gas	0.002		0.200	%
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	28.822	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.409	in. H2O		
Ts	Stack Gas Temperature, Average	81.4	deg. F	541.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	23.02	ft/sec		
Qa	Actual Flow Rate	5,092	cfm		
Qad	Actual Flow Rate, Dry	5,082	dcfm		
Q(std)	Stack Gas Flow Rate	4,902	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	94.61	%		

AIRx Testing - 1994

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #3 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	31.887	dcf		
Lp	Avg. Leak Rate	0.001	cf		
Vn	Leak Corrected Sample Gas Volume	31.887	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	85.7	deg. F	545.7	deg. R
Vm(std)	Sample Gas Volume	29.7441	dscf		
Vm(wet)	Sample Gas Volume, Wet	30.2271	scf		
Bws	Water Content of Stack Gas	0.016		1.598	%
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	28.671	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.416	in. H2O		
Ts	Stack Gas Temperature, Average	86.6	deg. F	546.6	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	23.61	ft/sec		
Qa	Actual Flow Rate	5,224	cfm		
Qad	Actual Flow Rate, Dry	5,141	dcfm		
Q(std)	Stack Gas Flow Rate	4,912	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	87.03	%		

**FIELD DATA SUMMARY
TOTAL PARTICULATE
OVERFLOW CYCLONE**

	Run# 1	Run# 2	Run# 3
Vlc - Volume of water collected, ml	0.6	1.1	0.2
Vm - Gas volume, meter cond., dcf	44.998	43.717	42.105
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	30.05	30.05 [*]	30.05
Pg - Stack static pressure, in. H2O	-0.02	-0.05	-0.05
ΔH - Avg. meter press. diff., in. H2O	1.830	1.710	1.608
Tm - Absolute meter temperature, °R	557.4	565.3	563.1
Vm(std) - Standard sample gas vol., dscf	40.5392	38.8251	37.5252
Bws - Water vapor part in gas stream	0.1	0.1	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	28.837	28.830	28.841
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.480	0.467	0.448
Ts - Absolute stack Temp. °R	556.1	556.0	553.8
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	5681	5523	5316
An - Area of nozzle, square feet	0.0004746	0.0004746	0.0004746
τ - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	92.4	91.0	91.4

**FIELD DATA SUMMARY
TOTAL PARTICULATE
OVERFLOW CYCLONE**

Should be PM₁₀

	Run#1	Run#2	
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	32.371	35.307	33.808
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	30.05	30.05	30.05
Pg - Stack static pressure, in. H2O	-0.02	-0.05	-0.05
ΔH - Avg. meter press. diff., in. H2O	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	546.4	552.8	550.8
Vm(std) - Standard sample gas vol., dscf	30.1564	32.5098	31.2473
Bws - Water vapor part in gas stream	0.1	0.1	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	28.837	28.830	28.841
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.450	0.480	0.467
Ts - Absolute stack Temp. °R	556.1	555.8	553.8
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	5328	5679	5539
An - Area of nozzle, square feet	0.0004276	0.0004276	0.0004276
t - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	81.3	82.3	81.1

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **1**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.6	g		
Vlc	Water Condensate Volume	0.6	ml		
Vm	Metered Sample Gas Volume	44.998	dcf		
Lp	Avg. Leak Rate	0.003	cf		
Vn	Leak Corrected Sample Gas Volume	44.998	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.830	in. H2O		
Tm	Dry Gas Meter Temperature, Average	97.4	deg. F	557.4	deg. R
Vm(std)	Sample Gas Volume	40.5392	dscf		
Vm(wet)	Sample Gas Volume, Wet	40.5671	scf		
Vw(std)	Water Vapor Volume	0.0279	scf		
Bws	Water Content of Stack Gas	0.001		0.069	%
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	28.837	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.480	in. H2O		
Ts	Stack Gas Temperature, Average	96.1	deg. F	556.1	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	27.36	ft/sec		
Qa	Actual Flow Rate	6,053	cfm		
Qad	Actual Flow Rate, Dry	6,049	dcfm		
Q(std)	Stack Gas Flow Rate	5,681	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	92.39	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	1.1	g		
Vlc	Water Condensate Volume	1.1	ml		
Vm	Metered Sample Gas Volume	43.717	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	43.717	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.05	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.710	in. H2O		
Tm	Dry Gas Meter Temperature, Average	105.3	deg. F	565.3	deg. R
Vm(std)	Sample Gas Volume	38.8251	dscf		
Vm(wet)	Sample Gas Volume, Wet	38.8762	scf		
Vw(std)	Water Vapor Volume	0.0512	scf		
Bws	Water Content of Stack Gas	0.001		0.132	%
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	28.830	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.467	in. H2O		
Ts	Stack Gas Temperature, Average	96.0	deg. F	556.0	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	26.62	ft/sec		
Qa	Actual Flow Rate	5,888	cfm		
Qad	Actual Flow Rate, Dry	5,881	dcfm		
Q(std)	Stack Gas Flow Rate	5.523	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	91.01	%		

AIRx Testing - 1994

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 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	42.105	dcf		
Lp	Avg. Leak Rate	0.005	cf		
Vn	Leak Corrected Sample Gas Volume	42.105	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.05	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.608	in. H2O		
Tm	Dry Gas Meter Temperature, Average	103.1	deg. F	563.1	deg. R
Vm(std)	Sample Gas Volume	37.5252	dscf		
Vm(wet)	Sample Gas Volume, Wet	37.5346	scf		
Vw(std)	Water Vapor Volume	0.0093	scf		
Bws	Water Content of Stack Gas	0.000		0.025	%
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	28.841	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.448	in. H2O		
Ts	Stack Gas Temperature, Average	93.8	deg. F	553.8	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	25.49	ft/sec		
Qa	Actual Flow Rate	5,638	cfm		
Qad	Actual Flow Rate, Dry	5,637	dcfm		
Q(std)	Stack Gas Flow Rate	5,316	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	91.39	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #1 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	32.371	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	32.371	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.02	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	86.4	deg. F	546.4	deg. R
Vm(std)	Sample Gas Volume	30.1564	dscf		
Vm(wet)	Sample Gas Volume, Wet	30.1773	scf		
Bws	Water Content of Stack Gas	0.001		0.069	%
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	28.837	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.450	in. H2O		
Ts	Stack Gas Temperature, Average	96.1	deg. F	556.1	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	25.66	ft/sec		
Qa	Actual Flow Rate	5,677	cfm		
Qad	Actual Flow Rate, Dry	5,673	dcfm		
Q(std)	Stack Gas Flow Rate	5,328	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	81.34	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	35.307	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	35.307	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.05	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	92.8	deg. F	552.8	deg. R
Vm(std)	Sample Gas Volume	32.5098	dscf		
Vm(wet)	Sample Gas Volume, Wet	32.5528	scf		
Bws	Water Content of Stack Gas	0.001		0.132	%
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	28.830	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.480	in. H2O		
Ts	Stack Gas Temperature, Average	95.8	deg. F	555.8	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	27.36	ft/sec		
Qa	Actual Flow Rate	6,052	cfm		
Qad	Actual Flow Rate, Dry	6,044	dcfm		
Q(std)	Stack Gas Flow Rate	5,679	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	82.26	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Over Flow**

Date: **10/31/94**
 Type: **T std = 60 F**
 Run: **Run #3 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	33.808	dcf		
Lp	Avg. Leak Rate	0.007	cf		
Vn	Leak Corrected Sample Gas Volume	33.808	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	30.05	in. Hg		
Pg	Static Pressure	-0.05	in. H2O		
Ps	Stack Pressure, Absolute	30.05	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	90.8	deg. F	550.8	deg. R
Vm(std)	Sample Gas Volume	31.2473	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.2551	scf		
Bws	Water Content of Stack Gas	0.000		0.025	%
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	28.841	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.467	in. H2O		
Ts	Stack Gas Temperature, Average	93.8	deg. F	553.8	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	26.56	ft/sec		
Qa	Actual Flow Rate	5,875	cfm		
Qad	Actual Flow Rate, Dry	5,874	dcfm		
Q(std)	Stack Gas Flow Rate	5,539	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	81.07	%		

MOTES
CYCLONE

**FIELD DATA SUMMARY
TOTAL PARTICULATE
NOTES CYCLONE**

	Run# 1	Run# 2	Run# 3
Vlc - Volume of water collected, ml	3.1	0.7	0.0
Vm - Gas volume, meter cond., dcf	41.194	46.596	45.030
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	28.85	28.85	28.85
Pg - Stack static pressure, in. H2O	-0.25	-0.25	-0.25
ΔH - Avg. meter press. diff., in. H2O	1.804	1.751	1.750
Tm - Absolute meter temperature, °R	520.9	539.8	550.4
Vm(std) - Standard sample gas vol., dscf	38.1314	41.6147	39.4397
Bws - Water vapor part in gas stream	0.4	0.1	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	28.803	28.836	28.844
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.642	0.635	0.635
Ts - Absolute stack Temp. °R	523.3	534.5	541.7
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	7663	7512	7468
An - Area of nozzle, square feet	0.0003274	0.0003274	0.0003274
ϕ - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	93.4	104.0	99.1

**FIELD DATA SUMMARY
PM10 PARTICULATE
NOTES CYCLONE**

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	34.300	34.791	31.855
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	28.85	28.85	28.85
Pg - Stack static pressure, in. H2O	-0.25	-0.25	-0.25
ΔH - Avg. meter press. diff., in. H2O	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	520.6	534.5	543.6
Vm(std) - Standard sample gas vol., dscf	32.2031	31.8161	28.6399
Bws - Water vapor part in gas stream	0.4	0.1	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	28.803	28.360	28.844
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.611	0.642	0.635
Ts - Absolute stack Temp. °R	523.3	534.2	541.3
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	7287	7603	7470
An - Area of nozzle, square feet	0.0002592	0.0002592	0.0002592
\bar{t} - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	104.8	99.2	90.9

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Notes**

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

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	3.1	g		
Vlc	Water Condensate Volume	3.1	ml		
Vm	Metered Sample Gas Volume	41.194	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	41.194	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.804	in. H2O		
Tm	Dry Gas Meter Temperature, Average	60.9	deg. F	520.9	deg. R
Vm(std)	Sample Gas Volume	38.1314	dscf		
Vm(wet)	Sample Gas Volume, Wet	38.2756	scf		
Vw(std)	Water Vapor Volume	0.1442	scf		
Bws	Water Content of Stack Gas	0.004		0.377	%
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	28.803	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.642	in. H2O		
Ts	Stack Gas Temperature, Average	63.3	deg. F	523.3	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	36.31	ft/sec		
Qa	Actual Flow Rate	8,033	cfm		
Qad	Actual Flow Rate, Dry	8,002	dcfm		
Q(std)	Stack Gas Flow Rate	7,663	dscfm		
An	Nozzle Area	0.0003274	sq ft	0.245	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	93.39	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Notes**

Date: **11/1/94**
 Type: **T std = 60 F**
 Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.7	g		
Vlc	Water Condensate Volume	0.7	ml		
Vm	Metered Sample Gas Volume	46.596	dcf		
Lp	Avg. Leak Rate	0.003	cf		
Vn	Leak Corrected Sample Gas Volume	46.596	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.751	in. H2O		
Tm	Dry Gas Meter Temperature, Average	79.8	deg. F	539.8	deg. R
Vm(std)	Sample Gas Volume	41.6147	dscf		
Vm(wet)	Sample Gas Volume, Wet	41.6473	scf		
Vw(std)	Water Vapor Volume	0.0326	scf		
Bws	Water Content of Stack Gas	0.001		0.078	%
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	0.635	in. H2O		
Ts	Stack Gas Temperature, Average	74.5	deg. F	534.5	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	36.25	ft/sec		
Qa	Actual Flow Rate	8,019	cfm		
Qad	Actual Flow Rate, Dry	8,013	dcfm		
Q(std)	Stack Gas Flow Rate	7,512	dscfm		
An	Nozzle Area	0.0003274	sq ft	0.245	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	103.98	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Notes**

Date: **11/1/94**
 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	45.030	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	45.030	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.750	in. H2O		
Tm	Dry Gas Meter Temperature, Average	90.4	deg. F	550.4	deg. R
Vm(std)	Sample Gas Volume	39.4397	dscf		
Vm(wet)	Sample Gas Volume, Wet	39.4397	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	0.635	in. H2O		
Ts	Stack Gas Temperature, Average	81.7	deg. F	541.7	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	36.49	ft/sec		
Qa	Actual Flow Rate	8,072	cfm		
Qad	Actual Flow Rate, Dry	8,072	dcfm		
Q(std)	Stack Gas Flow Rate	7,468	dscfm		
An	Nozzle Area	0.0003274	sq ft	0.245	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	99.13	%		

AIRx Testing - 1994

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Notes**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	34.300	dcf		
Lp	Avg. Leak Rate	0.003	cf		
Vn	Leak Corrected Sample Gas Volume	34.300	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	60.6	deg. F	520.6	deg. R
Vm(std)	Sample Gas Volume	32.2031	dscf		
Vm(wet)	Sample Gas Volume, Wet	32.3249	scf		
Bws	Water Content of Stack Gas	0.004		0.377	%
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	28.803	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.611	in. H2O		
Ts	Stack Gas Temperature, Average	63.3	deg. F	523.3	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	34.53	ft/sec		
Qa	Actual Flow Rate	7,638	cfm		
Qad	Actual Flow Rate, Dry	7,610	dcfm		
Q(std)	Stack Gas Flow Rate	7,287	dscfm		
An	Nozzle Area	0.0002592	sq ft	0.218	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	104.77	%		

AIRx Testing - 1994

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Motes**

Date: **11/1/94**
 Type: **T std = 60 F**
 Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	34.791	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	34.791	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	74.5	deg. F	534.5	deg. R
Vm(std)	Sample Gas Volume	31.8161	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.8409	scf		
Bws	Water Content of Stack Gas	0.001		0.078	%
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	0.642	in. H2O		
Ts	Stack Gas Temperature, Average	74.2	deg. F	534.2	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	36.67	ft/sec		
Qa	Actual Flow Rate	8,112	cfm		
Qad	Actual Flow Rate, Dry	8,105	dcfm		
Q(std)	Stack Gas Flow Rate	7,603	dscfm		
An	Nozzle Area	0.0002592	sq ft	0.218	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	99.20	%		

AIRx Testing - 1994

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Notes**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	31.855	dcf		
Lp	Avg. Leak Rate	0.005	cf		
Vn	Leak Corrected Sample Gas Volume	31.855	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.25	in. H2O		
Ps	Stack Pressure, Absolute	28.83	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	83.6	deg. F	543.6	deg. R
Vm(std)	Sample Gas Volume	28.6399	dscf		
Vm(wet)	Sample Gas Volume, Wet	28.6399	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	0.635	in. H2O		
Ts	Stack Gas Temperature, Average	81.3	deg. F	541.3	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	36.47	ft/sec		
Qa	Actual Flow Rate	8,069	cfm		
Qad	Actual Flow Rate, Dry	8,069	dcfm		
Q(std)	Stack Gas Flow Rate	7,470	dscfm		
An	Nozzle Area	0.0002592	sq ft	0.218	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	90.89	%		

AIRx Testing - 1994

DRYER #2
CYCLONE

FIELD DATA SUMMARY
TOTAL PARTICULATE
DRYER #2 CYCLONE

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	6.3	3.5	6.3
Vm - Gas volume, meter cond., dcf	37.863	38.620	40.005
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	28.85	28.85	28.85
Pg - Stack static pressure, in. H2O	-0.07	-0.07	-0.07
ΔH - Avg. meter press. diff., in. H2O	1.211	1.229	1.183
Tm - Absolute meter temperature, °R	554.4	555.5	555.2
Vm(std) - Standard sample gas vol., dscf	32.8806	33.4741	34.6887
Bws - Water vapor part in gas stream	0.8	0.5	0.8
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	28.748	28.792	28.753
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.364	0.369	0.360
Ts - Absolute stack Temp. °R	576.5	574.4	579.3
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	4115	4201	4068
An - Area of nozzle, square feet	0.0005140	0.0005140	0.0005140
t - Sampling time, minutes	60	60	60
l - Isokinetic variation, percent	95.5	95.2	101.9

**FIELD DATA SUMMARY
PM10 PARTICULATE
DRYER #2 CYCLONE**

	Run# 1	Run# 2	Run# 3
Vlc - Volume of water collected, ml	--	--	--
Vm - Gas volume, meter cond., dcf	34.184	34.708	35.956
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	28.85	28.85	28.85
Pg - Stack static pressure, in. H2O	-0.07	-0.07	-0.07
ΔH - Avg. meter press. diff., in. H2O	1.000	1.000	1.000
Tm - Absolute meter temperature, °R	543.4	547.3	546.5
Vm(std) - Standard sample gas vol., dscf	30.7456	30.9982	32.1569
Bws - Water vapor part in gas stream	0.8	0.5	0.8
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	28.748	28.792	28.753
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.326	0.369	0.369
Ts - Absolute stack Temp. °R	576.4	574.4	577.8
A - Area of stack, square feet	3.69	3.69	3.69
Qstd - Volumetric flow rate, dscfm	3690	4199	4177
An - Area of nozzle, square feet	0.0004276	0.0004276	0.0004276
θ - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	119.8	106.1	110.6

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Dryer #2**

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

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	6.3	g		
Vlc	Water Condensate Volume	6.3	ml		
Vm	Metered Sample Gas Volume	37.863	dcf		
Lp	Avg. Leak Rate	0.004	cf		
Vn	Leak Corrected Sample Gas Volume	37.863	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
Ps	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.211	in. H2O		
Tm	Dry Gas Meter Temperature, Average	94.4	deg. F	554.4	deg. R
Vm(std)	Sample Gas Volume	32.8806	dscf		
Vm(wet)	Sample Gas Volume, Wet	33.1737	scf		
Vw(std)	Water Vapor Volume	0.2931	scf		
Bws	Water Content of Stack Gas	0.009		0.883	%
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	28.748	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.364	in. H2O		
Ts	Stack Gas Temperature, Average	116.5	deg. F	576.5	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	21.58	ft/sec		
Qa	Actual Flow Rate	4,775	cfm		
Qad	Actual Flow Rate, Dry	4,733	dcfm		
Q(std)	Stack Gas Flow Rate	4,115	dscfm		
An	Nozzle Area	0.000514	sq ft	0.307	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	95.51	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Dryer #2**

Date: **11/1/94**
 Type: **T std = 60 F**
 Run: **2**

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	3.5	g		
Vlc	Water Condensate Volume	3.5	ml		
Vm	Metered Sample Gas Volume	38.620	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	38.620	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
Ps	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.229	in. H2O		
Tm	Dry Gas Meter Temperature, Average	95.5	deg. F	555.5	deg. R
Vm(std)	Sample Gas Volume	33.4741	dscf		
Vm(wet)	Sample Gas Volume, Wet	33.6370	scf		
Vw(std)	Water Vapor Volume	0.1628	scf		
Bws	Water Content of Stack Gas	0.005		0.484	%
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	28.792	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.369	in. H2O		
Ts	Stack Gas Temperature, Average	114.4	deg. F	574.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	21.87	ft/sec		
Qa	Actual Flow Rate	4,837	cfm		
Qad	Actual Flow Rate, Dry	4,814	dcfm		
Q(std)	Stack Gas Flow Rate	4,201	dscfm		
An	Nozzle Area	0.000514	sq ft	0.307	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	95.24	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Dryer #2**

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

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	6.3	g		
Vlc	Water Condensate Volume	6.3	ml		
Vm	Metered Sample Gas Volume	40.005	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	40.005	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
Ps	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.183	in. H2O		
Tm	Dry Gas Meter Temperature, Average	95.2	deg. F	555.2	deg. R
Vm(std)	Sample Gas Volume	34.6887	dscf		
Vm(wet)	Sample Gas Volume, Wet	34.9818	scf		
Vw(std)	Water Vapor Volume	0.2931	scf		
Bws	Water Content of Stack Gas	0.008		0.838	%
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	0.360	in. H2O		
Ts	Stack Gas Temperature, Average	119.3	deg. F	579.3	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	21.43	ft/sec		
Qa	Actual Flow Rate	4,741	cfm		
Qad	Actual Flow Rate, Dry	4,702	dcfm		
Q(std)	Stack Gas Flow Rate	4,068	dscfm		
An	Nozzle Area	0.000514	sq ft	0.307	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	101.92	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Dryer #2**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	34.184	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	34.184	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
Ps	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	83.4	deg. F	543.4	deg. R
Vm(std)	Sample Gas Volume	30.7456	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.0195	scf		
Bws	Water Content of Stack Gas	0.009		0.883	%
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	28.748	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.326	in. H2O		
Ts	Stack Gas Temperature, Average	116.4	deg. F	576.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	19.35	ft/sec		
Qa	Actual Flow Rate	4,280	cfm		
Qad	Actual Flow Rate, Dry	4,243	dcfm		
Q(std)	Stack Gas Flow Rate	3,690	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	119.75	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Dryer #2**

Date: **11/1/94**
 Type: **T std = 60 F**
 Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	34.708	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	34.708	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
Ps	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	87.3	deg. F	547.3	deg. R
Vm(std)	Sample Gas Volume	30.9982	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.1490	scf		
Bws	Water Content of Stack Gas	0.005		0.484	%
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	28.792	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.369	in. H2O		
Ts	Stack Gas Temperature, Average	114.4	deg. F	574.4	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
Vs	Stack Gas Velocity	21.85	ft/sec		
Qa	Actual Flow Rate	4,834	cfm		
Qad	Actual Flow Rate, Dry	4,811	dcfm		
Q(std)	Stack Gas Flow Rate	4,199	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	106.09	%		

Client: **Dos Palos 6in**
 Site: **Dos Palos**
 Unit: **Dryer #2**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	35.956	dcf		
<i>Lp</i>	Avg. Leak Rate	0.000	cf		
<i>Vn</i>	Leak Corrected Sample Gas Volume	35.956	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.85	in. Hg		
Pg	Static Pressure	-0.07	in. H2O		
<i>Ps</i>	Stack Pressure, Absolute	28.84	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	86.5	deg. F	546.5	deg. R
Vm(std)	Sample Gas Volume	32.1569	dscf		
<i>Vm(wet)</i>	Sample Gas Volume, Wet	32.4287	scf		
Bws	Water Content of Stack Gas	0.008		0.838	%
CO2	Carbon Dioxide, Dry	0.1	%		
O2	Oxygen, Dry	20.9	%		
<i>N2</i>	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	0.369	in. H2O		
Ts	Stack Gas Temperature, Average	117.8	deg. F	577.8	deg. R
As	Area of Stack	3.69	sq ft	26.0	in. dia.
<i>Vs</i>	Stack Gas Velocity	21.95	ft/sec		
<i>Qa</i>	Actual Flow Rate	4,855	cfm		
<i>Qad</i>	Actual Flow Rate, Dry	4,814	dcfm		
Q(std)	Stack Gas Flow Rate	4,177	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	110.64	%		

BATTERY CONDENSER
CYCLONE

**FIELD DATA SUMMARY
TOTAL PARTICULATE
BATTERY CONDENSER CYCLONE**

	Run#1	Run#2	Run#3
Vlc - Volume of water collected, ml	3.1	0.0	0.1
Vm - Gas volume, meter cond., dcf	35.247	40.476	39.490
Y - Meter calibration factor	0.957	0.957	0.957
Pbar - Barometric pressure, in. Hg	28.00	28.00	28.00
Pg - Stack static pressure, in. H2O	0.02	0.02	0.02
ΔH - Avg. meter press. diff., in. H2O	1.261	1.268	1.397
Tm - Absolute meter temperature, °R	521.3	536.6	541.6
Vm(std) - Standard sample gas vol., dscf	31.5994	35.2539	34.0864
Bws - Water vapor part in gas stream	0.5	0.0	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	28.795	28.844	28.843
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.372	0.377	0.396
Ts - Absolute stack Temp. °R	527.4	529.6	532.3
A - Area of stack, square feet	4.91	4.91	4.91
Qstd - Volumetric flow rate, dscfm	5792	5881	6157
An - Area of nozzle, square feet	0.0004746	0.0004746	0.0004746
\bar{t} - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	94.0	103.3	95.4

**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	35.520	35.086	33.722
Y - Meter calibration factor	0.972	0.972	0.972
Pbar - Barometric pressure, in. Hg	28.00	28.00	28.00
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	521.3	531.1	535.0
Vm(std) - Standard sample gas vol., dscf	32.3270	31.3408	29.9019
Bws - Water vapor part in gas stream	0.5	0.0	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	28.795	28.844	28.844
Cp - Pitot tube coef., dimensionless	0.833	0.833	0.833
Δp - Avg. of sq. roots of each Δp	0.339	0.372	0.377
Ts - Absolute stack Temp. °R	527.4	529.3	532.3
A - Area of stack, square feet	4.91	4.91	4.91
Qstd - Volumetric flow rate, dscfm	5277	5801	5865
An - Area of nozzle, square feet	0.0004276	0.0004276	0.0004276
θ - Sampling time, minutes	60	60	60
I - Isokinetic variation, percent	117.2	103.4	97.5

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

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

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	3.1	g		
Vlc	Water Condensate Volume	3.1	ml		
Vm	Metered Sample Gas Volume	35.247	dcf		
Lp	Avg. Leak Rate	0.006	cf		
Vh	Leak Corrected Sample Gas Volume	35.247	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.261	in. H2O		
Tm	Dry Gas Meter Temperature, Average	61.3	deg. F	521.3	deg. R
Vm(std)	Sample Gas Volume	31.5994	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.7436	scf		
Vw(std)	Water Vapor Volume	0.1442	scf		
Bws	Water Content of Stack Gas	0.005		0.454	%
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	28.795	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.372	in. H2O		
Ts	Stack Gas Temperature, Average	67.4	deg. F	527.4	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	21.41	ft/sec		
Qa	Actual Flow Rate	6,305	cfm		
Qad	Actual Flow Rate, Dry	6,277	dcfm		
Q(std)	Stack Gas Flow Rate	5,792	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	94.04	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

Date: **11/1/94**
 Type: **T std = 60 F**
 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	40.476	dcf		
Lp	Avg. Leak Rate	0.006	cf		
Vn	Leak Corrected Sample Gas Volume	40.476	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.268	in. H2O		
Tm	Dry Gas Meter Temperature, Average	76.6	deg. F	536.6	deg. R
Vm(std)	Sample Gas Volume	35.2539	dscf		
Vm(wet)	Sample Gas Volume, Wet	35.2539	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	0.377	in. H2O		
Ts	Stack Gas Temperature, Average	69.6	deg. F	529.6	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	21.73	ft/sec		
Qa	Actual Flow Rate	6,399	cfm		
Qad	Actual Flow Rate, Dry	6,399	dcfm		
Q(std)	Stack Gas Flow Rate	5,881	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	103.33	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

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

FIELD DATA & CALCULATIONS SUMMARY

Wlc	Water Condensate Weight	0.1	g		
Vlc	Water Condensate Volume	0.1	ml		
Vm	Metered Sample Gas Volume	39.490	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	39.490	dcf		
Y	Dry Gas Meter Calibration Factor	0.957			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.397	in. H2O		
Tm	Dry Gas Meter Temperature, Average	81.6	deg. F	541.6	deg. R
Vm(std)	Sample Gas Volume	34.0864	dscf		
Vm(wet)	Sample Gas Volume, Wet	34.0910	scf		
Vw(std)	Water Vapor Volume	0.0047	scf		
Bws	Water Content of Stack Gas	0.000		0.014	%
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	28.843	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.396	in. H2O		
Ts	Stack Gas Temperature, Average	72.3	deg. F	532.3	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	22.87	ft/sec		
Qa	Actual Flow Rate	6,735	cfm		
Qad	Actual Flow Rate, Dry	6,734	dcfm		
Q(std)	Stack Gas Flow Rate	6,157	dscfm		
An	Nozzle Area	0.0004746	sq ft	0.295	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	95.42	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	35.520	dcf		
Lp	Avg. Leak Rate	0.006	cf		
Vn	Leak Corrected Sample Gas Volume	35.520	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	61.3	deg. F	521.3	deg. R
Vm(std)	Sample Gas Volume	32.3270	dscf		
Vm(wet)	Sample Gas Volume, Wet	32.4745	scf		
Bws	Water Content of Stack Gas	0.005		0.454	%
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	28.795	lb/lb mole		
Cp	Pitot Calibration Factor	0.833			
Del. P	Velocity Head, Average Square Root	0.339	in. H2O		
Ts	Stack Gas Temperature, Average	67.4	deg. F	527.4	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	19.51	ft/sec		
Qa	Actual Flow Rate	5,745	cfm		
Qad	Actual Flow Rate, Dry	5,719	dcfm		
Q(std)	Stack Gas Flow Rate	5,277	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	117.20	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

Date: **11/1/94**
 Type: **T std = 60 F**
 Run: **Run #2 PM-10**

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	35.086	dcf		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	35.086	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	71.1	deg. F	531.1	deg. R
Vm(std)	Sample Gas Volume	31.3408	dscf		
Vm(wet)	Sample Gas Volume, Wet	31.3408	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	0.372	in. H2O		
Ts	Stack Gas Temperature, Average	69.6	deg. F	529.6	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	21.43	ft/sec		
Qa	Actual Flow Rate	6,313	cfm		
Qad	Actual Flow Rate, Dry	6,313	dcfm		
Q(std)	Stack Gas Flow Rate	5,801	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	103.36	%		

Client: **Dos Palos Gin**
 Site: **Dos Palos**
 Unit: **Battery Cond.**

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

FIELD DATA & CALCULATIONS SUMMARY

Vm	Metered Sample Gas Volume	33.722	dcf		
Lp	Avg. Leak Rate	0.006	cf		
Vn	Leak Corrected Sample Gas Volume	33.722	dcf		
Y	Dry Gas Meter Calibration Factor	0.972			
Pbar	Barometric Pressure	28.00	in. Hg		
Pg	Static Pressure	0.02	in. H2O		
Ps	Stack Pressure, Absolute	28.00	in. Hg		
Del. H	Dry Gas Meter Press. Differential, Average	1.000	in. H2O		
Tm	Dry Gas Meter Temperature, Average	75.0	deg. F	535.0	deg. R
Vm(std)	Sample Gas Volume	29.9019	dscf		
Vm(wet)	Sample Gas Volume, Wet	29.9023	scf		
Bws	Water Content of Stack Gas	0.000		0.001	%
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	0.377	in. H2O		
Ts	Stack Gas Temperature, Average	72.3	deg. F	532.3	deg. R
As	Area of Stack	4.91	sq ft	30.0	in. dia.
Vs	Stack Gas Velocity	21.78	ft/sec		
Qa	Actual Flow Rate	6,416	cfm		
Qad	Actual Flow Rate, Dry	6,416	dcfm		
Q(std)	Stack Gas Flow Rate	5,865	dscfm		
An	Nozzle Area	0.0004276	sq ft	0.280	in. dia.
Theta	Sampling Time	60	min.		
I	Isokinetics	97.54	%		

CONSTANTS & CONVERSIONS

Tstd = 60, 68, or 70 °F	1 in. Hg = 13.6 in. H ₂ O
Pstd = 29.92 in. Hg	1 lb = 453.6 g
R = 21.85(in. Hg-cu ft/lb mole-°R)	1 lb = 7000 grain
Dw = 0.9982(g/ml)	1 g = 15.432 grain
MW(H ₂ O) = 18.0 lb/lb mole	1 mg = 0.001 g
MW(Sulfur) = 32.03 lb/lb mole	1 hr = 60 min.
M(H ₂ SO ₄) = 98.08 lb/lb mole	1 part/vol X = 1*10 ⁶ ppmv X
MW(SO ₂) = 64.06 lb/lb mole	1 bbl = 42 gal
K(H ₂ SO ₄) = 0.5 mg-g mole/g-meq	M = 1000
K(SO ₂) = 0.5 mg-g mole/g-meq	La = 0.02 cfm
Kp = 85.49(ft/sec(sqrt{lb/lb mole-in.Hg/°R-in. H ₂ O}))	
Kw,[cu ft/g-°R] = R / (453.6*MW(H ₂ O)*Pstd)	
Kf,[scf-ppm/lb mole] = R * (Tstd+460) * (1*10 ⁶) / Pstd	

INTERMEDIATE CALCULATIONS

$$F_{scf/MMBtu} = F \text{ Factor} * (Tstd + 460) / 528$$

$$Ph, [in. Hg] = Pbar + (\Delta H / 13.6)$$

$$N_2, [%] = 100 - (O_2\% + CO_2\%)$$

$$Vc, [ml] = Ww / Dw$$

$$Qa, [cfm] = 60 * Vs * As$$

$$Qad, [dcfm] = Qa * (1 - Bws)$$

CFR 40 - EPA EQUATIONS

eq. 2-8 $T[°R] = T[°F] + 460$

p. 2-6 $Ps, [in. Hg] = Pbar + (Pg/13.6)$

p. 5-3 $Bws, [%] = Vw(std) / \{ Vw(std) + Vm(std) \}$

eq. 3-2 $Md, [lb/lb-mole] = 0.44 * CO_2\% + 0.32 * O_2\% + 0.28 * (N_2\% + CO\%)$

p. 2-5 $Ms, [lb/lb mol] = Md * (1 - Bws) + (MW(H_2O) * Bws)$

p. 5-2 $Vw(std), [scf] = Ww * Kw * (Tstd + 460)$

eq. 5-1 $Vn, [cf] = Vm - ((Lp - La) * Theta)$

p. 5-1 $Vm(std), [sdscf] = Vm * Y * ((Tstd + 460) / (Tm + 460)) * Ph / Pstd$

p. 2-9 $Vs, [ft./sec.] = Kp * Cp * (\Delta P * (Ts + 460)) / (Ps * Ms)^{0.5}$

eq. 2-10 $Qstd, [dscfm] = Qad * (Tstd + 460) * Ps / ((Ts + 460) * Pstd)$

p. 5-8 $I, [%] = 100 * (Ts + 460) * Vm(std) * Pstd / (60 * Vs * Theta * An * Ps * (1 - Bws) * (Tstd + 460))$

p. 5-6 $Cx, [grain/dscf] = Wx, g * 15.432 / Vm(std)$

eq. 8-2,3 $Wx, [mg] = (Vt - Vtb) * N(std) * (Vsoln / Valq) * MWx * Kx$

$Cx, [grain/dscf] = Wx, mg * 0.001 * 15.432 / Vm(std)$

$CWx, [grain/scf] = Cx * (1 - Bws)$

$CCx, [grain/dscf @ 12\% CO_2] = Cx * 12.0 / CO_2\%$

$CWCx, [grain/scf @ 12\% CO_2] = CCx$

$CPx, [ppmv dry] = Cx * Kf / (MWx * 7000)$

$CPCx, [ppmv @ N\% O_2] = CPx * ((20.9 - N\%) / (20.9 - O_2\%))$

$CFx, [lb/hr] = Cx * Q(std) * 60 / 7000$

$CEx, [lb/MMBtu] = F * (Cx / 7000) * (20.9 / (20.9 - O_2\%))$

$CBx, [lb/bbl] = CEx * (Fuel Btu/MM) * (Fuel lb/gal) * 42$

$CEsx, [lb S/MMBtu] = CEx * (MW(S) / MWx)$

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

III. WET TEST METHODS CALCULATIONS

UNLOADING
CYCLONE

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **1**

CALCULATED EMISSION RESULTS

Particulate Weight	0.1493	g
Particulate Emissions	0.0598	grain/dscf
Particulate Flow Rate	6.29	lb/hr 2.52
Particulate Flow Rate	0.156	lb/bale 0.063
+10 μ Particulate	66.4	%
+10 μ Particulate	4.18	lb/hr 1.67
+10 μ Particulate	0.104	lb/bale .042
-10 μ Particulate	33.6	%
-10 μ Particulate	2.11	lb/hr .85
-10 μ Particulate	0.052	lb/bale .021

AIRx Testing - 1994

See correction sent
on 1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.2275	g
Particulate Emissions	0.0910	grain/dscf
Particulate Flow Rate	9.02	lb/hr 3.93
Particulate Flow Rate	0.217	lb/bale .087
+10 μ Particulate	58.4	%
+10 μ Particulate	5.73	lb/hr 2.29
+10 μ Particulate	0.012	lb/bale .002
-10 μ Particulate	41.6	%
-10 μ Particulate	4.09	lb/hr 1.63
-10 μ Particulate	0.009	lb/bale .001

AIRx Testing -1994

See correction
received on 1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **3**

CALCULATED EMISSION RESULTS

Particulate Weight	0.1826	g
Particulate Emissions	0.0734	grain/dscf
Particulate Flow Rate	7.65	lb/hr 3.08
Particulate Flow Rate	0.227	lb/bale .091
+10 μ Particulate	67.3	%
+10 μ Particulate	5.45	lb/hr 2.07
+10 μ Particulate	0.152	lb/bale .061
-10 μ Particulate	32.7	%
-10 μ Particulate	2.50	lb/hr 1.01
-10 μ Particulate	0.074	lb/bale .030

AIRx Testing -1994

See correction
received on
1-9-95

OVERFLOW
CYCLONE

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **1**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0888	g	
Particulate Emissions	0.0338	grain/dscf	
Particulate Flow Rate	4.32	lb/hr	1.65
Particulate Flow Rate	0.130	lb/bale	.049
+10 μ Particulate	57.6	%	
+10 μ Particulate	2.49	lb/hr	.95
+10 μ Particulate	0.075	lb/bale	.028
-10 μ Particulate	42.4	%	
-10 μ Particulate	1.83	lb/hr	.7
-10 μ Particulate	0.055	lb/bale	.021

AIRx Testing -1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.1211	g	
Particulate Emissions	0.0481	grain/dscf	
Particulate Flow Rate	5.73	lb/hr	2.28
Particulate Flow Rate	0.133	lb/bale	.053
+10 μ Particulate	66.2	%	
+10 μ Particulate	3.80	lb/hr	1.51
+10 μ Particulate	0.088	lb/bale	.035
-10 μ Particulate	33.8	%	
-10 μ Particulate	1.94	lb/hr	.77
-10 μ Particulate	0.045	lb/bale	.018

AIRx Testing -1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **3**

CALCULATED EMISSION RESULTS

Particulate Weight	0.1695	g	
Particulate Emissions	0.0697	grain/dscf	
Particulate Flow Rate	7.72	lb/hr	3.18
Particulate Flow Rate	0.221	lb/bale	.091
+10 μ Particulate	80.1	%	
+10 μ Particulate	6.19	lb/hr	2.54
+10 μ Particulate	0.177	lb/bale	.073
-10 μ Particulate	19.9	%	
-10 μ Particulate	1.54	lb/hr	.63
-10 μ Particulate	0.044	lb/bale	.018

AIRx Testing -1994

See correction
received on
1-9-95

MOTES
CYCLONE

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Notes**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0279	g	
Particulate Emissions	0.0113	grain/dscf	
Particulate Flow Rate	1.83	lb/hr	1.83 .74
Particulate Flow Rate	0.043	lb/bale	0.043 .017
+10 μ Particulate	65.2	%	
+10 μ Particulate	1.19	lb/hr	1.19 .48
+10 μ Particulate	0.028	lb/bale	0.028 .011
-10 μ Particulate	34.8	%	
-10 μ Particulate	0.64	lb/hr	0.64 .26
-10 μ Particulate	0.015	lb/bale	0.015 .006

AIRx Testing -1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Motes**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0458	g	
Particulate Emissions	0.0170	grain/dscf	
Particulate Flow Rate	2.95	lb/hr	1.09
Particulate Flow Rate	0.063	lb/bale	0.023
+10 μ Particulate	64.1	%	
+10 μ Particulate	1.89	lb/hr	0.70
+10 μ Particulate	0.040	lb/bale	0.015
-10 μ Particulate	35.9	%	
-10 μ Particulate	1.06	lb/hr	0.39
-10 μ Particulate	0.023	lb/bale	0.008

AIRx Testing - 1994

See correction
received on
9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Notes**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0311	g	
Particulate Emissions	0.0122	grain/dscf	
Particulate Flow Rate	1.99	lb/hr	1.78
Particulate Flow Rate	0.082	lb/bale	.032
+10 μ Particulate	11.2	%	
+10 μ Particulate	0.22	lb/hr	.09
+10 μ Particulate	0.009	lb/bale	.004
-10 μ Particulate	88.8	%	
-10 μ Particulate	1.77	lb/hr	.69
-10 μ Particulate	0.073	lb/bale	.029

AIRx Testing -1994

See correction
received on
1-9-95

DRYER #2
CYCLONE

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0602	g
Particulate Emissions	0.0283	grain/dscf
Particulate Flow Rate	2.12	lb/hr 1.0
Particulate Flow Rate	0.080	lb/bale .38
+10 μ Particulate	57.6	%
+10 μ Particulate	1.22	lb/hr .57
+10 μ Particulate	0.046	lb/bale .022
-10 μ Particulate	42.4	%
-10 μ Particulate	0.90	lb/hr .42
-10 μ Particulate	0.034	lb/bale .014

AIRx Testing -1994

see correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0521	g	
Particulate Emissions	0.0240	grain/dscf	
Particulate Flow Rate	1.88	lb/hr	.86
Particulate Flow Rate	0.049	lb/bale	.023
+10 μ Particulate	75.9	%	
+10 μ Particulate	1.42	lb/hr	.66
+10 μ Particulate	0.037	lb/bale	.017
-10 μ Particulate	24.1	%	
-10 μ Particulate	0.45	lb/hr	.21
-10 μ Particulate	0.012	lb/bale	.005

AIRx Testing - 1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0497	g	
Particulate Emissions	0.0221	grain/dscf	
Particulate Flow Rate	1.73	lb/hr	.77
Particulate Flow Rate	0.042	lb/bale	.019
+10 μ Particulate	60.0	%	
+10 μ Particulate	1.04	lb/hr	.46
+10 μ Particulate	0.025	lb/bale	.011
-10 μ Particulate	40.0	%	
-10 μ Particulate	0.69	lb/hr	.31
-10 μ Particulate	0.017	lb/bale	.007

AIRx Testing -1994

See correction
received on
1-9-95

BATTERY CONDENSER
CYCLONE

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0149	g	
Particulate Emissions	0.0073	grain/dscf	
Particulate Flow Rate	0.74	lb/hr	.36
Particulate Flow Rate	0.016	lb/bale	.008
+10 μ Particulate	88.0	%	
+10 μ Particulate	0.65	lb/hr	.32
+10 μ Particulate	0.014	lb/bale	.007
-10 μ Particulate	12.0	%	
-10 μ Particulate	0.09	lb/hr	.04
-10 μ Particulate	0.002	lb/bale	.001

AIRx Testing - 1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

CALCULATED EMISSION RESULTS

Particulate Weight	0.0061	g	
Particulate Emissions	0.0027	grain/dscf	
Particulate Flow Rate	0.31	lb/hr	.13
Particulate Flow Rate	0.007	lb/bale	.003
+10 μ Particulate	9.0	%	
+10 μ Particulate	0.03	lb/hr	.01
+10 μ Particulate	0.001	lb/bale	.000
-10 μ Particulate	91.0	%	
-10 μ Particulate	0.28	lb/hr	.12
-10 μ Particulate	0.006	lb/bale	.003

AIRx Testing - 1994

See correction
received on
1-9-95

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

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

CALCULATED EMISSION RESULTS

Particulate Weight	0.0087	g	
Particulate Emissions	0.0039	grain/dscf	
Particulate Flow Rate	0.46	lb/hr	.21
Particulate Flow Rate	0.010	lb/bale	.005
+10 μ Particulate	66.6	%	
+10 μ Particulate	0.31	lb/hr	.14
+10 μ Particulate	0.007	lb/bale	.003
-10 μ Particulate	33.4	%	
-10 μ Particulate	0.15	lb/hr	.07
-10 μ Particulate	0.003	lb/bale	.002

AIRx Testing -1994

See correction
received on
1-9-95

V. LABORATORY ANALYSIS

UNLOADING
CYCLONE

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **1**

Imp. #1:

gross	608.7
tare	611.2
final	<u>-2.5</u>

Imp. #2:

gross	583.6
tare	582.3
final	<u>1.3</u>

Imp. #3:

gross	478.8
tare	471.2
final	<u>7.6</u>

Imp. #4:

gross	654.9
tare	654.2
final	<u>0.7</u>

Total: 7.1

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **2**

Imp. #1:	gross	610.3
	tare	610.2
	final	<u>0.1</u>

Imp. #2:	gross	584.7
	tare	584.3
	final	<u>0.4</u>

Imp. #3:	gross	468.2
	tare	467.8
	final	<u>0.4</u>

Imp. #4:	gross	580.5
	tare	579.6
	final	<u>0.9</u>

Total: 1.8

AIRx Testing -1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Unloading**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **3**

Imp. #1:	gross	596.4
	tare	585.3
	final	<u>11.1</u>

Imp. #2:	gross	598.2
	tare	596.7
	final	<u>1.5</u>

Imp. #3:	gross	477.7
	tare	477.4
	final	<u>0.3</u>

Imp. #4:	gross	654.9
	tare	654.4
	final	<u>0.5</u>

Total: 13.4

AIRx Testing - 1994

OVERFLOW
CYCLONE

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **1**

Imp. #1:

gross	575.9
tare	589.3
final	<u>-13.4</u>

Imp. #2:

gross	594.0
tare	587.8
final	<u>6.2</u>

Imp. #3:

gross	467.3
tare	467.7
final	<u>-0.4</u>

Imp. #4:

gross	588.3
tare	580.1
final	<u>8.2</u>

Total: 0.6

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **2**

Imp. #1:

gross	603.3
tare	616.1
final	<u>-12.8</u>

Imp. #2:

gross	608.5
tare	604.0
final	<u>4.5</u>

Imp. #3:

gross	476.3
tare	476.5
final	<u>-0.2</u>

Imp. #4:

gross	664.0
tare	654.4
final	<u>9.6</u>

Total: 1.1

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Over Flow**

Date: **10/31/94**
Type: **T std = 60 F**
Run: **3**

Imp. #1:	gross	584.9
	tare	595.4
	final	<u>-10.5</u>

Imp. #2:	gross	578.4
	tare	577.6
	final	<u>0.8</u>

Imp. #3:	gross	469.6
	tare	467.7
	final	<u>1.9</u>

Imp. #4:	gross	588.3
	tare	580.3
	final	<u>8.0</u>

Total: 0.2

AIRx Testing - 1994

MOTES
CYCLONE

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Notes**

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

Imp. #1:

gross	671.6
tare	670.8
final	<u>0.8</u>

Imp. #2:

gross	606.7
tare	605.6
final	<u>1.1</u>

Imp. #3:

gross	477.0
tare	476.4
final	<u>0.6</u>

Imp. #4:

gross	654.6
tare	654.0
final	<u>0.6</u>

Total: 3.1

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Motes**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

Imp. #1:

gross	578.7
tare	583.5
final	<u>-4.8</u>

Imp. #2:

gross	580.2
tare	580.4
final	<u>-0.2</u>

Imp. #3:

gross	468.1
tare	467.9
final	<u>0.2</u>

Imp. #4:

gross	585.8
tare	580.3
final	<u>5.5</u>

Total: 0.7

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Motes**

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

Imp. #1:

gross	593.1
tare	598.6
final	<u>-5.5</u>

Imp. #2:

gross	567.1
tare	567.1
final	<u>0.0</u>

Imp. #3:

gross	478.1
tare	477.4
final	<u>0.7</u>

Imp. #4:

gross	658.8
tare	654.0
final	<u>4.8</u>

Total: 0.0

AIRx Testing - 1994

DRYER #2
CYCLONE

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

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

Imp. #1:	gross	592.2
	tare	587.5
	final	<u>4.7</u>

Imp. #2:	gross	566.2
	tare	565.2
	final	<u>1.0</u>

Imp. #3:	gross	469.1
	tare	468.4
	final	<u>0.7</u>

Imp. #4:	gross	580.7
	tare	580.8
	final	<u>-0.1</u>

Total: 6.3

AIRx Testing -1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

Imp. #1:

gross	582.5
tare	589.5
final	<u>-7.0</u>

Imp. #2:

gross	573.0
tare	574.7
final	<u>-1.7</u>

Imp. #3:

gross	476.8
tare	476.9
final	<u>-0.1</u>

Imp. #4:

gross	658.7
tare	646.4
final	<u>12.3</u>

Total: 3.5

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Dryer #2**

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

Imp. #1:

gross	609.5
tare	605.0
final	<u>4.5</u>

Imp. #2:

gross	581.4
tare	580.2
final	<u>1.2</u>

Imp. #3:

gross	468.7
tare	468.5
final	<u>0.2</u>

Imp. #4:

gross	581.1
tare	580.7
final	<u>0.4</u>

Total: 6.3

BATTERY CONDENSER
CYCLONE

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

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

Imp. #1:

gross	619.9
tare	620.3
final	<u>-0.4</u>

Imp. #2:

gross	622.6
tare	621.5
final	<u>1.1</u>

Imp. #3:

gross	478.2
tare	477.0
final	<u>1.2</u>

Imp. #4:

gross	651.9
tare	650.7
final	<u>1.2</u>

Total: 3.1

AIRx Testing -1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

Date: **11/1/94**
Type: **T std = 60 F**
Run: **2**

Imp. #1:

gross	580.5
tare	584.3
final	<u>-3.8</u>

Imp. #2:

gross	564.3
tare	564.2
final	<u>0.1</u>

Imp. #3:

gross	468.5
tare	468.0
final	<u>0.5</u>

Imp. #4:

gross	584.3
tare	581.1
final	<u>3.2</u>

Total: 0.0

AIRx Testing - 1994

Impinger Weight Sheet

Client: **Dos Palos Gin**
Site: **Dos Palos**
Unit: **Battery Cond.**

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

Imp. #1:

gross	585.2
tare	587.7
final	<u>-2.5</u>

Imp. #2:

gross	668.8
tare	667.7
final	<u>1.1</u>

Imp. #3:

gross	477.9
tare	477.3
final	<u>0.6</u>

Imp. #4:

gross	652.8
tare	651.9
final	<u>0.9</u>

Total: 0.1

AIRx Testing - 1994

UNLOADING
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Unloading Lab # : 292-139
Run : 1

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 Gross: 0.4675 gms. Tare: 0.3921 gms. Net: 0.0754 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: 78.4140 gms. Tare: 78.3414 gms. Net: 0.0726 gms.

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

Total: 350 ml Aliquot: 350 ml

Gross: 80.7260 gms. Tare: 80.7212 gms. Net: 0.0029 gms.

Total Particulate Weight = 0.1493 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Unloading Lab # : 292-139
Run : 2

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 Gross: 0.5169 gms. Tare: 0.3959 gms. Net: 0.1210 gms.
Probe Rinse -
Acetone: 110 ml * 1E-05 gms./ml = Net: -0.0014 gms.
DI Water: 115 ml * 6E-06 gms./ml = Net: -0.0006 gms.
Gross: 80.5382 gms. Tare: 80.4294 gms. Net: 0.1088 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 79.5625 gms. Tare: 79.5611 gms. Net: -0.0002 gms.
Total Particulate Weight = 0.227⁷ gms.

← 0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Unloading Lab # : 292-139
Run : 3

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 Gross: 0.4650 gms. Tare: 0.3933 gms. Net: 0.0717 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: 79.2496 gms. Tare: 79.1358 gms. Net: 0.1138 gms.
Impinger Catch -
DI Water: 340 ml * 6E-06 gms./ml = Net: -0.0019 gms.
Total: 340 ml Aliquot: 340 ml
Gross: 79.3316 gms. Tare: 79.3310 gms. Net: -0.0013 gms.
Total Particulate Weight = 0.1826³⁹ gms.

← 0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>10/31/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Unloading</u>	Lab # : <u>294-139</u>
Run : <u>1</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-60) Gross: <u>0.0870</u> gms.	Tare: <u>0.0849</u> gms.	Net: <u>0.0021</u> gms.
Filter (F-61) Gross: <u>0.0874</u> gms.	Tare: <u>0.0848</u> gms.	Net: <u>0.0026</u> gms.

+ 10 μ Rinse -

Acetone: <u>85</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0011</u> gms.
DI Water: <u>90</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0005</u> gms.
Gross: <u>80.9854</u> gms.	Tare: <u>80.9169</u> gms.	Net: <u>0.0685</u> gms.

+10μ Total Weight = 0.0716 gms.

Filter (E-31) Gross: <u>0.1401</u> gms.	Tare: <u>0.1105</u> gms.	Net: <u>0.0296</u> gms.
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- 10 μ Rinse

DI Water: <u>310</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0017</u> gms.
Acetone : <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>360</u> ml	Aliquot: <u>360</u> ml	
Gross: <u>80.8888</u> gms.	Tare: <u>80.8798</u> gms.	Net: <u>0.0090</u> gms.

-10μ Total Weight = 0.0362 gms.

Total Weight = 0.1078 gms.

+ 10 μ	<u>66.4</u> %
- 10 μ	<u>33.6</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>10/31/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Unloading</u>	Lab # : <u>294-139</u>
Run : <u>2</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-75) Gross: <u>0.0902</u> gms.	Tare: <u>0.0870</u> gms.	Net: <u>0.0032</u> gms.
Filter (F-76) Gross: <u>0.0898</u> gms.	Tare: <u>0.0869</u> gms.	Net: <u>0.0029</u> gms.

+ 10 μ Rinse -

Acetone: <u>80</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0010</u> gms.
DI Water: <u>80</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross: <u>80.9100</u> gms.	Tare: <u>80.8167</u> gms.	Net: <u>0.0933</u> gms.

+ 10μ Total Weight = 0.0979 gms.

Filter (E-38) Gross: <u>0.1766</u> gms.	Tare: <u>0.1142</u> gms.	Net: <u>0.0624</u> gms.
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- 10 μ Rinse

DI Water: <u>300</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0017</u> gms.
Acetone : <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>350</u> ml	Aliquot: <u>350</u> ml	
Gross: <u>78.0445</u> gms.	Tare: <u>78.0348</u> gms.	Net: <u>0.0097</u> gms.

- 10μ Total Weight = 0.0698 gms.

Total Weight = 0.1677 gms.

+ 10 μ	<u>58.4</u>	%
- 10 μ	<u>41.6</u>	%

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>10/31/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Unloading</u>	Lab # : <u>294-139</u>
Run : <u>3</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-55)	Gross: <u>0.0895</u> gms.	Tare: <u>0.0870</u> gms.	Net: <u>0.0025</u> gms.
Filter (F-56)	Gross: <u>0.0917</u> gms.	Tare: <u>0.0869</u> gms.	Net: <u>0.0048</u> gms.

+10 μ Rinse -

Acetone:	<u>80</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0010</u> gms.
DI Water:	<u>80</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross:	<u>80.4338</u> gms.	Tare: <u>80.3192</u> gms.	Net: <u>0.1146</u> gms.

+10μ Total Weight = 0.1204 gms.

Filter (E-28)	Gross: <u>0.1564</u> gms.	Tare: <u>0.1160</u> gms.	Net: <u>0.0404</u> gms.
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-10 μ Rinse

DI Water:	<u>300</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0017</u> gms.
Acetone:	<u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total:	<u>350</u> ml	Aliquot: <u>350</u> ml	
Gross:	<u>77.3649</u> gms.	Tare: <u>77.3446</u> gms.	Net: <u>0.0203</u> gms.

-10μ Total Weight = 0.0584 gms.

Total Weight = 0.1788 gms.

+ 10 μ	<u>67.3</u> %
- 10 μ	<u>32.7</u> %

OVERFLOW
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Overflow Lab # : 292-139
Run : 1

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: 0.4300 gms. Tare: 0.3968 gms. Net: 0.0332 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: 77.4001 gms. Tare: 77.3430 gms. Net: 0.0571 gms.

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

Total: 250 ml Aliquot: 250 ml
Gross: 80.2856 gms. Tare: 80.2843 gms. Net: -0.0001 gms.

Total Particulate Weight = 0.088⁹ gms.

← 0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Overflow Lab # : 292-139
Run : 2

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 Gross: 0.4549 gms. Tare: 0.3964 gms. Net: 0.0585 gms.
Probe Rinse -
Acetone: 100 ml * 1E-05 gms./ml = Net: -0.0013 gms.
DI Water: 100 ml * 6E-06 gms./ml = Net: -0.0006 gms.
Gross: 79.3404 gms. Tare: 79.2761 gms. Net: 0.0643 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 4.1350 gms. Tare: 4.1332 gms. Net: 0.0001 gms.
Total Particulate Weight = 0.1211 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Overflow Lab # : 292-139
Run : 3

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 Gross: 0.6462 gms. Tare: 0.5826 gms. Net: 0.0636 gms.
Probe Rinse -
Acetone: 110 ml * 1E-05 gms./ml = Net: -0.0014 gms.
DI Water: 115 ml * 6E-06 gms./ml = Net: -0.0006 gms.
Gross: 4.1398 gms. Tare: 4.0304 gms. Net: 0.1094 gms.
Impinger Catch -
DI Water: 275 ml * 6E-06 gms./ml = Net: -0.0015 gms.
Total: 275 ml Aliquot: 300 ml
Gross: 3.9185 gms. Tare: 3.9184 gms. Net: -0.0014 gms.

Total Particulate Weight = 0.171
~~-0.1695~~ gms.

← 0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>10/31/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Overflow</u>	Lab # : <u>294-139</u>
Run : <u>1</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-87) Gross: <u>0.0890</u> gms.	Tare: <u>0.0855</u> gms.	Net: <u>0.0035</u> gms.
Filter (F-88) Gross: <u>0.0888</u> gms.	Tare: <u>0.0853</u> gms.	Net: <u>0.0035</u> gms.

+ 10 μ Rinse -

Acetone: <u>90</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0012</u> gms.
DI Water: <u>90</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0005</u> gms.
Gross: <u>80.0477</u> gms.	Tare: <u>80.0126</u> gms.	Net: <u>0.0351</u> gms.

+ 10μ Total Weight = 0.0404 gms.

Filter (E-49) Gross: <u>0.1348</u> gms.	Tare: <u>0.1124</u> gms.	Net: <u>0.0224</u> gms.
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- 10 μ Rinse

DI Water: <u>290</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0016</u> gms.
Acetone : <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>340</u> ml	Aliquot: <u>340</u> ml	
Gross: <u>76.9758</u> gms.	Tare: <u>76.9662</u> gms.	Net: <u>0.0096</u> gms.

- 10μ Total Weight = 0.0298 gms.

Total Weight = 0.0702 gms.

+ 10 μ	<u>57.6</u> %
- 10 μ	<u>42.4</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 10/31/94
Site : Dos Palos Job # : 4033
Unit : Overflow Lab # : 294-139
Run : 2

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-63) Gross: 0.0934 gms. Tare: 0.0845 gms. Net: 0.0089 gms.
Filter (F-64) Gross: 0.0900 gms. Tare: 0.0855 gms. Net: 0.0045 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: 80.6064 gms. Tare: 80.5486 gms. Net: 0.0578 gms.

+ 10 μ Total Weight = 0.0697 gms.

Filter (E-32) Gross: 0.1379 gms. Tare: 0.1060 gms. Net: 0.0319 gms.

- 10 μ Rinse

DI Water: 250 ml * 6E-06 gm/ml = Net: -0.0014 gms.
Acetone: 50 ml * 1E-05 gm/ml = Net: -0.0007 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 80.0120 gms. Tare: 80.0062 gms. Net: 0.0058 gms.

- 10 μ Total Weight = 0.0357 gms.

Total Weight = 0.1054 gms.

+ 10 μ 66.2 %
- 10 μ 33.8 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>10/31/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Overflow</u>	Lab # : <u>294-139</u>
Run : <u>3</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-107)	Gross: <u>0.0890</u> gms.	Tare: <u>0.0856</u> gms.	Net: <u>0.0034</u> gms.
Filter (F-108)	Gross: <u>0.0876</u> gms.	Tare: <u>0.0850</u> gms.	Net: <u>0.0026</u> gms.

+ 10 μ Rinse -

Acetone:	<u>65</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0008</u> gms.
DI Water:	<u>70</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross:	<u>76.4131</u> gms.	Tare: <u>76.2998</u> gms.	Net: <u>0.1133</u> gms.

+ 10μ Total Weight = 0.1181 gms.

Filter (E-54)	Gross: <u>0.1409</u> gms.	Tare: <u>0.1147</u> gms.	Net: <u>0.0262</u> gms.
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- 10 μ Rinse

DI Water:	<u>350</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0019</u> gms.
Acetone :	<u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total:	<u>400</u> ml	Aliquot: <u>400</u> ml	
Gross:	<u>80.1058</u> gms.	Tare: <u>80.1000</u> gms.	Net: <u>0.0058</u> gms.

- 10μ Total Weight = 0.0294 gms.

Total Weight = 0.1475 gms.

+ 10 μ	<u>80.1</u> %
- 10 μ	<u>19.9</u> %

MOTES
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Motes Lab # : 292-139
Run : 1

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 Gross: 0.5923 gms. Tare: 0.5835 gms. Net: 0.0088 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: 4.1434 gms. Tare: 4.1225 gms. Net: 0.0209 gms.
Impinger Catch -
DI Water: 400 ml * 6E-06 gms./ml = Net: -0.0022 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 4.2096 gms. Tare: 4.2078 gms. Net: -0.0004 gms.

Total Particulate Weight = 0.0279⁸³ gms.

← *0 for calc. purposes*

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Motes Lab # : 292-139
Run : 2

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 Gross: 0.6040 gms. Tare: 0.5808 gms. Net: 0.0232 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: 4.0679 gms. Tare: 4.0429 gms. Net: 0.0250 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 4.1902 gms. Tare: 4.1896 gms. Net: -0.0011 gms. ← *for calc. purposes*
Total Particulate Weight = ⁶⁹0.0450 gms.

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Motes Lab # : 292-139
Run : 3

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: 0.6008 gms. Tare: 0.5846 gms. Net: 0.0162 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: 3.8744 gms. Tare: 3.8571 gms. Net: 0.0173 gms.

Impinger Catch -
DI Water: 270 ml * 6E-06 gms./ml = Net: -0.0015 gms.

Total: 270 ml Aliquot: 270 ml

Gross: 4.1191 gms. Tare: 4.1184 gms. Net: -0.0008 gms.

Total Particulate Weight = 0.0311 gms.

0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/1/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Motes</u>	Lab # : <u>294-139</u>
Run : <u>1</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-83)	Gross: <u>0.0885</u> gms.	Tare: <u>0.0867</u> gms.	Net: <u>0.0018</u> gms.
Filter (F-84)	Gross: <u>0.0882</u> gms.	Tare: <u>0.0859</u> gms.	Net: <u>0.0023</u> gms.

+ 10 μ Rinse -

Acetone:	<u>70</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0009</u> gms.
DI Water:	<u>75</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross:	<u>4.1160</u> gms.	Tare: <u>4.0965</u> gms.	Net: <u>0.0195</u> gms.

+ 10μ Total Weight = 0.0223 gms.

Filter (E-42)	Gross: <u>0.1271</u> gms.	Tare: <u>0.1125</u> gms.	Net: <u>0.0146</u> gms.
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- 10 μ Rinse

DI Water:	<u>360</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0020</u> gms.
Acetone:	<u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total:	<u>410</u> ml	Aliquot: <u>410</u> ml	
Gross:	<u>4.2355</u> gms.	Tare: <u>4.2356</u> gms.	Net: <u>-0.0001</u> gms.

- 10μ Total Weight = 0.0119 gms.

Total Weight = 0.0341 gms.

+ 10 μ	<u>65.2</u> %
- 10 μ	<u>34.8</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/1/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Motes</u>	Lab # : <u>294-139</u>
Run : <u>2</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-59) Gross: <u>0.0878</u> gms.	Tare: <u>0.0855</u> gms.	Net: <u>0.0023</u> gms.
Filter (F-60) Gross: <u>0.0872</u> gms.	Tare: <u>0.0849</u> gms.	Net: <u>0.0023</u> gms.

+10 μ Rinse -

Acetone: <u>75</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0010</u> gms.
DI Water: <u>75</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross: <u>3.9952</u> gms.	Tare: <u>3.9752</u> gms.	Net: <u>0.0200</u> gms.

+10μ Total Weight = 0.0232 gms.

Filter (E-30) Gross: <u>0.1238</u> gms.	Tare: <u>0.1097</u> gms.	Net: <u>0.0141</u> gms.
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-10 μ Rinse

DI Water: <u>300</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0017</u> gms.
Acetone: <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>350</u> ml	Aliquot: <u>350</u> ml	
Gross: <u>4.1191</u> gms.	Tare: <u>4.1179</u> gms.	Net: <u>0.0012</u> gms.

-10μ Total Weight = 0.0130 gms.

Total Weight = 0.0362 gms.

+ 10 μ	<u>64.1</u> %
- 10 μ	<u>35.9</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Motes Lab # : 294-139
Run : 3

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-79) Gross: 0.0853 gms. Tare: 0.0854 gms. Net: -0.0001 gms.
Filter (F-80) Gross: 0.0870 gms. Tare: 0.0868 gms. Net: 0.0002 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: 4.0988 gms. Tare: 4.0950 gms. Net: 0.0038 gms.

+ 10 μ Total Weight = 0.0026 gms.

Filter (E-40) Gross: 0.1188 gms. Tare: 0.1106 gms. Net: 0.0082 gms.

- 10 μ Rinse

DI Water: 340 ml * 6E-06 gm/ml = Net: -0.0019 gms.
Acetone: 50 ml * 1E-05 gm/ml = Net: -0.0007 gms.
Total: 390 ml Aliquot: 390 ml
Gross: 4.0594 gms. Tare: 4.0445 gms. Net: 0.0149 gms.

- 10 μ Total Weight = 0.0206 gms.

Total Weight = 0.0232 gms.

**+ 10 μ 11.2 %
- 10 μ 88.8 %**

DRYER #2
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Dryer #2 Lab # : 292-139
Run : 1

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 Gross: 0.5973 gms. Tare: 0.5865 gms. Net: 0.0108 gms.
Probe Rinse -
Acetone: 100 ml * 1E-05 gms./ml = Net: -0.0013 gms.
DI Water: 100 ml * 6E-06 gms./ml = Net: -0.0006 gms.
Gross: 4.0657 gms. Tare: 4.0122 gms. Net: 0.0535 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 4.2100 gms. Tare: 4.2106 gms. Net: -0.0023 gms.

Total Particulate Weight = 0.0602²⁴ gms.

← 0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Dryer #2 Lab # : 292-139
Run : 2

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 Gross: 0.5960 gms. Tare: 0.5859 gms. Net: 0.0101 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: 4.1522 gms. Tare: 4.1066 gms. Net: 0.0456 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 3.9544 gms. Tare: 3.9550 gms. Net: -0.0023 gms.

Total Particulate Weight = 0.05⁴³~~21~~ gms.

0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/1/94
Site : Dos Palos Job # : 4033
Unit : Dryer #2 Lab # : 292-139
Run : 3

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 Gross: 0.5950 gms. Tare: 0.5815 gms. Net: 0.0135 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: 4.1486 gms. Tare: 4.1092 gms. Net: 0.0394 gms.

Impinger Catch -
DI Water: 325 ml * 6E-06 gms./ml = Net: -0.0018 gms.

Total: 325 ml Aliquot: 325 ml

Gross: 4.0128 gms. Tare: 4.0126 gms. Net: -0.0016 gms.

Total Particulate Weight = $\frac{513}{1000}$ 0.0497 gms.

⊖ for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/1/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Dryer #2</u>	Lab # : <u>294-139</u>
Run : <u>1</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-73)	Gross: <u>0.0864</u> gms.	Tare: <u>0.0865</u> gms.	Net: <u>-0.0001</u> gms.
Filter (F-74)	Gross: <u>0.0863</u> gms.	Tare: <u>0.0869</u> gms.	Net: <u>-0.0006</u> gms.

+ 10 μ Rinse -

Acetone:	<u>85</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0011</u> gms.
DI Water:	<u>90</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0005</u> gms.
Gross:	<u>4.2052</u> gms.	Tare: <u>4.1569</u> gms.	Net: <u>0.0483</u> gms.

+ 10μ Total Weight = 0.0460 gms.

Filter (E-37)	Gross: <u>0.1450</u> gms.	Tare: <u>0.1089</u> gms.	Net: <u>0.0361</u> gms.
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- 10 μ Rinse

DI Water:	<u>270</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0015</u> gms.
Acetone:	<u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total:	<u>320</u> ml	Aliquot: <u>320</u> ml	
Gross:	<u>4.1605</u> gms.	Tare: <u>4.1481</u> gms.	Net: <u>0.0124</u> gms.

- 10μ Total Weight = 0.0464 gms.

Total Weight = 0.0924 gms.

+ 10 μ	<u>49.8</u> %
- 10 μ	<u>50.2</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/1/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Dryer #2</u>	Lab # : <u>294-139</u>
Run : <u>2</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-93) Gross: <u>0.0887</u> gms.	Tare: <u>0.0873</u> gms.	Net: <u>0.0014</u> gms.
Filter (F-94) Gross: <u>0.0876</u> gms.	Tare: <u>0.0856</u> gms.	Net: <u>0.0020</u> gms.

+ 10 μ Rinse -

Acetone: <u>80</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0010</u> gms.
DI Water: <u>80</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross: <u>4.3110</u> gms.	Tare: <u>4.2838</u> gms.	Net: <u>0.0272</u> gms.

+ 10μ Total Weight = 0.0291 gms.

Filter (E-47) Gross: <u>0.1230</u> gms.	Tare: <u>0.1111</u> gms.	Net: <u>0.0119</u> gms.
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- 10 μ Rinse

DI Water: <u>330</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0018</u> gms.
Acetone : <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>380</u> ml	Aliquot: <u>380</u> ml	
Gross: <u>3.8614</u> gms.	Tare: <u>3.8616</u> gms.	Net: <u>-0.0002</u> gms.

- 10μ Total Weight = 0.0092 gms.

Total Weight = 0.0384 gms.

+ 10 μ	<u>75.9</u> %
- 10 μ	<u>24.1</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/1/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Dryer #2</u>	Lab # : <u>294-139</u>
Run : <u>3</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-45) Gross: <u>0.0906</u> gms.	Tare: <u>0.0864</u> gms.	Net: <u>0.0042</u> gms.
Filter (F-46) Gross: <u>0.0890</u> gms.	Tare: <u>0.0865</u> gms.	Net: <u>0.0025</u> gms.

+ 10 μ Rinse -

Acetone: <u>80</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0010</u> gms.
DI Water: <u>85</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0005</u> gms.
Gross: <u>4.2008</u> gms.	Tare: <u>4.1760</u> gms.	Net: <u>0.0248</u> gms.

+ 10μ Total Weight = 0.0300 gms.

Filter (E-23) Gross: <u>0.1226</u> gms.	Tare: <u>0.1099</u> gms.	Net: <u>0.0127</u> gms.
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- 10 μ Rinse

DI Water: <u>390</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0021</u> gms.
Acetone: <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>440</u> ml	Aliquot: <u>440</u> ml	
Gross: <u>4.0818</u> gms.	Tare: <u>4.0717</u> gms.	Net: <u>0.0101</u> gms.

- 10μ Total Weight = 0.0200 gms.

Total Weight = 0.0500 gms.

+ 10 μ	<u>60.0</u> %
- 10 μ	<u>40.0</u> %

BATTERY CONDENSER
CYCLONE

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/2/94
Site : Dos Palos Job # : 4033
Unit : Battery Condenser Lab # : 292-139
Run : 1

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: 0.5842 gms. Tare: 0.5803 gms. Net: 0.0039 gms.

Probe Rinse -
Acetone: 80 ml * 1E-05 gms./ml = Net: -0.0010 gms.

DI Water: 80 ml * 6E-06 gms./ml = Net: -0.0004 gms.

Gross: 3.9310 gms. Tare: 3.9176 gms. Net: 0.0134 gms.

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

Total: 350 ml Aliquot: 350 ml

Gross: 4.0702 gms. Tare: 4.0692 gms. Net: -0.0009 gms.

Total Particulate Weight = 0.014⁵⁹ gms.

0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/2/94
Site : Dos Palos Job # : 4033
Unit : Battery Condenser Lab # : 292-139
Run : 2

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 Gross: 0.5821 gms. Tare: 0.5798 gms. Net: 0.0023 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: 3.8670 gms. Tare: 3.8600 gms. Net: 0.0070 gms.
Impinger Catch -
DI Water: 275 ml * 6E-06 gms./ml = Net: -0.0015 gms.
Total: 275 ml Aliquot: 275 ml
Gross: 3.9633 gms. Tare: 3.9636 gms. Net: -0.0018 gms.
Total Particulate Weight = 0.0079
~~-0.0061~~ gms.

0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/2/94
Site : Dos Palos Job # : 4033
Unit : Battery Condenser Lab # : 292-139
Run : 3

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 Gross: 0.5904 gms. Tare: 0.5807 gms. Net: 0.0097 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: 3.8308 gms. Tare: 3.8292 gms. Net: 0.0016 gms.
Impinger Catch -
DI Water: 300 ml * 6E-06 gms./ml = Net: -0.0017 gms.
Total: 300 ml Aliquot: 300 ml
Gross: 4.0456 gms. Tare: 4.0452 gms. Net: -0.0013 gms.
Total Particulate Weight = 0.0099
~~0.0087~~ gms.

0 for calc. purposes

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/2/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Battery Condenser</u>	Lab # : <u>294-139</u>
Run : <u>1</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-95) Gross: <u>0.0871</u> gms.	Tare: <u>0.0872</u> gms.	Net: <u>-0.0001</u> gms.
Filter (F-96) Gross: <u>0.0874</u> gms.	Tare: <u>0.0872</u> gms.	Net: <u>0.0002</u> gms.

+ 10 μ Rinse -

Acetone: <u>70</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0009</u> gms.
DI Water: <u>70</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0004</u> gms.
Gross: <u>3.9488</u> gms.	Tare: <u>3.9468</u> gms.	Net: <u>0.0020</u> gms.

+ 10μ Total Weight = 0.0008 gms.

Filter (E-48) Gross: <u>0.1134</u> gms.	Tare: <u>0.1135</u> gms.	Net: <u>-0.0001</u> gms.
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- 10 μ Rinse

DI Water: <u>280</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0015</u> gms.
Acetone : <u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total: <u>330</u> ml	Aliquot: <u>330</u> ml	
Gross: <u>4.0830</u> gms.	Tare: <u>4.0806</u> gms.	Net: <u>0.0024</u> gms.

- 10μ Total Weight = 0.0001 gms.

Total Weight = 0.0009 gms.

+ 10 μ	<u>88.0</u> %
- 10 μ	<u>12.0</u> %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Dos Palos Date : 11/2/94
Site : Dos Palos Job # : 4033
Unit : Battery Condenser Lab # : 294-139
Run : 2

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-49) Gross: 0.0872 gms. Tare: 0.0866 gms. Net: 0.0006 gms.
Filter (F-50) Gross: 0.0880 gms. Tare: 0.0875 gms. Net: 0.0005 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: 3.9986 gms. Tare: 3.9979 gms. Net: 0.0007 gms.

+10 μ Total Weight = 0.0003 gms.

Filter (E-25) Gross: 0.1059 gms. Tare: 0.1057 gms. Net: 0.0002 gms.

-10 μ Rinse

DI Water: 350 ml * 6E-06 gm/ml = Net: -0.0019 gms.
Acetone : 50 ml * 1E-05 gm/ml = Net: -0.0007 gms.
Total: 380 ml Aliquot: 380 ml
Gross: 3.9434 gms. Tare: 3.9378 gms. Net: 0.0056 gms.

-10 μ Total Weight = 0.0032 gms.

Total Weight = 0.0035 gms.

+ 10 μ 9.0 %
- 10 μ 91.0 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : <u>Dos Palos</u>	Date : <u>11/2/94</u>
Site : <u>Dos Palos</u>	Job # : <u>4033</u>
Unit : <u>Battery Condenser</u>	Lab # : <u>294-139</u>
Run : <u>3</u>	

BLANKS

Acetone	Gross: <u>4.1584</u> gms.	Tare: <u>4.1558</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0026</u> gms.
DI Water	Gross: <u>4.0301</u> gms.	Tare: <u>4.0290</u> gms.	Volume: <u>200</u> ml	Residue: <u>0.0011</u> gms.

WEIGHTS & VOLUMES

Filter (F-57)	Gross: <u>0.0850</u> gms.	Tare: <u>0.0844</u> gms.	Net: <u>0.0006</u> gms.
Filter (F-58)	Gross: <u>0.0874</u> gms.	Tare: <u>0.0863</u> gms.	Net: <u>0.0011</u> gms.

+ 10 μ Rinse -

Acetone:	<u>85</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0011</u> gms.
DI Water:	<u>90</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0005</u> gms.
Gross:	<u>4.2452</u> gms.	Tare: <u>4.2373</u> gms.	Net: <u>0.0079</u> gms.

+ 10μ Total Weight = 0.0080 gms.

Filter (E-29)	Gross: <u>0.1106</u> gms.	Tare: <u>0.1101</u> gms.	Net: <u>0.0005</u> gms.
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- 10 μ Rinse

DI Water:	<u>260</u> ml * <u>6E-06</u> gm/ml	=	Net: <u>-0.0014</u> gms.
Acetone:	<u>50</u> ml * <u>1E-05</u> gm/ml	=	Net: <u>-0.0007</u> gms.
Total:	<u>310</u> ml	Aliquot: <u>310</u> ml	
Gross:	<u>3.9434</u> gms.	Tare: <u>3.9378</u> gms.	Net: <u>0.0056</u> gms.

- 10μ Total Weight = 0.0040 gms.

Total Weight = 0.0120 gms.

+ 10 μ	<u>66.6</u> %
- 10 μ	<u>33.4</u> %

WEIGHT SHEET

Client : DP
 Site : _____
 Unit : Unloading

Date : 10-31
 Job# : 299-139
 Lab# : _____

#	Sample ID	Final	Tare
✓ 1	+10 175 R-1	<u>80.9852</u> <u>80.9856</u>	<u>80.9168</u> <u>80.9170</u>
✓ 2	-10 360	<u>80.8887</u> <u>80.8890</u>	<u>80.8799</u> <u>80.8798</u>
✓ 3	+10 160 R-2	<u>80.9100</u> <u>80.9101</u>	<u>80.8167</u> <u>80.8167</u>
✓ 4	-10 350	<u>78.0446</u> <u>78.0444</u>	<u>78.0347</u> <u>78.0349</u>
✓ 5	+10 160 R-3	<u>80.4336</u> <u>80.4340</u>	<u>80.3194</u> <u>80.3191</u>
✓ 6	-10 350	<u>77.3647</u> <u>77.3651</u>	<u>77.3431</u> <u>77.3448</u> <u>77.3443</u>
•	R1 F60 F61 E31	<u>0.0870/0.0870</u> <u>0.0873/0.0875</u> <u>0.1402/0.1400</u>	<u>0.0849</u> <u>0.0848</u> <u>0.1105</u>
•	R2 F75 F76 E38	<u>0.0901/0.0904</u> <u>0.0899/0.0897</u> <u>0.1766/0.1767</u>	<u>0.0870</u> <u>0.0869</u> <u>0.1142</u>
•	R3 F55 F56 E28	<u>0.0895/0.0895</u> <u>0.0916/0.0918</u> <u>0.1563/0.1565</u>	<u>0.0867</u> <u>0.0889</u> <u>0.1160</u>

WEIGHT SHEET

Client : DA
 Site : _____
 Unit : Unloading

Part

Date : 10-31
 Job# : 294-139
 Lab# : _____

#	Sample ID	Final	Tare
✓ 7	Probe 175	78.4141 78.4158	78.3416 78.3412 ✓
✓ 8	R-1 Imps 350	80.7262 80.7258	80.7204 80.7213 ✓ 80.7210
✓ 9	Probe 225	80.5384 80.5380	80.4292 80.4296 ✓
✓ 10	R-2 Imps 300	79.5624 79.5626	79.5609 79.5613 ✓
✓ 11	Probe 175 R-3	79.2495 79.2498	79.1358 79.1358 ✓
✓ 12	Imps 340	79.3315 79.3318	79.3310 79.3310 ✓
•	R1 B45	0.4674/0.4676	0.3921
•	R2 B46	0.5168/0.5170	0.3959
•	R3 B47	0.4651/0.4648	0.3933

WEIGHT SHEET

Client : D.P.
 Site : _____
 Unit : OVERFLOW

Date : 10-31
 Job# : 294-179
 Lab# : _____

#	Sample ID	Final	Tare
✓ 13	+10 180	80.0426	80.0124
	R-1	80.0478	80.0129
		80.0476	
✓ 14	-10 340	76.9758	76.9663
		76.9759	76.9662
✓ 15	+10 160	80.6066	80.5491
	R-2	80.6063	80.5484
			80.5488
✓ 16	-10 300	80.0118	80.0054
	R-3	80.0122	80.0066
			80.0063
✓ 17	+10 135	76.4131	76.2997
		76.4131	76.2999
✓ 18	-10 400	80.1058	80.0988
		80.1059	80.1001
			80.0998
• R1	F87	0.0891/0890	0.0855
	F88	0.0888/0889	0.0853
	F49	0.1316/1349	0.1124
• R2	F63	0.0935/0933	0.0845
	F64	0.0900/0900	0.0855
	E32	0.1328/1380	0.1060
• R3	F107	0.0890/0891	0.0856
	F108	0.0875/0877	0.0850
	F54	0.1110/1108	0.1147

WEIGHT SHEET

Client: D.P.
 Site: _____
 Unit: OVERFLOW

PART

Date: 10-31
 Job#: 294-139
 Lab#: _____

#	Sample ID	Final	Tare
✓ 19	Prole 150	77.4000 77.4602	77.3428 77.3433
✓ 20	R-1 Imps 250	80.2856 80.2856	80.2842 80.2844
✓ 21	Prole 200	79.3395 79.3404 79.3403	79.2759 79.2763
T 63 - 22	Beak Emps 300	4.1342 4.1353 4.1350	4.1334 4.1330
82 23 ✓ 420-220	Prole 225	4.1399 4.1397	4.0299 4.0503
✓ 45 - 24	R-3 Imps 275	3.9184 3.9186	3.9185 3.9181
✓	R1 B 48	0.4300/4300	0.3968
✓	R2 B 49	0.4550/4548	0.3964
✓	R3 C1	0.6461/6463	0.5826

WEIGHT SHEET

Client : D.P
 Site : _____
 Unit : NOTES

Date : 11-1
 Job# : 294-139
 Lab# : _____

#	Sample ID	Final	Tare
39	+10 145	4.1159	4.0967
	R-1	4.1160	4.0963
100	-10 410	4.2358	4.2354
		4.2351	4.2357
41	+10 150	3.9951	3.9751
	R-2	3.9954	3.9754
91	-10 350	4.1196	4.1181
		4.1190	4.1177
98	+10 140	4.0987	4.0953
	R-3	4.0990	4.0949
94	-10 390	4.0596	4.0445
		4.0593	4.0445
R1	F83	0.0886/0884	0.0867
	F84	0.0883/0882	0.0859
	E42	0.1222/1220	0.1125
R2	F54	0.0878/0878	0.0855
	F60	0.0871/0873	0.0849
	E30	0.1240/1236	0.1097
R3	F79	0.0853/0853	0.0854
	F80	0.0871/0870	0.0868
	E40	0.1189/1188	0.1106

WEIGHT SHEET

Client : D.P Date : 11-1
 Site : _____ Job# : 294-139
 Unit : NOTES Part Lab# : _____

#	Sample ID	Final	Tare
29	Push 150	4.1434	4.1223
	R-1	4.1433	4.1239
			4.1229
97	Inps 400	4.2098	4.2077
		4.2094	4.2080
95	Push 150	4.0677	4.0428
	R-2	4.0681	4.0430
87	Inps 200	4.1900	4.1894
		4.1904	4.1899
96	Push 150	3.8779	3.8570
	R-3	3.8743	3.8572
		3.8745	
89	Inps 270	4.1192	4.1183
		4.1190	4.1186
	R1 C2	0.5921/0.5925	0.5835
	R2 C3	0.6038/0.6041	0.5808
	R3 C4	0.6002/0.6009	0.5846

WEIGHT SHEET

Client : O.P
 Site : _____
 Unit : Dryer 2

Date : 11-1
 Job# : 204-139
 Lab# : _____

#	Sample ID	Final	Tare
70	+10 175	4.2051	4.1568
		4.2052	4.1570 ✓
65	-10 320	4.1607	4.1482
		4.1603	4.1490 ✓
86	+10 160	4.3109	4.2826
		4.3112	4.2840 ✓
27	-10 380	3.8615	3.8617
		3.8612	3.8615 ✓
99	+10 165	4.2007	4.1740
		4.2009	4.1761 ✓
66	-10 440	4.0818	4.0718
		4.0819	4.0716 ✓
R1	F23	0.0865/0864	0.0865
	F74	0.0864/0862	0.0869
	E37	0.1449/1451	0.1089
R2	F93	0.0886/0888	0.0873
	F94	0.0892/0876	0.0856
	E47	0.1230/1231	0.1111
R3	F45	0.0905/0906	0.0864
	F46	0.0890/0890	0.0865
	E23	0.1227/1225	0.1099

WEIGHT SHEET

Client : D.P.
 Site : _____
 Unit : Dryer #2

Date : 11-1
 Job# : 294-139
 Lab# : _____

#	Sample ID	Final	Tare
76	R-1 Probe 200	4.0657	4.0131
		4.0657	4.0123
88	Imps 300	4.2100	4.2106
		4.2099	4.2106
33	R-2 Probe 150	4.1521	4.1094
		4.1523	4.1065
90	Imps 300	3.9543	3.9550
		3.9546	3.9551
85	R-3 Probe 175	4.1488	4.1113
		4.1483	4.1091
59	Imps 325	4.0128	4.0125
		4.0127	4.0127
	R1 C5	0.5974/5972	0.5865
	R2 C6	0.5978/5975	0.5854
	R3 C7	0.5951/5950	0.5815

WEIGHT SHEET

Client : D.P
 Site : _____
 Unit : Battery Condenser

Date : 11-2
 Job# : 294-139
 Lab# : _____

#	Sample ID	Final	Tare
30	+10 140	3.9490	3.9460
	R-1	3.9485	3.9469
61	-10 330	4.0827	4.0808
		4.0832	4.0800
69	+10 160	3.9985	3.9966
	R-2	3.9986	3.9977
40	-10 380	3.9445	3.9375
		3.9439	3.9380
67	+10 175	4.2453	4.2373
	R-3	4.2452	4.2373
84	-10 310	4.2042	4.1938
		4.2039	4.1949
R1	F95	0.0872/0.0870	0.0872
	F96	0.0874/0.0874	0.0872
	E48	0.1134/0.1135	0.1120
R2	F49	0.0872/0.0872	0.0866
	F50	0.0879/0.0880	0.0875
	E25	0.1058/0.1060	0.1057
R3	F57	0.0850/0.0849	0.0844
	F58	0.0875/0.0873	0.0863
	E29	0.1105/0.1107	0.1101

WEIGHT SHEET

Client : DP
 Site : _____
 Unit : BATTERY CONDENSER

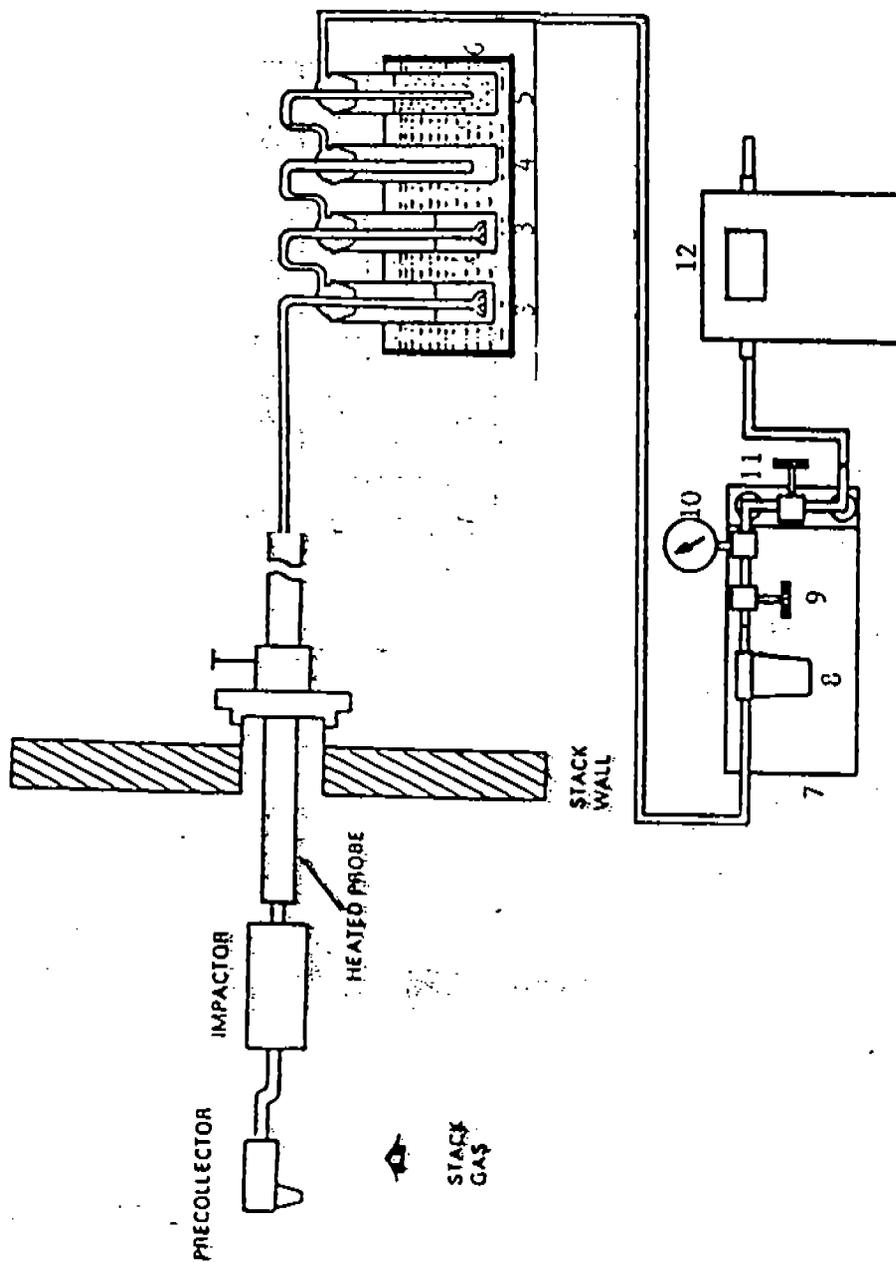
PART

Date : 11-2
 Job# : 294-139
 Lab# : _____

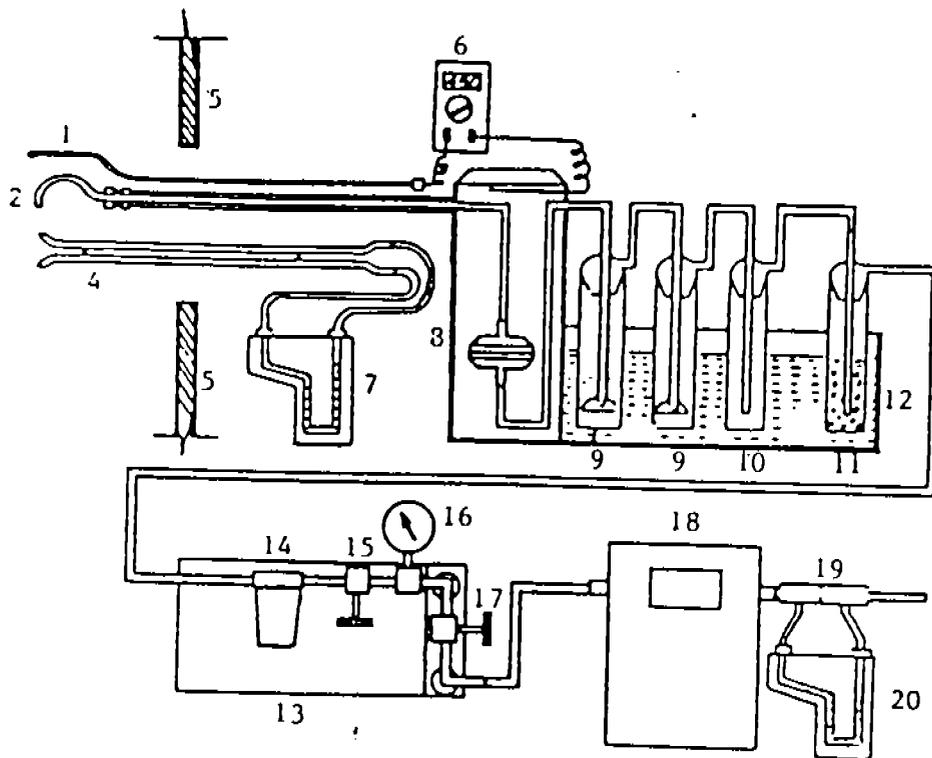
#	Sample ID	Final	Tare
83	Probe 160 R-1	<u>3.9312</u>	<u>3.9174</u>
		3.9302	3.9179
		<u>3.9309</u>	
77	Imps 350	<u>4.075</u>	<u>4.0690</u>
		4.0701	4.0699
		<u>4.0702</u>	<u>4.0694</u>
44	Probe 150 R-2	<u>3.8684</u>	<u>3.8599</u>
		3.8669	3.8600
		<u>3.8672</u>	
35	Imps 275	<u>3.9635</u>	<u>3.9624</u>
		3.9631	3.9636
			<u>3.9635</u>
28	Probe 150 R-3	<u>3.8308</u>	<u>3.8290</u>
		3.8309	3.8297
			<u>3.8293</u>
32	Imps 300	4.0427	<u>4.0443</u>
		<u>4.0457</u>	<u>4.0450</u>
		<u>4.0455</u>	<u>4.0454</u>
	R1 C8	<u>0.5840/5843</u>	<u>0.5803</u>
	R2 C9	<u>0.5822/5820</u>	<u>0.5798</u>
	R3 C10	<u>0.5904/5903</u>	<u>0.5807</u>

VI. METHODOLOGY

PM-10 PARTICULATE SAMPLING TRAIN



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



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

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

VII. RAW DATA

UNLOADING
CYCLONE

Plant: DOSPALOS Filler: BHS Dox Heat: an
 Location: DOSPALOS G.A Am Temp: 52 Nozzel: 311
 Unit: Unloaded P. Bar: 30.05 Prob Heat: an
 Date: 10/31/94 Pilot: #1 .833 Wind Val: Lock
 Run#: #1 M-S Pyro: #1 1.0 Static Ps: 0.02
 Cold Box: 1 Mag ΔP: M-2 1.005 O2: 20.9
 Meter #: A Map ΔH: M-9 8.140 CO2: 0.05
 Meter Fac: .9572 X H2O: 0.03
 AP 1.7813

Stack Dia: 26
 "A" 62
 "B" >200

Imp	Gross	Tare	Final
1	608.7	611.2	
2	583.6	582.3	
3	478.8	477.2	
1	54.9	654.2	

8:07

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meler Vol	Inlet Temp	Outlet Temp	Vec.
1		8.08	0.0	67	0.0	.95	438.446	54	53	
2			5	70	.1	.95	4142.1	56	56	
3			10	70	.12	1.14	4411.5	58	58	2
4			15	72	.15	1.48	446.9	59	60	2
5			20	72	.25	2.37	4151.9	61	63	
6			25	74	.3	2.85	4550.	61	68	3
7		8.58	30	71	.15	1.43	4581.637	78	73	
8		8.11	35	75	.30	2.85	4161.2	72	74	
9			40	76	.30	2.85	4161.5	72	75	
10			45	76	.12	1.14	470.6	77	78	
11			50	76	.12	1.14	473.2	76	77	
12			55	77	.1	.95	476.3	78	77	
1		9.11	60				4789.19			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>.60</u>	ΔP <u>.135</u>	CFM: <u><0.008</u>	IN. HG <u>25</u>
ΔP <u>.60</u>	ΔP <u>.135</u>	CFM: <u>0.000</u>	IN. HG <u>7</u>
ΔH <u>.72</u>	ΔH <u>.65</u>	Notes: <u>9.5</u>	
ΔH <u>.72</u>	ΔH <u>.65</u>		

1.46

Plant: Dos Dalgos Filler: B-46 Dox Heat: on
 Location: 7" " G.N Am Temp: 59 Nozzel: 307
 Unit: Unloading P. Bar: 30.05 Prob Heat: on
 Date: 10/31/94 Pilot: #1 Wind Vol: Cal
 Run #: 2 M-5 Pyro: #1 Static Ps: -0.02
 Cold Box: 3 Mag ΔP: M-2 O2: 209
 Meter #: B Map ΔH: M-9 CO2: 0.05
 Meter Fac: 9572 X. I/20: 0.03

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1	600.7	6102	
2	582.7	5843	
3	468.2	467.8	
1	580.5	577.2	

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
		9.34	0.0	76	.3	2.7	479.100	82	83	4
			5	80	.3	2.7	483.1	82	82	
			10	80	.15	1.35	486.2	81	83	
			15	82	.1	.9	491.5	86	84	
			20	82	.1	.9	494.2	85	85	
			25	83	.15	1.35	496.4	86	86	
		10.84	30	82	.1	.9	500.276	87	87	
		10.16	35	82	.15	1.35	502.11	89	88	
			40	82	.15	1.35	505.5	89	90	
			45	82	.25	2.25	508.9	91	90	
			50	83	.2	1.8	513.0	93	92	
			55	83	.25	2.25	516.7	93	93	3
		10.86	60				521.167			

Leak Checks:

ΔP 1.35 ΔP 1.20 CFM: 20.007 IN. HG 17
 ΔP 1.35 ΔP 1.20 CFM: 0.000 IN. HG 9
 ΔH .73 ΔH 1.0 Notes: 9.0
 ΔH .73 ΔH 1.0

Plant: Dos Palos
 Location: 1 " G.L.
 Unit: unloading
 Date: 10/31/94
 Run #: M-53
 Cold Box: 3
 Meter #: A
 Meter Fac: .9572

Filler: B47
 Am Temp: 62
 P. Bar: 30.05
 Pilot: #1
 Pyro: #1
 Mag ΔP: m-2
 Map All: m-9
 X. H2O: 0.03

Dox Heat: on
 Nozzel: .304
 Prob Heat: on
 Wind Vol: Calu
 Static Ps: -0.02
 O2: 20.9
 CO2: 0.05

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

Imp	Gross	Tare	Final
1	596.4	596.4	585.3
2	596.2	596.2	596.7
3	477.7	477.7	477.4
1	654.9	654.9	654.4

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	All	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
		10:57	0.0	84	.15	1.35	521.329	95	96	
			5	86	.15	1.35	524.7	95	97	
			10	87	.2	1.8	527.7	95	92	
			15	87	.15	1.35	532.7	94	90	
			20	89	.15	1.35	535.7	95	95	
			25	89	.3	2.7	538.5	96	95	5
		11:27	30	89	.3	2.7	543.00	97	96	5
		11:30	35	91	.3	2.7	546.8	97	98	
			40	88	.1	.9	552.3	98	99	
			45	80	.15	1.35	551.0	98	92	
			50	81	.1	.9	557.9	97	98	
		11:55	55	76	.1	.9	560.7	97	96	
		12:52	60				563.579			

Leak Checks:

ΔP 1.45
 ΔP 1.45

ΔP .95
 ΔP .95

CFM: 6.002 IN.HG 20
 CFM: 0.000 IN.HG 10

ΔH 1.95
 ΔH 1.75

ΔH 1.05
 ΔH 1.05

Notes: 7

0.00 to 5.1

Plant: <u>DP</u>	Filter: <u>S-31, F61 F62</u>	Box Heat: <u>on</u>
Location: <u>DPG in</u>	Am Temp: <u>52</u>	Nozzel: <u>280</u>
Unit: <u>10/31/94</u>	P. Bar: <u>3005</u>	Prob Heat: <u>on</u>
Date: <u>10/31/94</u>	Pilot: <u>1</u>	Wind Vol: <u>None</u>
Run #: <u>1 PM-10</u>	Pyro: <u>1</u>	Static Ps: <u>-0.02</u>
Cold Box: <u>?</u>	Mag ΔP: <u>11-2</u>	O2: _____
Meter #: <u>B</u>	Map Alt: <u>M-7, 999</u>	CO2: _____
Meter Fac: <u>9723</u>	% H2O: <u>0.03</u>	

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Tray Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
			0.0	67	.1	1.0	664.600	51	51	3
			4.5	70	.2		667.2	55	53	
		11.25	6.75	70	.25		669.6	59	56	
		19.75	7.5	72	.1		674.0	67	59	
		23.25	4.5	72	.15		676.8	62	65	
		28.75	5.5	74	.05		679.7	70	65	
		31.75	3	71	.05		682.34	70	66	
		34.75	3	75	.1		682.7	71	67	
		39.25	4.5	76	.12		684.9	73	68	
		44.75	5	77	.1		687.4	74	71	
		48.75	4.5	75	.15		690.4	72	75	
		54.25	5.5	77	.12	∇	692.9	77	73	∇
	9.11	60	5				695.475			

Leak Checks:

ΔP <u>1.60</u>	ΔP <u>1.35</u>	CFM: <u>20.002</u>	IN, HG <u>26</u>	149
ΔP <u>.60</u>	ΔP <u>1.35</u>	CFM: <u>6.002</u>	IN, HG <u>10</u>	
ΔH <u>.77</u>	ΔH <u>.65</u>	Notes: _____		
ΔH <u>.72</u>	ΔH <u>.65</u>	_____		

Plant: <u>Dos Palos</u>	Filter: <u>E-38, 075 F76</u>	Dox Heat: <u>on</u>
Location: <u>" " Gin</u>	Air Temp: <u>59</u>	Nozzle: <u>28</u>
Unit: <u>Unloader</u>	P. Bar: <u>30.05</u>	Prob Heat: <u>on</u>
Date: <u>10/31/94</u>	Pilot: <u>#1</u>	Wind Vol: <u>Cal</u>
Run #: <u>2 PM-10</u>	Pyro: <u>#1</u>	Static Ps: <u>-0.02</u>
Cold Dox: <u>4</u>	Mag ΔP: <u>M2</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map All: <u>M-1</u>	CO2: <u>0.05</u>
Meter Fac: <u>923</u>	% IJ20: <u>0.03</u>	

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	Vec.
1		21.34		0.0	76	.1	1.0	695.625	70	72	.3
2				3.5	80	.12		697.7	72	70	
3			7.5	4	80	.12		699.5	75	71	
4			11.5	4	82	.3		703.9	72	74	
5			14.5	7	82	.3		706.7	80	76	
6			25.5	7	83	.15		709.0	81	77	
7		10:04	30	4.5	82	.3		712.453	81	78	
8		10:06	37	7	82	.25		715.6	72	79	
9			43.25	6.25	82	.15		717.6	80	84	
10			47.75	4.5	82	.12		720.12	80	81	
11			52.5	4.5	83	.1		722.14	82	82	
12			56	3.25	83	.1	▽	776.8	89	83	
1		10:36	60	3.5				729.747			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP <u>1.35</u>	ΔP <u>1.20</u>	CFM: <u>20,000</u>	IN. HG <u>10</u>
ΔP <u>1.35</u>	ΔP <u>1.12</u>	CFM: <u>0.0004</u>	IN. HG <u>6</u>
ΔH <u>.73</u>	ΔH <u>1.0</u>	Notes: _____	
ΔH <u>.73</u>	ΔH <u>1.0</u>		

150

2,01574

Plant: Des Palos Filler: E-28, F56, F55 Box Heat: on
 Location: Underground in Am Temp: 67 Nozzel: .25
 Unit: Underground P. Bar: 30.05 Prob Heat: on
 Date: 10/31/94 Pilot: #1 Wind Vol: Calm
 Run #: Run 3 PM-10 Pyro: #1 Static Ps: 0.07
 Cold Box: 2 Mag ΔP: M-2 O2: 20.9
 Meter #: B Map Alt: M-1 CO2: 0.05
 Meter Fac: .9723 % H2O: 0.07

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	Vec.
1	10:55	10:57	0.0	84	.25	1	729.500	79	82	4
2			6.25	86	.3		732.2	83	79	
3		13.75	7.5	87	.15		734.9	85	81	
4		17.75	4.5	89	.1		732.6	88	84	
5		21.75	3.5	89	.1		740.0	88	85	
6		24.75	3.5	89	1.5		742.2	87	85	
7	11:22	26.75	4.5	89	.1		744.653	88	86	
8	11:30	31.75	3.5	89	.15		747.3	90	86	
9		36.75	4.5	88	.15		756.4	92	87	
10		40.75	4.5	80	.25		753.2	93	88	
11		47	6.25	81	.2		755.6	91	89	
12	11:55	53.75	5.5	76	.25	6	758.6	79	77	
1	12:42	60	6.25				761.3567			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP 1.15 ΔP .9 CFM: 10.002 IN.HG 76
 ΔP 1.45 ΔP .9 CFM: 1.001 IN.HG 6 151

ΔH 1.75 ΔH 1.05'
 ΔH 1.75 ΔH 1.05

Notes: _____

COTTON GIN SOURCE TEST DATA						Date: 10/31/94	
GINNING PROCESS - Unloading						RUN # 1	
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			8:08		6	511	8:57
	3327720	488	8:09		7	517	8:58
	1	491	8:10		8	511	9:00
	2	493	8:12		9	517	9:02
	3	481	8:13		3327710	514	9:03
	4	487	8:14		1	506	9:05
	5	493	8:15		2	463	9:08
	6	500	8:17			END	9:11
	7	488	8:19		41	201.9	60 min
	8	500	8:20				
	9	492	8:21				
	3327720	474	8:22				
	1	478	8:24				
	2	488	8:25				
	3	487	8:26				
	4	475	8:28				
	5	469	8:29				
	6	477	8:30				
	7	507	8:31				
	8	471	8:33				
	9	490	8:34				
	3327790	499	8:36				
	1	511	8:37				
	2	475	8:38				
	5	492	8:43				
	6	494	8:44				
	7	492	8:45				
	8	492	8:46				
	9	493	8:47				
	3327800	485	8:49				
	1	483	8:50				152
	2	481	8:52	A. TOTAL LINT GINNED (lbs.)		20.149	
	3	493	8:53	B. TOTAL STANDARDS BALES (A/500)		40.298	
	4	509	8:54	C. TIME (hrs.)		1.00	
	5	473	8:56	D. TOTAL STD. BALES PER HOUR (B/C)		40.298	

COTTON GIN SOURCE TEST DATA							Date: 10/31/94
GINNING PROCESS - Unloadive							RUN # 2
	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME
START			9:34		2	496	10:24
	3327827	496	9:35		3	500	10:25
	8	475	9:36		4	515	10:27
	9	460	9:37		5	511	10:28
	3327830	489	9:38		6	484	10:29
	1	490	9:40		7	491	10:30
	2	484	9:41		8	480	10:31
	3	486	9:43		9	498	10:32
	4	505	9:45		3327870	477	10:33
	5	478	9:46		1	486	10:34
	6	474	9:47		2	495	10:35
	7	474	9:49		3	480	10:36
	8	492	9:50			END	10:36
	9	492	9:52		46	22578	60 min
	3327840	488	9:53				
	1	507	9:55				
	2	514	9:57				
	3	484	9:58				
	4	485	10:00				
	5	480	10:01				
	6	525	10:03				
	7	493	10:04				
	9	498	10:07				
	3327850	484	10:08				
	1	515	10:10				
	2	468	10:11				
	3	467	10:13				
	4	505	10:14				
	5	477	10:15				
	6	487	10:16				153
	7	475	10:17				
	8	469	10:19				
	9	517	10:20				
	3327860	534	10:21				
	1	496	10:23				
A. TOTAL LINT GINNED (lbs.)							22578
B. TOTAL STANDARDS BALES (A/500)							45.156
C. TIME (hrs.)							1.00
D. TOTAL STD. BALES PER HOUR (B/C)							45.156

COTTON GIN SOURCE TEST DATA

Date: 10/31/94

GINNING PROCESS - 1200/1200

RUN # 3

	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME	
START			10:57					
	3327889	486	10:59		34 Bales	16916	12:52	
	3327890	515	11:00				60 min	
	1	511	11:02					
	2	499	11:03					
	3	479	11:05					
	4	510	11:07					
	5	498	11:09					
	6	479	11:10					
	7	470	11:11					
	8	490	11:12					
	9	491	11:13					
	3327900	507	11:14					
	1	503	11:15					
	2	480	11:16					
	3	497	11:17					
	4	490	11:18					
	5	484	11:20					
	6	490	11:21					
	7	476	11:23					
	8	490	11:24					
	9	479	11:25					
	3327910	460	11:26					
	1	454	11:27					
	4	510	11:31					
	5	506	11:32					
	6	466	11:33					
	7	480	11:34					
	8	522	11:37					
	9	508	11:44					
	3327920	460	11:45				154	
	1	464	11:46					
	2	478	11:47					
	4	499	12:50					
	5	491	12:52					
						A. TOTAL LINT GINNED (lbs.)		16916
						B. TOTAL STANDARDS BALES (A/500)		33.832
						C. TIME (hrs.)		1.00
						D. TOTAL STD. BALES PER HOUR (B/C)		33.832

11:27
11:30

11:55
12:52

OVERFLOW
CYCLONE

Plant: DOS PALA G Filler: B-48 Dox Heat: on
 Location: DOS PALA G Am Temp: 75 Nozzel: 295
 Unit: Over Flow P. Bar: 30.05 Prob Heat: on
 Date: 10/31/94 Pilot: #1 5833 Wind Vol: Calc
 Run#: 1 M-5 Pyro: 41 1.0 Static Ps: _____
 Cold Box: S Mag ΔP: M-2 O2: 209
 Meter #: A Map All: M-9 CO2: 0.05
 Meter Fac: 9572 X. IJ20: 0.03

Stack Dia: 26
 "A" 56 72
 "B" 200

Imp	Gross	Tare	Final
1	575.9	584.3	
2	584.0	507.8	
3	467.3	467.7	
4	580.3	580.1	

	Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
1	1.2		150	0.0	91	.15	1.14	563.848	93	93	
2	3.8			5	95	.2	1.52	566.7	93	92	
3	7.2			10	96	.15	1.14	575.1	93	92	
4	18.3			15	97	.2	2.28	575.1	94	94	35
5	22.2			20	97	.2	1.52	577.2	98	95	
6	24.8			25	97	.15	1.14	583.5	97	96	
7			220	30	98	.35	2.66	585.2	97	97	35
8			222	35	92	.4	3.0	587.6	99	99	4
9				40	96	.4	3.0	593.0	104	100	
10				45	95	.35	2.66	598.4	102	101	
11				50	95	.15	1.14	603.6	103	103	
12				55	96	.1	.76	606.3	103	102	
1			257	60				608.846			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP 1.65
 ΔP 1.65

ΔP 1.2
 ΔP 1.2

CFM: 60.002 IN.HG 18
 CFM: 60.003 IN.HG 12

156

ΔH 1.25
 ΔH 1.25

ΔH 1.37
 ΔH 1.37

Notes: 7.6

Plant: Los Palos CA Filler: B-49 Box Heat: on
 Location: Los Palos Am Temp: 7 Nozzel: 295
 Unit: OverFlow P. Bar: 35.05 Prob Heat: on
 Date: 10/31/90 Pilot: 2 Wind Vol: 2.2
 Run #: 3 MS Pyro: #1 Static Ps: 0.05
 Cold Box: 5 Mag ΔP: 11.7 O2: 20.9
 Meter #: A Map Alt: m-9 CO2: 0.05
 Meter Fac: .9572 % H2O: (0.0)

Slack Dia: 20
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1	6033	616.1	
2	6085	604.0	
3	4763	476.5	
1	684.0	654.4	

Trav Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1		3:13	0.0	96	.35	2.106	609.403	103	104	4
2			5	97	.35	2.66	613.8	107	103	
3			10	97	.3	2.28	618.7	103	104	
4			15	96	.25	1.9	622.1	105	105	
5			20	96	.15	1.11	625.5	104	105	
6			25	96	.1	.76	629.1	104	105	
7		3:45	30	95	.2	1.52	631.512	104	105	
8		3:45	35	94	.2	1.52	635.7	105	106	
9			40	96	.15	1.14	638.7	105	105	
10			45	96	.2	2.258	641.8	105	106	
11			50	.97	.2	1.52	644.5	107	106	
12			55	96	.15	1.14	650.7	105	106	
1		4:15	60				655.120			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>75</u>	ΔP <u>70</u>	CFM: <u>6000</u>	IN.HG <u>21</u>	157
ΔP <u>25</u>	ΔP <u>70</u>	CFM: <u>0000</u>	IN.HG <u>8</u>	
ΔH <u>1.35</u>	ΔH <u>1.2</u>	Notes: <u>2.6</u>		
ΔH <u>1.35</u>	ΔH <u>1.2</u>			

Plant: <u>Dodatos G.u</u>	Filler: <u>C-1</u>	Dox Heat: <u>on</u>
Location: <u>Des PAB's</u>	Am Temp: <u>75</u>	Nozzel: <u>.295</u>
Unit: <u>Orwell</u>	P. Bar: <u>30.03</u>	Prob Heat: <u>on</u>
Date: <u>10/31/94</u>	Pilot: <u>#1 .833</u>	Wind Vol: <u>(dry)</u>
Run #: <u>M-53</u>	Pyro: <u>#1 1.0</u>	Static Ps: <u>-0.05</u>
Cold Box: <u>7</u>	Mag ΔP: <u>M-2</u>	O2: <u>20.9</u>
Meter #: <u>A</u>	Map All: <u>M-9</u>	CO2: <u>0.05</u>
Meter Fac: <u>.9572</u>	%.I20: <u>0.03</u>	

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1	584.9	595.4	
2	578.4	577.6	
3	469.6	467.7	
4	580.3	580.3	

Trav Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Ycc.
1		4.38	0.0	97	.7	1.29	653.700	104	107	0
2			5	95	.15	1.14	658.16	105	105	
3			10	95	.12	.91	660.6	106	104	
4			15	96	.2	1.52	663.98	103	104	
5			20	97	.25	1.9	666.3	103	107	
6		5.08	25	94	.15	1.14	670.5	102	102	
7		5.09	30	93	.4	3.01	674.10	107	102	3
8			35	92	.11	3.04	677.0	102	102	
9			40	93	.30	2.28	682.2	102	102	
10			45	91	.2	1.52	688.2	102	104	
11			50	.91	.1	.76	690.3	102	103	
12			55	91	.1	.76	693.9	102	102	
1		5.301	60				695.305			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>.95</u>	ΔP <u>1.30</u>	CFM: <u>20.002</u>	IN, HG <u>70</u>
ΔP <u>.95</u>	ΔP <u>1.30</u>	CFM: <u>0.000</u>	IN, HG <u>7</u>
ΔH <u>.60</u>	ΔH <u>.75</u>	Notes: <u>.76</u>	
ΔH <u>.60</u>	ΔH <u>.75</u>		

0,00069

Plant: <u>DE FARE</u>	Filler: <u>S-44, C-87, F-88</u>	Box Heat: <u>on</u>
Location: <u>11 11 G.V.</u>	Am Temp: <u>75</u>	Nozzel: <u>70</u>
Unit: <u>Ox. & Flow</u>	P. Bar: <u>20.05</u>	Prob Heat: <u>on</u>
Date: <u>10/31/90</u>	Pilot: <u>#1 8.33</u>	Wind Vol: <u>none</u>
Run #: <u>1 PM-10</u>	Pyro: <u>#1 1.0</u>	Static Ps: <u>-0.05</u>
Cold Box: <u>2</u>	Mag ΔP: <u>M-7</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map ΔH: <u>M-7</u>	CO2: <u>0.05</u>
Meter Fac: <u>9723</u>	% H2O: <u>0.03</u>	

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	Ycc.
1		1.50	0.0	91	0.15	1.0	761.584	77	76	4
2			4.25	95	.15		763.9	79	77	
3			4.25	96	.15		766.3	81	78	
4			4.25	97	.2		769.6	85	81	
5			5	97	.2		771.9	87	83	
6			5	97	.12		772.6	88	86	
7		2.20	35	98	.25		777.6	89	87	5
8		2.22	6.75	97	.25		779.8	91	88	
9			7	96	.35		782.9	93	89	
10			6.75	95	.25		786.6	90	94	
11			55	95	.15		786.5	96	91	
12			11.5	96	.1		791.1	97	91	
1		2.52	3.25				793.955			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>.65</u>	ΔP <u>1.2</u>	CFM: <u>20002</u>	IN, HG <u>74</u>
ΔP <u>.65</u>	ΔP <u>1.2</u>	CFM: <u>200</u>	IN, HG <u>7</u>
ΔH <u>1.25</u>	ΔH <u>1.37</u>	Notes: _____	
ΔH <u>1.25</u>	ΔH <u>1.37</u>	_____	

150

Plant: Dos Delos Filler: S-32, F64, F63 Box Heat:
 Location: " " Gir Am Temp: 75 Nozzel: 1280
 Unit: Overflow P. Bar: 305 Prob Heat: on
 Date: 10/31/90 Pilot: #1 82? Wind Vol: 1000
 Run #: R112 PM-10 Pyro: #1 1.0 Static Ps: 0.05
 Cold Box: 7 Mag ΔP: 11-2 O2: 20.5
 Meter #: B Map Alt: (11-) CO2: 0.05
 Meter Fac: .9977 % H2O: 0.03

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

Trav Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1			0.0	96	.1	1.6	794.265	87	89	
2			3.0	97	.15		797.2	91	87	
3			3.75	94	.35		800.0	92	88	3
4			6.75	96	.4		803.0	89	90	5
5			7	96	.4		805.8	95	88	
6		3.43	7	96	.35		809.2	91	96	
7		3.45	6.25	95	.15		812.119	90	91	
8			3.25	94	.2		815.7	97	91	
9			4.75	96	.3		819.0	98	94	
10			5.75	96	.15		820.7	98	90	
11			3.75	97	.2		824.2	99	94	
12			4.75	96	.15		826.9	99	95	
1		4.15	4.0				829.572			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP 175
 ΔP 175

ΔP 170
 ΔP 175

CFM: 10,002
 CFM: 670

IN. HG 21
 IN. HG 7

ΔH 1.35
 ΔH 1.25

ΔH 1.2
 ΔH 1.6

Notes: _____

0.000025

Plant: <u>Dos Palos C/A</u>	Filler: <u>832 864 863</u>	Box Heat: <u>on</u>
Location: <u>Dos Palos</u>	Am Temp: <u>75</u>	Nozzel: <u>780</u>
Unit: <u>OverFlow</u>	P. Bar: <u>30.05</u>	Prob Heat: <u>on</u>
Date: <u>10/31/94</u>	Pilot: <u>#1, 833</u>	Wind Vol: <u>Calu</u>
Run #: <u>PM-10 Run 3</u>	Pyro: <u>#1</u>	Static Ps: <u>-0.05</u>
Cold Box: <u>Z</u>	Mag ΔP: <u>11-2</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map ΔH: <u>11-1</u>	CO2: <u>0.05</u>
Meter Fac: <u>.9723</u>	% I/20: <u>0.07</u>	

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	Vec.
1		4.38	0.0	97	.15	1.0	829.728	91	86	Z
2			4	95	.2	1.0	834.1	90	90	
3			4.75	95	.3		836.3	92	86	
4			6	96	.15		839.2	92	88	
5			4	97	.2		841.6	93	88	
6		5.09	4.75	94	.2		844.5	94	88	
7		5.09	4.75	93	.1		847.7	93	87	
8			3	92	.15		849.5	94	87	
9			4	93	.25		852.3	95	87	
10			5.5	91	.2		846.3	96	89	
11			6.25	91	.35		857.4	96	89	
12			6.5	91	.35		861.7	96	89	
1		5.39	6.5				863.536			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>595</u>	ΔP <u>1.30</u>	CFM: <u>10.00E</u>	IN.HG <u>27</u>
ΔP <u>195</u>	ΔP <u>1.20</u>	CFM: <u>0.807</u>	IN.HG <u>5</u>
ΔH <u>1.2</u>	ΔH <u>85</u>	Notes: _____	
ΔH <u>1.2</u>	ΔH <u>65</u>	_____	

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COTTON GIN SOURCE TEST DATA							Date: 10/31/94
GINNING PROCESS - OVERFLOW							RUN # 1
	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME
START			1:50			End	2:52
	3327967	520	1:51		24	16636	60 ^{min}
	8	517	1:53				
	9	474	1:54				
	3327970	480	1:56				
	1	478	1:57				
	2	475	1:59				
	3	474	2:00				
	4	477	2:02				
	5	473	2:04				
	6	502	2:05				
	7	466	2:07				
	8	505	2:08				
	9	513	2:10				
	3327980	510	2:12				
	1	476	2:12				
	2	483	2:14				
	3	500	2:15				
	4	491	2:17				
	5	487	2:18				
	6	488	2:20				
	8	478	2:25				
	9	468	2:31				
	3327990	460	2:35				
	1	472	2:37				
	2	500	2:39				
	3	519	2:40				
	4	507	2:41				
	5	492	2:43				
	6	500	2:44				162
	7	508	2:46				
	8	510	2:47				
	9	469	2:49				
	3328000	485	2:50				
	1	479	2:51				
A. TOTAL LINT GINNED (lbs.)						16,636	
B. TOTAL STANDARDS BALES (A/500)						33.272	
C. TIME (hrs.)						1.00	
D. TOTAL STD. BALES PER HOUR (B/C)						33.272	

COTTON GIN SOURCE TEST DATA						Date: 10/31/94	
GINNING PROCESS - Over Flow						RUN # 2	
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			3:13		1	502	4:02
	3328016	492	3:14		2	478	4:03
	7	488	3:15		3	486	4:05
	8	484	3:16		4	484	4:06
	9	490	3:17		5	474	4:08
	3328020	484	3:19		6	508	4:10
	1	491	3:20		7	474	4:11
	2	476	3:21		8	489	4:13
	3	478	3:22		9	480	4:14
	4	511	3:24		3328060	483	4:15
	5	501	3:26			End	4:15
	6	492	3:27		44 bales	21482	60 min
	7	486	3:28				
	8	489	3:30				
	9	504	3:31				
	3328030	514	3:32				
	1	472	3:34				
	2	522	3:35				
	3	510	3:36				
	4	470	3:37				
	5	514	3:39				
	6	504	3:40				
	7	497	3:41				
	8	501	3:43				
	3328040	470	3:46				
	1	471	3:47				
	2	475	3:49				
	3	473	3:50				
	4	473	3:51				
	5	482	3:53				
	6	486	3:54				
	7	477	3:55				
	8	476	3:57				
	9	478	3:59				
	3328050	479	4:00				
A. TOTAL LINT GINNED (lbs.)						21482	
B. TOTAL STANDARDS BALES (A/500)						42.964	
C. TIME (hrs.)						1.00	
D. TOTAL STD. BALES PER HOUR (B/C)						42.964	

COTTON GIN SOURCE TEST DATA							Date: 10/31/94
GINNING PROCESS - Over Flow							RUN # 3
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			4:38		7	515	5:37
	3328072	492	4:39		8	475	5:39
	3	492	4:40			Encl	5:39
	4	493	4:42		36	17483	60 min
	5	477	4:44				
	6	479	4:45				
	7	486	4:46				
	8	490	4:47				
	9	497	4:49				
	3328080	484	4:50				
	1	467	4:52				
	2	473	4:53				
	3	476	4:55				
	4	480	4:56				
	5	470	4:58				
	6	472	4:59				
	7	474	5:00				
	8	504	5:02				
	9	477	5:04				
	3328090	480	5:05				
	1	499	5:07				
	3	496	5:10				
	4	510	5:11				
	5	484	5:13				
	6	496	5:15				
	7	489	5:20				
	8	479	5:24				
	9	470	5:25				
	3328100	496	5:27				
	1	480	5:29				164
	2	499	5:30				
	3	483	5:32				
	4	465	5:33				
	5	467	5:34				
	6	497	5:36				
A. TOTAL LINT GINNED (lbs.)							17483
B. TOTAL STANDARDS BALES (A/500)							34966
C. TIME (hrs.)							1:00
D. TOTAL STD. BALES PER HOUR (B/C)							35.0

MOTES
CYCLONE

Plant: Dos Dolos G.h
 Location: " 4
 Unit: MOTR
 Date: 11/194
 Run #: 1 M-S
 Cold Box: 3
 Meter #: A
 Meter Fac: 9572

Filler: C-2
 Am Temp: 49
 P. Bar: 28.85
 Pilot: #1 833
 Pyro: #1 1.0
 Mag ΔP: 1.005
 Map Alt: 1.9 OPAF
 X. 1/20: 0.03

Box Heat: on
 Nozzle: 26
 Prob Heat: on
 Wind Vel: Calu
 Static Ps: -0.25
 O2: 20.9
 CO2: 0.05

17813

Stack Dia: 26
 "A"
 "B"

Imp	Gross	Tare	Final
1	6714	670.8	
2	606.7	656	
3	4770	476.4	
1	654.6	671.0	

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	Alt	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
		7.19	0.0	57	.5	2.12	695.625	49	49	4
			5	59	.5	2.12	697.540	51	51	4
			10	61	.48	2.04	700.216	53	52	4
			15	62	.4	1.7	704.5	56	55	
			20	62	.32	1.36	707.5	57	58	
			25	62	.3	1.27	710.9	60	59	
	7.49		30	63	.25	1.06	714.499	63	63	
	7.52		35	66	.25	1.06	717.6	66	66	
			40	69	.25	1.06	720.1	67	67	
			45	66	.6	2.53	722.8	69	67	5.
			50	67	.6	2.55	726.9	71	68	
			55	68	.65	2.76	732.1	73	72	
	8.22		60				736.819			

Leak Checks:

ΔP 25
 ΔP 25

ΔP 50
 ΔP 8

CFM: 0.00 IN.HG 61
 CFM: 0.00 IN.HG 7

ΔH 90
 ΔH 90

ΔH 1.25
 ΔH 1.25

Notes: 4.25

Plant: DOSPALOS G-2 Filler: C-3 Box Heat: on
 Location: " " Am Temp: 55 Nozzel: .745
 Unit: MOTES P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 Wind Vol: Calu
 Run #: Run 2 W/S Pyro: #1 Static PS: 0.25
 Cold Box: S Mag ΔP: 11.7 O2: 20.9
 Meter #: B Map Alt: 11.7 CO2: 0.05
 Meter Fac: .9572 % I/20: 0.03

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1	576.7	5835	
2	580.2	580.4	
3	468.1	467.9	
4	580.8	580.3	

Trav Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
1		8.39	0.0	66	.22	.85	737.114	75	75	
2			5	73	.25	1.06	742.1	76	76	
3			10	73	.25	1.06	744.3	76	76	
4			15	74	.5	2.12	746.2	78	76	
5			20	74	.65	2.76	750.9	77	77	4.5
6			25	75	.6	2.55	756.0	79	79	
7		9.09	30	74	.5	2.12	760.372	79	80	
8		9.11	35	76	.45	1.91	763.9	80	81	
9			40	78	.15	1.91	767.7	82	81	
10			45	77	.9	1.7	777.9	85	83	
11			50	77	.4	1.12	775.8	83	84	
12		9.11	55	77	.3	1.27	790.4	87	86	
1			60				783.715			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP .65 ΔP 1.0 CFM: 4000 IN.HG 19
 ΔP .65 ΔP 1.0 CFM: 0.003 IN.HG 6
 ΔH 1.0 ΔH 1.2 Notes: 4.25
 ΔH 1.0 ΔH 1.7

Plant: DOSPALCO Filler: C-4 Dox Heat: on
 Location: " 4 Am Temp: 58 Nozzel: .745
 Unit: MOI-2 P. Bar: 28.85 Prob Heat: on
 Date: 11/1/74 Pilot: #1 Wind Vol: Calm
 Run#: U-S 3 Pyro: #1 Static Ps: 0.25
 Cold Box: 1 Mag ΔP: 11-2 O2: 20.7
 Meter #: B Map Alt: m 9 CO2: 0.03
 Meter Fac: .9572 X. I/20: 0.03

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

Imp	Gross	Tare	Final
1	593.1	596.6	
2	567.1	567.1	
3	478.1	477.4	
1	658.8	654.0	

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
1		9:57	0.0	80	.5	2.12	783.829	89	88	
2			5	78	.53	2.33	786.2	89	89	2
3			10	78	.5	2.12	792.3	89	88	
4			15	80	.4	1.7	798.5	89	90	
5			20	80	.35	1.48	800	91	90	
6			25	81	.3	1.27	803.6	91	91	
7			30	82	.2	.85	807.472	82	91	
8		10:27	35	84	.3	1.27	810.2	91	92	
9		10:30	40	84	.3	1.27	812.7	92	93	
10			45	84	.4	1.7	816.5	93	94	
11			50	84	.53	2.34	820.1	93	94	
12			55	83	.6	2.55	824.7	75	95	3
1		11:00	60				828.857			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP .75 ΔP .9 CFM: 0.002 IN.HG 71 168
 ΔP .75 ΔP .9 CFM: 0.000 IN.HG 7
 ΔH .60 ΔH .8 Notes: 4/25
 ΔH .60 ΔH .8

0100327

Plant: <u>DSPalos ch</u>	Filler: <u>542, F84 F83</u>	Box Heat: <u>an</u>
Location: <u>" "</u>	Am Temp: <u>49</u>	Nozzel: <u>.24</u>
Unit: <u>MOTES</u>	P. Bar: <u>28.85</u>	Prob Heat: <u>an</u>
Date: <u>11/1/94</u>	Pilot: <u>1.837</u>	Wind Vol: <u>Calu</u>
Run #: <u>Run 1 PM-10</u>	Pyro: <u>1 10</u>	Static Ps: <u>0.25</u>
Cold Box: <u>2</u>	Mag ΔP: <u>11-2 1005</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map All: <u>11.9 0.900</u>	CO2: <u>0.05</u>
Meter Fac: <u>0.723</u>	% I120: <u>0.03</u>	

Stack Dia: 26
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔI1	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1		7.19	0.0	57	.45	1.0	863.632	48	48	6
2			55	59	.5	1.0	866.651	52	50	6
3			6	61	.15	1.0	869.396	55	52	5
4			53	62	.35		872.5	57	55	
5			4.75	62	.3		874.9	60	56	
6			4.25	62	.3		877.7	62	59	
7			4.25	63	.23		880.485	63	61	
8		7.45	3.75	66	.2		883.7	67	62	
9		7.52	3.5	66	.2		886.1	69	64	
10			3.5	66	.15		888.7	70	65	
11			5.5	67	.6		891.7	72	67	
12			6.75	68	.6		894.8	73	68	
1		8.22	6.75				897.932			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>75</u>	ΔP <u>.98</u>	CFM: <u>0.002</u>	IN.HG <u>18</u>
ΔP <u>75</u>	ΔP <u>.8</u>	CFM: <u>0.003</u>	IN.HG <u>6</u>
ΔH <u>7</u>	ΔH <u>1.75</u>	Notes: _____	
ΔH <u>9</u>	ΔH <u>1.20</u>	Notes: _____	

169

0100074

Plant: <u>DSS PALOS 6</u>	Filler: <u>5-30 F69 F60</u>	Box Heat: <u>on</u>
Location: <u>A</u>	Am Temp: <u>55</u>	Nozzel: <u>215</u>
Unit: <u>MOTES</u>	P. Bar: <u>26.85</u>	Prob Heat: <u>on</u>
Date: <u>11/1/94</u>	Pilot: <u>#1</u>	Wind Vol: <u>None</u>
Run #: <u>2DM-10</u>	Pyro: <u>#1</u>	Static Ps: <u>-1.25</u>
Cold Box: <u>2</u>	Mag ΔP: <u>N-2</u>	O2: <u>20.9</u>
Meter #: <u>A</u>	Map Alt: <u>M-1</u>	CO2: <u>0.05</u>
Meter Fac: <u>977</u>	% IJ20: <u>0.03</u>	

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	Vcc.
1				0.0	66	.65	10	898.219	68	68	
2				0.5	73	.6		890.11	67	66	
3				1.25	74	.6		906.1	71	67	
4				2.25	74	.25		908.7	72	69	
5				3.25	74	.25		911.1	73	70	3
6				3.35	75	.25		914.0	77	72	
7		9.09		3.75	74	.3		916.525	76	74	
8		9.11		4	76	.32		918.8	78	74	
9				4.25	78	.4		921.6	79	76	
10				5	77	.48		925.2	82	72	
11				5.5	72	.5		922.1	83	87	
12				5.5	77	.5		930.6	81	80	
1		9.41		5.5				933.610			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP <u>1.5</u>	ΔP <u>1.0</u>	CFM: <u>10000</u>	IN, HG <u>26</u>	170
ΔP <u>1.65</u>	ΔP <u>1.0</u>	CFM: <u>6,000</u>	IN, HG <u>9</u>	
ΔH <u>1.0</u>	ΔH <u>1.2</u>	Notes: _____		
ΔH <u>1.0</u>	ΔH <u>1.2</u>	_____		

008

Plant: <u>DUSTMAG</u>	Filler: <u>S-40 S 79 F 80</u>	Box Heat: <u>on</u>
Location: <u>" "</u>	Am Temp: <u>56</u>	Nozzel: <u>.718</u>
Unit: <u>NOTES</u>	P. Bar: <u>22.85</u>	Prob Heat: <u>on</u>
Date: <u>11/1/94</u>	Pilot: <u>#1</u>	Wind Vol: <u>11g</u>
Run #: <u>Run 3 PM-10</u>	Pyro: <u>#1</u>	Static Ps: <u>.75</u>
Cold Box: <u>9</u>	Mag ΔP: <u>11-2</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map all: <u>M-1</u>	CO2: <u>0.05</u>
Meter Fac: <u>9723</u>	% IJ20: <u>0.03</u>	

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Tray Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	all	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1				0.0	80	.3	1.0	933.105	79	77	
2				4.25	75	.4		935.7	79	76	
3				5	78	.4		938.8	77	81	
4				5	83	.45		942.6	80	83	
5				5.25	80	.45		944.7	81	81	S
6				5.75	81	.5		946.3	83	82	
7				5.75	82	.6		950.5	86	83	
8				5.75	82	.65		953.2	84	88	
9				5.75	84	.5		955.6	89	81	
10				5.75	84	.25		959.3	90	83	
11				5.75	84	.25		961.8	91	83	
12				5.75	83	.22		964.7	92	86	
1			11/00	5.75				965.0			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP: <u>.75</u>	ΔP: <u>9</u>	CFM: <u>20.002</u>	IN.HG: <u>74</u>	171
ΔP: <u>.75</u>	ΔP: <u>9</u>	CFM: <u>0.008</u>	IN.HG: <u>74</u>	
ΔH: <u>.60</u>	ΔH: <u>.8</u>	Notes: _____		
ΔH: <u>100</u>	ΔH: <u>.8</u>	_____		

COTTON GIN SOURCE TEST DATA							Date: 11/17/94
GINNING PROCESS - MOTCS							RUN # 1
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			7:19		9	500	8:10
	3328503	503	7:20		3328540	497	8:11
	4	482	7:22		1	492	8:13
	5	518	7:23		2	493	8:14
	6	485	7:24		3	484	8:15
	7	487	7:25		4	487	8:17
	8	492	7:27		5	515	8:18
	9	486	7:28		6	496	8:20
	3328510	500	7:29		7	524	8:21
	1	496	7:31		8	486	8:22
	2	487	7:32			END	8:22
	3	482	7:33		44	21445	60
	4	490	7:34				
	5	472	7:35				
	6	493	7:37				
	7	454	7:38				
	8	458	7:40				
	9	475	7:41				
	3328520	468	7:42				
	1	470	7:44				
	2	487	7:45				
	3	487	7:47				
	4	489	7:48				
	5	467	7:49				
	8	484	7:54				
	9	480	7:55				
	3328530	461	7:57				
	1	475	7:58				
	2	500	7:59				
	3	495	8:01				172
	4	476	8:03				
	5	487	8:04				
	6	495	8:06				
	7	508	8:07				
	8	482	8:09				
A. TOTAL LINT GINNED (lbs.)						21445	
B. TOTAL STANDARDS BALES (A/500)						42.89	
C. TIME (hrs.)						1:00	
D. TOTAL STD. BALES PER HOUR (B/C)						42.89	

COTTON GIN SOURCE TEST DATA						Date: <u>11/1/94</u>	
GINNING PROCESS - NOTES						RUN # <u>2</u>	
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			8:39		8	510	9:27
	3328563	512	8:40		9	503	9:28
	4	485	8:42		3328600	513	9:30
	5	500	8:43		1	515	9:31
	6	506	8:45		2	508	9:32
	7	474	8:46		3	515	9:33
	8	475	8:47		4	497	9:34
	9	477	8:48		5	507	9:36
	3328570	474	8:49		6	537	9:37
	1	525	8:50		7	520	9:38
	2	515	8:52		8	538	9:40
	3	520	8:54		9	539	9:41
	4	525	8:55			End	9:41
	5	516	8:57		46	23402	60 ^{min}
	6	517	8:58				
	7	519	9:00				
	8	524	9:01				
	9	480	9:03				
	3328580	488	9:04				
	1	492	9:05				
	2	491	9:06				
	3	508	9:08				
	4	507	9:09				
	6	501	9:12				
	7	507	9:13				
	8	504	9:14				
	9	498	9:15				
	3328590	496	9:16				
	1	536	9:17				
	2	512	9:19				173
	3	526	9:20				
	4	512	9:21				
	5	537	9:23				
	6	534	9:25				
	7	507	9:26				
A. TOTAL LINT GINNED (lbs.)						23402	
B. TOTAL STANDARDS BALES (A/500)						46.804	
C. TIME (hrs.)						1:00	
D. TOTAL STD. BALES PER HOUR (B/C)						46.804	

COTTON GIN SOURCE TEST DATA							Date: <u>11/17/94</u>
GINNING PROCESS - NOTES							RUN # <u>3</u>
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			9:57				
	10:06	498	10:06				
	10:07	511	10:07				
	10:10	490	10:10				
	10:11	514	10:11				
	10:13	503	10:13				
	10:14	509	10:14				
	10:15	501	10:15				
	10:16	500	10:16				
	10:17	486	10:17				
	10:19	501	10:19				
	10:20	503	10:20				
	10:21	509	10:21				
	10:22	499	10:22				
	10:23	487	10:23				
	10:24	478	10:24				
	10:25	524	10:25				
	10:27	513	10:27				
	10:32	532	10:32				
	10:40	541	10:40				
	10:41	501	10:41				
	10:42	536	10:42				
	10:44	490	10:44				
	10:45	485	10:45				
	10:46	493	10:46				
		End	11:00				
	24	12109	60 min				
							174
A. TOTAL LINT GINNED (lbs.)						12109	
B. TOTAL STANDARDS BALES (A/500)						24.218	
C. TIME (hrs.)						1.00	
D. TOTAL STD. BALES PER HOUR (B/C)						24.218	

DRYER #2
CYCLONE.

Plant: Das Dalos Gin Filler: C-5 Dox Heat: on
 Locallon: " " Am Temp: 69 Nozzel: 307
 Unit: Dyer #2 P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 .833 Wind Vol: Calc
 Run #: Rm M-5 Pyro: #1 1.0 Static Ps: -0.07
 Cold Box: 1 Mag ΔP: M-2 1.002 O2: 20.9
 Meter #: B .9572 Map All: M-9 .999 CO2: 0.05
 Meter Fac: AH@ 1.7813 % I2O: 0.03

Stack Dia: 26
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1	592.2	587.5	
2	546.2	565.2	
3	469.1	468.0	
1	580.7	580.8	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1			11:31	0.0	121	.20	1.72	829.040	97	96	3
2				5	121	.15	1.87	833.1	98	95	
3				10	118	.17	1.96	836.2	97	98	
4			11:46	15	118	.1	1.86	840.5	97	96	
5			12:44	20	95	.17	1.03	842.6	91	92	
6				25	116	.2	1.72	846.5	92	91	
7			12:54	30	117	.05	.43	850.0	92	93	
8			1:06	35	105	.05	.47	852.2	93	94	
9				40	114	.05	.43	856.7	90	93	
10				45	120	.15	1.29	859.7	86	95	
11				50	125	.2	1.72	859.4	95	95	
12				55	128	.25	2.15	862.4	96	97	4
1			1:30	60				866.903			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP 1.75
 ΔP 1.75

ΔP .90
 ΔP .90

CFM: 20.002 IN.HG 17
 CFM: 0.004 IN.HG 7

ΔH 2.0
 ΔH 2.0

ΔH 1.6
 ΔH 1.6

Notes: 8.6

176

Plant: DOS DMS 60 Filler: C-6 Box Heat: on
 Location: " " Am Temp: 59 Nozzel: _____
 Unit: Dryer 1 P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 Wind Vol: calm
 Run#: 2 M-S Pyro: #1 Static Ps: _____
 Cold Box: 1 Mag ΔP: M-7 O2: 20.9
 Meter #: B Map ΔH: M-9 CO2: 0.05
 Meter Fac: .9572 X. I/20: 0.03

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

Imp	Gross	Tare	Final
1	582.5	589.5	
2	573.0	574.7	
3	476.8	476.9	
1	650.7	646.4	

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
		1:49	0.0	111	.05	.43	867.115	97	97	
			5	111	.05	.43	869.16	97	97	
			10	113	.05	.43	872.1	95	97	
			15	114	.15	1.29	874.2	95	97	
			20	116	.2	1.77	877.9	95	96	3
		2:14	25	115	.25	2.15	880.7	96	96	3
			30	117	.15	1.29	885.4	95	95	
		2:21	35	115	.25	2.15	889.2	93	95	
			40	115	.2	1.77	892.1	95	95	
			45	117	.15	1.29	896.4	95	95	
			50	115	.1	.86	899.7	95	94	
			55	114	.15	1.29	901.6	94	94	
		2:58	60				905.735			

Leak Checks:

ΔP .35
 ΔP .35

ΔP .70
 ΔP .70

CFM: 20.000 IN.HG 20
 CFM: 0.000 IN.HG 6

177

ΔH .85
 ΔH .85

ΔH 1.0
 ΔH 1.0

Notes: 8.6

Plant: DOS PALOS G. Filler: C-7 Box Heat: on
 Location: " " Am Temp: 63 Nozzle: 307
 Unit: Dryer P. Bar: 26.85 Prob Heat: on
 Date: 11/1/91 Pilot: #1 Wind Vol: Calm
 Run #: 3 M-S Pyro: #1 Static Ps: _____
 Cold Box: S Mag ΔP: M-2 O2: 20.8
 Meter #: B Map Alt: M-9 CO2: 6.85
 Meter Fac: .9572 % H2O: 0.02

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

Imp	Gross	Tare	Final
1	609.5	605.0	
2	581.4	580.2	
3	468.7	466.5	
1	581.1	580.7	

	Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1			3.06	0.0	107	.2	1.72	905.913	96	98	
2				5	121	.25	2.15	909.7	94	96	3
3				10	121	.15	1.29	914.1	95	98	
4				15	125	.1	2.6	917.5	95	97	
5				20	120	.1	2.6	921.1	94	94	
6				25	117	.15	1.29	921.1	94	95	
7			3.36	20	117	.05	4.7	927.9	95	95	
8			33.8	25	121	.05	4.3	929.7	95	95	
9				40	118	.1	1.86	931.4	93	94	
10				45	119	.1	1.86	936.1	94	96	
11				50	129	.15	1.29	938.2	97	95	
12				55	125	.25	2.15	941.0	95	96	
1				60				945.918			
2			4.08								
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP 1.25
 ΔP 1.25

ΔP 1.75
 ΔP 1.70

CFM: 20.082
 CFM: 0.000

IN. HG 20
 IN. HG 16

178

ΔH 35
 ΔH 35

ΔH 1.8
 ΔH 1.8

Notes: 8.6

0100863

Plant: DOS PNO 36.0 Filter: E 37, F 73, F 74 Box Heat: on
 Location: " " Am Temp: 64 Nozzle: .28
 Unit: DMF# 2 P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 .833 Wind Vol: calm
 Run #: T PM-10 Pyro: #1 1.0 Static Ps: 0.07
 Cold Box: 2 Mag ΔP: M-2 1.005 O2: 20.9
 Meter #: A 9723 Map Alt: M-1 1.010 CO2: 0.05
 Meter Fac: AHC 2.0041 % IJ20: 0.03

Stack Dia: 26
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	all	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1		11:31	0.0	120	.15	1.0	967.773	80	82	4
2			6	121	.15		971.0	79	78	
3			6	118	.15		973.1	83	80	
4		11:46	6	118	.15		976.6	83	80	
5			6	95	.1		978.4	81	80	
6			4:25	116	.1		981.7	84	81	
7			4:21	117	.05		984.9	83	84	
8			3	105	.05		987.9	83	82	
9			3	114	.05		990.6	83	82	
10			3	120	.05		993.6	88	84	
11			3	125	.15		996.7	90	88	
12			6	128	.2	▽	999.0	86	90	
1		1:30	7.25				1007.957			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP 1.75 ΔP .9 CFM: 56.002 IN.HG 21
 ΔP 1.75 ΔP .9 CFM: 6.00 IN.HG 10 179

ΔH 2.0 ΔH 1.6 Notes: _____
 ΔH 2.0 ΔH 1.6

0.00484

Plant: Des PA 636 Filler: 347, 493, 594 Box Heat: on
 Location: 1 Am Temp: 89 Nozzle: 26
 Unit: Dryer P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 Wind Vol: calm
 Run #: Rm 2 PM 10 Pyro: 4 Static Ps: _____
 Cold Box: 4 Mag ΔP: m-2 O2: 20.97
 Meter #: B Map Alt: m-1 CO2: 0.05
 Meter Fac: 9723 X.1/20: 0.03

Slack Dia: _____
 "A" _____
 "B" _____

Imp	Gross	Tare	Final
1			
2			
3			
4			

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Tray Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
		1.49	0.0	111	.25	1.0	2.205	85	82	cf
			7.75	111	.12		6.4	82	82	
			6.5	113	.15		4.8	88	83	
			5.5	114	.05		11.6	84	85	
			7.75	116	.05		14.9	90	85	
			2.35	115	.05		17.3	91	86	
			7.75	117	.12		20.7	86	89	
		2.19	6.5	115	.17		23.7	97	86	
			7.75	115	.11		25.6	92	87	
		2.21	5.75	117	.17		28.5	92	87	
			11.25	115	.15		30.9	93	87	
			5.75	114	.12	Y	34.5	93	87	
		2.50	6.5				36.1913			

Leak Checks:

ΔP 135 ΔP 17 CFM: 5002 IN.HG 78
 ΔP 131 ΔP 17 CFM: 0000 IN.HG 6 180

ΔH 1.85 ΔH 1.10 Notes: _____
 ΔH .85 ΔH 1.0 _____

0.00538

Plant: Dos Paros-1 Filler: 523, CUS, F46 Box Heat: on
 Location: " " Am Temp: 63 Nozzel: 28
 Unit: Dryer P. Bar: 28.85 Prob Heat: on
 Date: 11/1/94 Pilot: #1 Wind Vol: 0.0
 Run #: Run 3 PM 10 Pyro: #1 Static Ps: "
 Cold Box: 7 Mag ΔP: M-2 O2: 20.9
 Meter #: B Map Alt: M-1 CO2: 0.05
 Meter Fac: .9723 % H2O: 0.03

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	Vec.
1			0.0	107	.15	10	37.129	87	83	
2			5.75	121	.1		40.2	85	81	
3			4	121	.15		43.9	87	82	
4			5.75	126	.7		46.3	88	83	
5			6.25	120	.25		48.18	89	83	
6			7	119	.15		52.3	85	89	
7			4.75	117	.25		56.0	96	85	
8			7	121	.7		58.7	89	84	
9			6.75	118	.15		58.3	89	83	
10			5.75	119	.05		65.1	90	84	
11			3	129	.05		67.0	85	80	
12			3	120	.05		69.6	90	88	
1		408	3				73.085			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP <u>1.75</u>	ΔP <u>1.7</u>	CFM: <u>60.002</u>	IN. HG <u>14</u>
ΔP <u>1.25</u>	ΔP <u>1.7</u>	CFM: <u>0.005</u>	IN. HG <u>6</u>
ΔH <u>.25</u>	ΔH <u>1.8</u>	Notes: _____	
ΔH <u>1.35</u>	ΔH <u>1.8</u>	_____	

COTTON GIN SOURCE TEST DATA							Date: <u>11/1/94</u>
GINNING PROCESS - <u>Drum #2</u>							RUN # <u>1</u>
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			11:31				
	3328661	481	11:33				
	2	510	11:34				
	3	518	11:35				
	4	494	11:37				
	5	494	11:38				
	6	486	11:39				
	7	467	11:40				
	8	523	12:47				
	3328671	487	1:03				
	2	514	1:05				
	3	494	1:07				
	4	479	1:08				
	5	485	1:10				
	6	487	1:11				
	7	509	1:13				
	8	502	1:14				
	9	506	1:15				
	3328680	495	1:17				
	1	483	1:18				
	2	480	1:20				
	3	495	1:21				
	4	473	1:23				
	5	496	1:25				
	6	492	1:26				
	7	470	1:27				
	8	478	1:29				
	9	473	1:30				
		End	1:30				
	27	13271	60 min				182
A. TOTAL LINT GINNED (lbs.)							13271
B. TOTAL STANDARDS BALES (A/500)							26.542
C. TIME (hrs.)							1:00
D. TOTAL STD. BALES PER HOUR (B/C)							26.5

COTTON GIN SOURCE TEST DATA							Date: 11/1/94
GINNING PROCESS - Dryer #1							RUN # 2
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			1:49		9	489	2:30
	3328703	509	1:50		3328740	507	2:51
	4	472	1:51		1	495	2:53
	5	471	1:53		2	485	2:54
	6	520	1:55			END	2:55
	7	525	1:56		38	19206	60 ^{min}
	8	520	1:58				
	9	519	1:59				
	3328710	506	2:01				
	1	509	2:03				
	2	505	2:05				
	3	500	2:06				
	4	504	2:08				
	5	539	2:10				
	6	501	2:13				
	7	496	2:17				
	8	518	2:18				
	33287201	529	2:23				
	2	508	2:25				
	3	544	2:27				
	4	509	2:28				
	5	527	2:30				
	6	512	2:32				
	7	500	2:34				
	8	493	2:35				
	9	499	2:37				
	3328730	505	2:38				
	1	521	2:39				
	2	492	2:41				
	3	507	2:42				183
	4	492	2:44				
	5	503	2:45				
	6	476	2:46				
	7	492	2:47				
	8	507	2:49				
A. TOTAL LINT GINNED (lbs.)							19,206
B. TOTAL STANDARDS BALES (A/500)							38.412
C. TIME (hrs.)							1:00
D. TOTAL STD. BALES PER HOUR (B/C)							38.4

COTTON GIN SOURCE TEST DATA						Date: <u>11/1/94</u>	
GINNING PROCESS - Dryer #1						RUN # <u>3</u>	
	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME
START			3:06		2	477	3:58
	3328747	539	3:12		3	478	3:59
	8	553	3:14		4	486	4:00
	9	491	3:15		5	491	4:02
	3328750	486	3:16		6	490	4:04
	1	528	3:18		7	489	4:05
	2	516	3:19		8	482	4:07
	3	505	3:20		9	474	4:08
	4	499	3:21			End	4:08
	5	490	3:23		42	20777	60 min
	6	496	3:24				
	7	505	3:25				
	8	495	3:26				
	9	491	3:28				
	3328760	516	3:29				
	1	515	3:30				
	2	485	3:32				
	3	497	3:33				
	4	495	3:34				
	5	499	3:35				
	6	502	3:36				
	8	500	3:39				
	9	504	3:40				
	3328770	496	3:42				
	1	500	3:43				
	2	491	3:44				
	3	484	3:45				
	4	471	3:47				
	5	481	3:48				
	6	504	3:50				184
	7	470	3:51				
	8	476	3:52				
	9	463	3:53				
	3328780	484	3:55				
	1	483	3:57				
A. TOTAL LINT GINNED (lbs.)						20777	
B. TOTAL STANDARDS BALES (A/500)						41.554	
C. TIME (hrs.)						1:00	
D. TOTAL STD. BALES PER HOUR (B/C)						41.6	

BATTERY CONDENSER
CYCLONE

Plant: <u>Dos Palos G.H.</u>	Filler: <u>C-8</u>	Box Heat: <u>an</u>
Location: <u>" "</u>	Am Temp: <u>50</u>	Nozzel: <u>.285</u>
Unit: <u>BATTERY COND.</u>	P. Bar: <u>28.00</u>	Prob Heat: <u>an</u>
Date: <u>11/2/94</u>	Pilot: #1 <u>.833</u>	Wind Vol: <u>Calm</u>
Run #: <u>1 A-5</u>	Pyro: #1 <u>1.0</u>	Static Ps: <u>0.02</u>
Cold Box: <u>1</u>	Mag ΔP: <u>M-2 1.005</u>	O2: <u>20.7</u>
Meter #: <u>B</u>	Map All: <u>M-9 9.99</u>	CO2: <u>0.05</u>
Meter Fac: <u>AS 72</u>	% H2O: <u>0.03</u>	

ΔHE 1.7413

Slack Dia: 30
 "A" 64²
 "B" 19²

Imp	Gross	Tare	Final
1	619.9	620.3	
2	622.4	621.5	
3	478.2	477.0	
1	651.9	650.7	

	Tray Point	O2 %	CO2 %	Time Min	Slack Temp	ΔP	All	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
1	1.32		7.40	0.0	64	.4	3.05	946.257	52	52	6
2	4.38			5	67	.4	3.05	951.1	55	55	
3	8.97			10	68	.3	7.29	955.8	57	58	
4	21.12			15	69	.15	1.14	960.0	58	57	
5	25.62			20	68	.1	.76	963.1	60	60	
6	28.68			25	68	.05	.38	964.3	62	61	
7			8.10	20	68	.1	.76	967.1	63	62	
8			8.13	35	62	.12	.97	970.6	65	66	
9				45	68	.15	1.14	973.7	67	66	
10				45	69	.05	.38	976.3	68	70	
11				50	69	.05	.38	978.7	70	69	
12				55	69	-.05	.38	979.6	69	70	
1			8.43	60				981.504			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP <u>.27</u>	ΔP <u>.50</u>	CFM: <u>2000</u>	IN. HG <u>18</u>	186
ΔP <u>.27</u>	ΔP <u>.50</u>	CFM: <u>0.006</u>	IN. HG <u>15</u>	
ΔH <u>.39</u>	ΔH <u>1.0</u>	Notes: <u>7.63</u>		
ΔH <u>.39</u>	ΔH <u>1.0</u>			

Plant: Doc #105 G.W. Filler: C-9 Box Heat: on
 Location: " " Am Temp: 53 Nozzel: .25
 Unit: Plating Prod P. Bar: 28.00 Prob Heat: on
 Date: 11/2/94 Pilot: 21 Wind Vol: Calc
 Run#: R-2 M-5 Pyro: 27 Static Ps: -0
 Cold Box: 5 Mag ΔP: M-2 O2: 20.9
 Meter #: A Map All: M-9 CO2: 0.05
 Meter Fac: .9577 % H2O: 0.05

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

Imp	Gross	Tare	Final
1	580.5	584.3	
2	564.3	564.2	
3	468.5	468.0	
4	584.3	581.1	

Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vec.
1		8.57	0.0	55	.1	0.76	981.625	76	79	
2			5	69	.15	1.14	964.6	73	73	3
3			10	68	.15	1.14	961.5	75	75	
4			15	70	.05	.38	984.7	73	75	
5			20	73	.05	.34	991.7	75	75	
6			25	70	.05	.35	991.8	74	75	
7		9.27	30	69	.4	3.05	996.10	74	74	4
8		9.29	35	73	.4	3.05	1.5	78	72	4
9			40	72	.3	2.29	6.1	78	74	
10			45	71	.25	1.91	9.6	78	75	
11			50	72	.05	.38	10.6	86	74	
12			55	73	.05	.38	14.5	87	80	
1		10.01	60				22.101			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP .30 ΔP .20 CFM: 0.002 IN.HG 24
 ΔP .30 ΔP .20 CFM: 0.006 IN.HG 10 187

ΔH 1.1 ΔH .78 Notes: 7.63
 ΔH 1.1 ΔH .75

Plant: Dos Palos Coal
 Location: Dos Palos
 Unit: ENTIRE Coal
 Date: 11/2/94
 Run #: 3 M-5
 Cold Box: 1
 Meter #: 3
 Meter Fac: 9572

Filter: C-10
 Am Temp: 59
 P. Bar: 28.00
 Pilot: #1
 Pyro: #1
 Mag ΔP: M-2
 Map ΔH: M-9
 X. H2O: 0.05

Box Heat: on
 Nozzel: 285
 Prob Heat: on
 Wind Vol: light
 Static Ps: _____
 O2: 0.9
 CO2: 0.05

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

Imp	Gross	Tare	Final
1	585.2	587.7	
2	668.8	667.7	
3	477.9	477.3	
4	652.8	651.9	

1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
10
11
12
0

Trav Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	ΔH	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
		10:14	0.0	71	.4	3.05	22.240	81	79	5
			5	73	.4	3.05	26.7	82	81	5
			10	73	.4	3.05	31.7	84	81	
			15	73	.3	2.29	37.4	86	82	
			20	72	.05	.98	40.3	81	80	
			25	72	.05	.88	43.2	81	80	
	10:43		30	71	.1	.76	45.9	80	81	
	10:45		35	70	.15	1.14	48.1	81	81	
			40	71	.15	1.14	52.0	87	82	
			45	74	.1	.76	54.2	87	81	
			50	73	.02	.38	57.1	82	86	
			55	73	.04	.32	60.0	87	87	
	11:0		60				61.730			

Leak Checks:

ΔP .60
 ΔP .60
 ΔH 1.0
 ΔH 1.0

ΔP .85
 ΔP .85
 ΔH 1.20
 ΔH 1.2

CFM: 20.002 IN.HG 24
 CFM: 200 IN.HG 7

Notes: 7.63

0.00454

Plant: Des. Dallas Filler: S45, F95, F96 Dox Heat: On
 Location: 1 Am Temp: 50 Nozzel: 20
 Unit: Energy Unit P. Bar: 28.00 Prob Heat: On
 Date: 11/2/94 Pilot: #1 Wind Vol: Calor
 Run #: 1 FM-10 Pyro: #1 Static Ps: 0.02
 Cold Box: 2 Mag ΔP: M-2 1.005 O2: 20.9
 Meter #: B Map ΔP: M-1 1.005 CO2: 0.03
 Meter Fac: .9723, 2.0011 X.1/20: 0.003

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	Ycc.
1		7.10	0.0	64	.1	0.9	72.494	52	52	5
2			4	67	.1	1	76.5	54	52	
3			4	68	.1		79.2	56	53	
4			4	69	.07		82.1	59	56	
5			3.25	68	.05		85.6	61	58	
6			2.95	68	.02		87.6	64	60	
7			1.5	66	.4		90.7	63	64	
8			9.25	62	.4		94.5	67	67	
9			9.25	68	.4		97.9	69	64	
10			9.25	69	.05		101.2	69	66	
11			2.75	69	.05		103.0	67	70	
12			2.75	69	.02	▽	105.1	72	67	
1		8.43	1.5				109.014			
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
0										

Leak Checks:

ΔP .27 ΔP .05 CFM: 1.002 IN.HG 24
 ΔP .27 ΔP .05 CFM: 1.000 IN.HG 9

ΔH .37 ΔH 1.0
 ΔH .30 ΔH 1.0

Notes: _____

189

0.002014

Plant: <u>DSPALC GR</u>	Filler: <u>F 19, 55, 15</u>	Box Heat: <u>on</u>
Location: <u>1</u>	Am Temp: <u>50</u>	Nozzel: <u>780</u>
Unit: <u>3501 GR</u>	P. Bar: <u>28.0</u>	Prob Heat: <u>on</u>
Date: <u>11/2/99</u>	Pilot: <u>#1</u>	Wind Vol: <u>calm</u>
Run #: <u>3 PM10</u>	Pyro: <u>#1</u>	Static Ps: _____
Cold Box: <u>2</u>	Mag ΔP: <u>M-2</u>	O2: <u>20.9</u>
Meter #: <u>B</u>	Map All: <u>M-1</u>	CO2: <u>0.0</u>
Meter Fac: <u>9723</u>	Σ. IJ20: <u>0.02</u>	

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

Imp	Gross	Tare	Final
1			
2			
3			
4			

	Tray Point	O2 %	CO2 %	Time Min	Stack Temp	ΔP	All	Dry Gas Meter Vol	Inlet Temp	Outlet Temp	Vcc.
1				0.0	71	.05	9	14413.67	70	73	4
2				2.5	72	.05		1477.3	73	69	
3				7.5	73	.25		150.2	70	70	
4				6.5	73	.3		153.5	71	75	
5				7.75	72	.4		155.2	76	72	
6				8.5	72	.4		158.9	77	73	
7				8.5	72	.05		161.4	77	73	3
8				7.5	70	.05		163.6	79	83	
9				7.5	71	.05		167.6	80	74	
10				2.5	74	.15		169.6	80	73	
11				4.75	74	.15		172.5	76	81	
12				4.75	73	.1	9	176.0	82	76	
1		11.15		3.75				178.089			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
0											

Leak Checks:

ΔP <u>66</u>	ΔP <u>85</u>	CFM: <u>0.002</u>	IN.HG <u>21</u>	191
ΔP <u>60</u>	ΔP <u>85</u>	CFM: <u>0.006</u>	IN.HG <u>9</u>	
ΔH <u>1.0</u>	ΔH <u>1.2</u>	Notes: _____		
ΔH <u>1.0</u>	ΔH <u>1.2</u>	_____		

COTTON GIN SOURCE TEST DATA						Date: 11/2/94	
GINNING PROCESS - Battery Cond.						RUN # 1	
	BALE #	BALE WT	TIME		BALE #	BALE WT	TIME
START			7:00		7	485	8:31
	3329371	516	7:42		8	496	8:32
	2	522	7:43		9	492	8:33
	3	517	7:44		3329410	495	8:34
	4	522	7:46		1	493	8:35
	5	481	7:47		2	496	8:37
	6	491	7:49		3	490	8:38
	7	501	7:50		4	486	8:39
	8	502	7:52		5	522	8:40
	9	494	7:53		6	501	8:42
	3329380	492	7:54		7	498	8:43
	1	494	7:55			END	8:43
	2	490	7:57		45 Bales	22709	60m
	3	523	7:58				
	4	513	7:59				
	5	514	8:01				
	6	509	8:03				
	7	502	8:05				
	8	501	8:06				
	9	502	8:08				
	3329390	513	8:09				
	1	520	8:10				
	4	487	8:14				
	5	506	8:15				
	6	505	8:17				
	7	517	8:18				
	8	510	8:20				
	9	510	8:21				
	3329400	511	8:22				
	1	510	8:23				192
	2	535	8:24				
	3	531	8:26				
	4	531	8:27				
	5	502	8:28				
	6	484	8:29				
A. TOTAL LINT GINNED (lbs.)						22709	
B. TOTAL STANDARDS BALES (A/500)						45.418	
C. TIME (hrs.)						1.0	
D. TOTAL STD. BALES PER HOUR (B/C)						45.4	

COTTON GIN SOURCE TEST DATA							Date: 11/2/94
GINNING PROCESS - Battery Cond.							RUN # 2
START	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
			8:57		3	494	9:06
	3329427	487	8:58		4	500	9:17
	8	474	8:59		5	502	9:18
	9	466	9:00		6	511	9:19
	3329430	502	9:02		7	505	9:50
	1	465	9:04		8	469	9:52
	2	505	9:06		9	465	9:53
	3	479	9:07		3329460	504	9:55
	4	482	9:08		1	509	9:56
	5	481	9:10		2	502	9:57
	6	492	9:11		3	500	9:59
	7	491	9:13		4	490	10:00
	8	472	9:14			End	10:01
	9	481	9:15		46 Bales	22489	60 min
	3329440	492	9:16				
	1	492	9:17				
	2	485	9:19				
	3	464	9:20				
	4	493	9:21				
	5	489	9:23				
	6	512	9:25				
	7	484	9:26				
	8	488	9:27				
	3329451	491	9:30				
	2	489	9:31				
	3	491	9:33				
	4	491	9:34				
	5	493	9:35				
	6	487	9:36				1.73
	7	476	9:37				
	8	478	9:39				
	9	469	9:40				
	3329460	491	9:41				
	1	510	9:43				
	2	493	9:44				
A. TOTAL LINT GINNED (lbs.)						22,489	
B. TOTAL STANDARDS BALES (A/500)						44,978	
C. TIME (hrs.)						1:00	
D. TOTAL STD. BALES PER HOUR (B/C)						45.0	

COTTON GIN SOURCE TEST DATA						Date: <u>11/2/94</u>	
GINNING PROCESS - <u>Battery Cond.</u>						RUN # <u>3</u>	
	BALE #	BALE WT.	TIME		BALE #	BALE WT.	TIME
START			10:11		9	527	11:00
	3329484	500	10:15		3329520	499	11:02
	5	507	10:16		1	502	11:04
	6	512	10:17		2	521	11:06
	7	494	10:19		3	522	11:08
	8	505	10:20		4	517	11:10
	9	495	10:21		5	476	11:11
	3329490	503	10:23		6	515	11:12
	1	490	10:24		7	516	11:13
	2	509	10:25		8	498	11:15
	3	494	10:26			5 Wd	11:15
	4	503	10:27		44	22302	60 min
	5	499	10:29				
	6	504	10:30				
	7	513	10:31				
	8	516	10:33				
	9	518	10:34				
	3329500	520	10:35				
	1	520	10:36				
	2	512	10:38				
	3	512	10:39				
	11	513	10:40				
	5	508	10:41				
	6	514	10:43				
	8	526	10:46				
	9	490	10:47				
	3329510	520	10:49				
	1	495	10:50				
	2	495	10:51				
	3	505	10:53				194
	4	503	10:54				
	5	495	10:55				
	6	495	10:56				
	7	505	10:58				
	8	521	10:59				
A. TOTAL LINT GINNED (lbs.)						22302	
B. TOTAL STANDARDS BALES (A/500)						44.604	
C. TIME (hrs.)						1:00	
D. TOTAL STD. BALES PER HOUR (B/C)						44.6	

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	GASVOL WET TEST METER V,w	GASVOL DRY GAS METER Vb,	wet test tw	Temperature				Y	DH@Y
				Dry IN	Dry Out	Ave f	Time e		
				TD, IN	Tdo,	Td,	min		
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

Meter Factor: 0.9572

Reviewed by: _____

Delta H: 1.7813

Equations:

$$Y = (V_w * P_b) * (T_d + 460) / (V_d * t - V_d * b) + (D_e * H / 13.6) * (((W_t + w_t) / 2) + 460)$$

$$D_e * H = (0.0317 * D_e) * (((((W_t + w_t) / 2) + 460) * e) / V_w)^2 / ((P_b * (T_d + 460))$$

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			Time e min	Y	DH@Y
				Dry IN	Dry Out	Ave f			
				TD, IN	Tdo,	Td,			
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

Meter Factor: 0.9723

Reviewed by: OD

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

THERMO COUPLE CALIBRATION

Date: 6/28/94

Unit: 1

Point	* Standard Temperature <i>T_{std}</i>		Pyrometer Temperature <i>T_{pyr}</i>		Error % ** $(T_{std}-T_{pyr})/T_{std}$
	deg. F	deg. F	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	0.0	0.0	0.00%

Std. Corr. Factor 1.000

Calibration by: KK

* Standard ID: _____

Reviewed by: (D)

* * in deg. K

**PM-10
NOZZLE DATA
6/28/94**

<table border="1"> <thead> <tr> <th>Nozzle ID</th> <th>PM-1</th> </tr> </thead> <tbody> <tr> <td>Point</td> <td></td> </tr> <tr> <td>1</td> <td><u>0.152</u></td> </tr> <tr> <td>2</td> <td><u>0.150</u></td> </tr> <tr> <td>3</td> <td><u>0.151</u></td> </tr> <tr> <td>4</td> <td><u>0.152</u></td> </tr> <tr> <td>5</td> <td><u>0.152</u></td> </tr> <tr> <td>6</td> <td><u>0.151</u></td> </tr> <tr> <td>7</td> <td><u>0.152</u></td> </tr> <tr> <td>8</td> <td><u>0.152</u></td> </tr> <tr> <td>Average</td> <td><u>0.152</u></td> </tr> </tbody> </table>	Nozzle ID	PM-1	Point		1	<u>0.152</u>	2	<u>0.150</u>	3	<u>0.151</u>	4	<u>0.152</u>	5	<u>0.152</u>	6	<u>0.151</u>	7	<u>0.152</u>	8	<u>0.152</u>	Average	<u>0.152</u>	<table border="1"> <thead> <tr> <th>Nozzle ID</th> <th>PM-2</th> </tr> </thead> <tbody> <tr> <td>Point</td> <td></td> </tr> <tr> <td>1</td> <td><u>0.190</u></td> </tr> <tr> <td>2</td> <td><u>0.190</u></td> </tr> <tr> <td>3</td> <td><u>0.191</u></td> </tr> <tr> <td>4</td> <td><u>0.191</u></td> </tr> <tr> <td>5</td> <td><u>0.191</u></td> </tr> <tr> <td>6</td> <td><u>0.190</u></td> </tr> <tr> <td>7</td> <td><u>0.191</u></td> </tr> <tr> <td>8</td> <td><u>0.191</u></td> </tr> <tr> <td>Average</td> <td><u>0.191</u></td> </tr> </tbody> </table>	Nozzle ID	PM-2	Point		1	<u>0.190</u>	2	<u>0.190</u>	3	<u>0.191</u>	4	<u>0.191</u>	5	<u>0.191</u>	6	<u>0.190</u>	7	<u>0.191</u>	8	<u>0.191</u>	Average	<u>0.191</u>	<table border="1"> <thead> <tr> <th>Nozzle ID</th> <th>PM-3</th> </tr> </thead> <tbody> <tr> <td>Point</td> <td></td> </tr> <tr> <td>1</td> <td><u>0.218</u></td> </tr> <tr> <td>2</td> <td><u>0.218</u></td> </tr> <tr> <td>3</td> <td><u>0.218</u></td> </tr> <tr> <td>4</td> <td><u>0.218</u></td> </tr> <tr> <td>5</td> <td><u>0.218</u></td> </tr> <tr> <td>6</td> <td><u>0.217</u></td> </tr> <tr> <td>7</td> <td><u>0.217</u></td> </tr> <tr> <td>8</td> <td><u>0.218</u></td> </tr> <tr> <td>Average</td> <td><u>0.218</u></td> </tr> </tbody> </table>	Nozzle ID	PM-3	Point		1	<u>0.218</u>	2	<u>0.218</u>	3	<u>0.218</u>	4	<u>0.218</u>	5	<u>0.218</u>	6	<u>0.217</u>	7	<u>0.217</u>	8	<u>0.218</u>	Average	<u>0.218</u>
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**STAINLESS
PROBE & NOZZEL UNIT
6/20/94**

Nozzle ID <u>HAST-12</u> Point	Nozzle ID <u>S-14</u> Point	Nozzle ID <u>S-18</u> Point
1 <u>0.123</u>	1 <u>0.160</u>	1 <u>0.185</u>
2 <u>0.123</u>	2 <u>0.160</u>	2 <u>0.184</u>
3 <u>0.123</u>	3 <u>0.160</u>	3 <u>0.185</u>
4 <u>0.123</u>	4 <u>0.160</u>	4 <u>0.186</u>
5 <u>0.123</u>	5 <u>0.160</u>	5 <u>0.186</u>
6 <u>0.123</u>	6 <u>0.160</u>	6 <u>0.185</u>
7 <u>0.123</u>	7 <u>0.160</u>	7 <u>0.184</u>
8 <u>0.123</u>	8 <u>0.160</u>	8 <u>0.185</u>
Average <u>0.123</u>	Average <u>0.160</u>	Average <u>0.185</u>

Nozzle ID <u>S-21</u> Point	Nozzle ID <u>S-22</u> Point	Nozzle ID <u>S-23</u> Point
1 <u>0.213</u>	1 <u>0.222</u>	1 <u>0.255</u>
2 <u>0.212</u>	2 <u>0.222</u>	2 <u>0.255</u>
3 <u>0.212</u>	3 <u>0.223</u>	3 <u>0.255</u>
4 <u>0.212</u>	4 <u>0.224</u>	4 <u>0.255</u>
5 <u>0.212</u>	5 <u>0.225</u>	5 <u>0.255</u>
6 <u>0.212</u>	6 <u>0.226</u>	6 <u>0.254</u>
7 <u>0.212</u>	7 <u>0.225</u>	7 <u>0.255</u>
8 <u>0.212</u>	8 <u>0.225</u>	8 <u>0.255</u>
Average <u>0.212</u>	Average <u>0.224</u>	Average <u>0.255</u>

Nozzle ID <u>HAST-24</u> Point	Nozzle ID <u>HAST-26</u> Point	Nozzle ID <u>S-28</u> Point
1 <u>0.245</u>	1 <u>0.178</u>	1 <u>0.280</u>
2 <u>0.245</u>	2 <u>0.179</u>	2 <u>0.280</u>
3 <u>0.244</u>	3 <u>0.179</u>	3 <u>0.280</u>
4 <u>0.244</u>	4 <u>0.180</u>	4 <u>0.280</u>
5 <u>0.245</u>	5 <u>0.181</u>	5 <u>0.280</u>
6 <u>0.245</u>	6 <u>0.180</u>	6 <u>0.280</u>
7 <u>0.245</u>	7 <u>0.179</u>	7 <u>0.280</u>
8 <u>0.245</u>	8 <u>0.179</u>	8 <u>0.280</u>
Average <u>0.245</u>	Average <u>0.179</u>	Average <u>0.280</u>

**STAINLESS
PROBE & NOZZEL UNIT
6/20/94**

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

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

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 <u>#DIV/0!</u>	Average <u>#DIV/0!</u>	Average <u>#DIV/0!</u>

MAGNEHELIC CALIBRATION

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

SCHEDULED CALIBRATION:
 SEMI ANNUAL XXX
 BI-MONTHLY
 OTHER

REFERENCE ID # M-9

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

AVERAGE DEVIATION
 STANDARD DEVIATION
 95% CONFIDENCE INTERVAL
 PRECISION(within +/- 3%)

0.999
0.001
0.003
0.007
-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: 6/27/94
 GAGE ID # M-1
 RANGE 0-5 in. H2O

SCHEDULED CALIBRATION:
 SEMI ANNUAL
 BI-MONTHLY
 OTHER

REFERENCE ID # M-1

LEAK CHECK:

System:	† Set @ 10 in. H2O	vacuum 10 in. P F	pressure 10 in. P F
Point:	†† Set @ 90 % FS in. H2O	vacuum in. P F	pressure in. P F

Point	Incline Delta P <i>Pinc</i>	Magnehelic Delta P <i>Pmag</i>	% Deviation $(Pinc - Pmag) / Pinc \times 100$
1	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%
2	2.00	1.99	0.500%
	2.00	1.97	1.500%
	2.00	1.97	1.500%
average	2.00	1.98	** 1.167%
3	3.00	3.00	0.000%
	3.00	3.00	0.000%
	3.00	2.99	0.333%
average	3.00	3.00	** 0.111%
4	4.00	3.88	3.000%
	4.00	3.86	3.500%
	4.00	3.86	3.500%
average	4.00	3.87	** 3.333%
5	5.00	4.97	0.600%
	5.00	4.98	0.400%
	5.00	4.98	0.400%
average	5.00	4.98	** 0.467%

STANDARD CORRECTION FACTOR

AVERAGE DEVIATION
 STANDARD DEVIATION
 95% CONFIDENCE INTERVAL
 PRECISION(within +/- 3%)

1.010
0.010
0.013
0.032
-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: 6/27/94
 GAGE ID # M-2
 RANGE 0 - 2 in. H20

SCHEDULED CALIBRATION:
 SEMI ANNUAL
 BI-MONTHLY
 OTHER

REFERENCE ID # M-2

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 <i>Pinc</i>	Magnehelic Delta P <i>Pmag</i>	% Deviation $(Pinc - Pmag) / Pinc \times 100$
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%

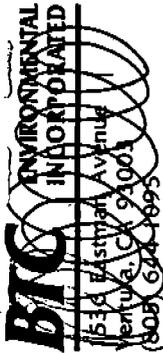
STANDARD CORRECTION FACTOR
 AVERAGE DEVIATION
 STANDARD DEVIATION
 95% CONFIDENCE INTERVAL
 PRECISION(within +/- 3%)

1.005
0.004
0.007
0.017
-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: _____



Bill-to

Company:

AIRX

Address:

CHAIN OF CUSTODY RECORD

Phone #: () Contact:

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH	SAMPLERS (Signature)			
						NO.	DATE	TIME	GRAB
294-139	Dos Pabos Grain unloading	7							
P-1	R-1 Probe 175ml		X						
P-2	R-1 Imps 350mL		X						
P-3	Filter B-45		X						
P-4	R-2 Probe 225ml		X						
P-5	R-2 Imps 300mL		X						
P-6	R-2 Filter B-46		X						
P-7	R-3 Probe 175		X						
P-8	R-3 Imps 340		X						
P-9	R-3 Filter B-47		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)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME ADDRESS	PHONE NO.		

WHITE COPY

CANARY COPY

PINK COPY

ALIX

CHAIN OF CUSTODY RECORD

Phone #: () - - Contact:

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH
294-139	PROJECT NAME		Dos Palos (CORREDA)						
SAMPLES: (Signature)		SAMPLER OVERFLOW							
R-10	10-31		X		R-1 Probe 150ml	1	X		
11					R-1 Imps 250ml		X		
12					R-1 Filter B-48		X		
13					R-2 Probe 200		X		
14					R-2 Imps 300		X		
15					R-2 Filter B-49		X		
16					R-3 Probe 225		X		
17					R-3 Imps 275		X		
18					R-3 Filter C-1		X		

TOTAL MATERIALS
Cross Material

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

CHAIN OF CUSTODY RECORD

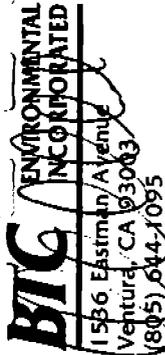
Phone #: _____ Contact: _____

PROJ. NO.	PROJECT NAME	NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH
194-139	Dos Palcos (Amgen)	28	11-1		X		R-1 Probe 200	1	X		
		29					R-1 Imp 300	1	X		
		30					R-1 Filter C-5	1	X		
		31					R-2 Probe 150	1	X		
		32					R-2 Imp 300	1	X		
		33					R-2 Filter C-6	1	X		
		34					R-3 Probe 175	1	X		
		35					R-3 Imp 305	1	X		
		36					R-3 Filter C-7	1	X		

*To Lab with
 Sample # 194-139*

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) <i>[Signature]</i>	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time	Received for Laboratory by: (Signature)	Date/Time
NAME		ADDRESS	
PHONE NO.		PHONE NO.	



BILL TO Company: ALKA
Address: _____

CHAIN OF CUSTODY RECORD

Phone #: _____ Contact: _____

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH
P-37	11-2		X		R-1 Probe 160	1	X		
P-38					R-1 Imps 350		X		
P-39					R-1 Filter C-8		X		
P-40					R-2 Probe 150		X		
P-41					R-2 Imps 275		X		
P-42					R-2 Filter C-9		X		
P-43					R-3 Probe 150		X		
P-44					R-3 Imps 300		X		
P-45					R-3 Filter C-10		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)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature) 	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME ADDRESS	PHONE NO.		

210

WHITE COPY _____ CANARY COPY _____ PINK COPY _____



BILL TO Company:

Address:

CHAIN OF CUSTODY RECORD

Phone #: () - ()

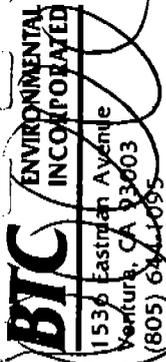
Contact:

PROJ. NO.	PROJECT NAME		NO. OF CONTAINERS	ANALYSIS Gross wt	REMARKS	CHECK IF RUSH
	NO.	DATE				
294-139	DOSPALOS GIN		1			
SAMPLERS: (Signature) <i>Car. D. ...</i>						
NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	
T1	10/31	X			RUN 1 PROG +10	150ml
T2					IMPS -10	
T3					F61 +10	
T4					F62 +10	
T5					E-31 -10	
T6					RUN 2 PROG +10	
T7					IMPS -10	
T8					F75 +10	
T9					F-76 +10	
T10					E-38 -10	
T11					RUN 3 PROG +10	
T12					IMPS -10	
T13					F85 +10	
T14					F56 +10	
T15					E-28 -10	

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

WHITE COPY _____ CANARY COPY _____ PINK COPY _____



CHAIN OF CUSTODY RECORD

BILL TO Company: AIKX
 Address: _____
 Phone #: (_____) _____ Contact: _____

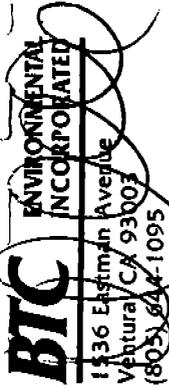
NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH
T-16					Probe R1 +10	1			
T-17					INP R1 -10				
T-18					E46 R1 -10				
T-19					F88 R1 +10				
T-20					F87 R1 +10				
T-21					Probe R2 +10				
T-22					INP R2 -10				
T-23					E59 R2 -10				
T-24					F107 R2 +10				
T-25					F108 R2 +10				
T-26					Probe R3 +10				
T-27					INP R3 -10				
T-28					E32 R3 -10				
T-29					F64 R3 +10				
T-30					F63 R3 +10				

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

212

WHITE COPY _____ CANARY COPY _____ PINK COPY _____



BILL TO Company:

Address:

Phone #: () - () - ()

Contact:

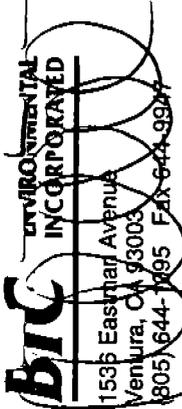
CHAIN OF CUSTODY RECORD

PROJECT NAME		NO. OF CONTAINERS	ANALYSIS	REMARKS	CHECK IF RUSH
PROJ. NO.	SAMPLERS: (Signature)				
294-139	DOS PALOS (Imps) Dwyer #2				
NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.
T 31	11/1				R1 Proge +10
T 32					Imps -10
T 33					F 73 +10
T 34					F 74 +10
T 35					E 37 -10
T 36					R2 Probe +10
T 37					Imps -10
T 38					F 94 +10
T 39					F 93 +10
T 40					E 47 -10
T 41					R23 Proge +10
T 42					Imps -10
T 43					E 23 -10
T 44					F 46 +10
T 45					F 45 +10

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Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME	ADDRESS	PHONE NO.	
13							

WHITE COPY _____ CANARY COPY _____ PINK COPY _____



CHAIN OF CUSTODY RECORD

BILL TO: P.O.# _____

Company _____
 Address _____
 Phone _____ Contact _____

REPOH: _____

Company _____
 Address _____
 Phone _____ Contact _____

PROJ. NO. **294-139** PROJECT NAME **Dos Palos (NOTES)**

SAMPLERS: (Signature) _____

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

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	Q/C	Q/S	SAMPLE DESCRIPTION	MATRIX			CONTAINER #	TYPE	REMARKS
						WATER	SOIL	SLUDGE/OTHER			
46	11-1		X		Front 1/2 +10				1	P	
47					Back 1/2 -10						
48					F-83 -10						
49					F-84 -10						
50					E-40 -10						
51					Front 1/2 +10						
52					Back 1/2 -10						
53					F-59 -10						
54					F-60 -10						
55					E-30 -10						
56					Front 1/2 +10						
57					Back 1/2 -10						
58					F-79 -10						
59					F-80 -10						
60					E-40 -10						

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) _____ Date/Time _____

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

TURN AROUND TIME
 24 Hr. _____
 48 Hr. _____
 72 Hr. _____

5 Day _____
 Standard _____
 Other _____