ECKLEY ENGINEERING
255 North Fulton Street
Fresno, Ca. 9301
Attn: Bob Eckley

SOURCE EMISSION TESTING
~~**HANFORD GROWERS**~~
Total Particulate
PM-10 Particulate
December 3 & 4, 1990
County Line Gin

Prepared By:

BTC ENVIRONMENTAL, INC.
1536 Eastman Avenue
Ventura, CA 93003

Job Number
5019

Laboratory Report Number
290-188

Test Team Leader
Cameron Doonahco

Results Verified By:
Tom Porter - Director Air Test Division

BTC ENVIRONMENTAL INCORPORATED

CKLEY
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SJVUAPCD/Kings
330 Campus Drive
Hanford, California 93230

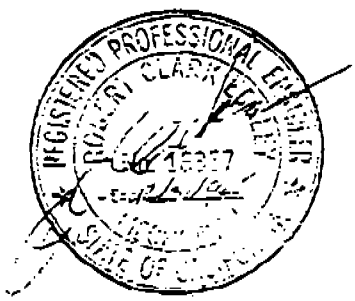
RE: County Line Gin, Inc.
Authority to Construct and Emissions Reduction Credit
Supplement to May 26, 1991, Application #
Corrections to Pre-Modification (12/04/90) Source Testing

The attached sheets document errors in the calculation of the pounds per bale pre-modification figures.

One error was caused by multiplying the emissions per cyclone by four cyclones, instead of the correct factor of six, in the #2 Drying System.

The second error was caused by the source testing laboratory's erroneously labeling a 28" diameter candy cane as measuring only 19" in diameter. BTC has provided the attached corrected pages to be incorporated into the original (12/04/90) report to replace the defective pages.

The corrected figures are incorporated into the computation of the 8.81 pounds/bale TSP, as shown on the attached spread sheet.



COUNTY LINE GIN: PRE-MODIFICATION EMISSIONS

EMISSIONS POINT	REFERENCE	TEST DATE	TESTED G/DSCF	TESTED LB/HR	CYCLONE COLLECTORS [NUMBER & SIZE(" ϕ)]	BALES/HOUR	SYSTEM (POUNDS/HOUR)	SYSTEM (POUNDS/BALE)	
SUCTION	County Line	12/90	0.0378	1.21	4/34	21.9	4.84	0.22	
#1 DRYING	County Line	12/90	0.0596	1.68	6/38	18.4	10.08	0.55	
#2 DRYING	Stratford	12/90	0.0925	4.21	6/38	21.4	~~16.84~~ 25.26	~~0.79~~ 1.18	Multiplied by 4 ratio to...
MOTES	County Line	12/90	0.1000*	~~4.13~~ 8.96	2/60	18.2	~~8.26~~ 17.92	~~0.45~~ 0.98	Lab error see scales pages
LINT CLEANER	County Line	12/90	0.0601	1.68, wrong 2.62	16/38	18.5	26.88	1.45	
OVERFLOW	%(#2 Drying)	12/90	-	-	1/40	-	-	0.20	
G.S. TRASH	Stratford	11/90	0.0357	1.52	2/38	12.7	3.80 adj.	0.30	
BC SCRNBSKT	AP-42	-	-	-	-	-	-	0.19	
MOTE CLEANER	%(Motes)	12/90	-	-	1/43	-	-	~~0.93~~ 0.74	See 'Motes' Note above

Calculated pounds per bale before 1991 modifications = ~~5.5~~ 5.81

*Allowable under Rule 404

A+ 50% PM_{10} → 2.905 lb. PM_{10} / bale

Pre-Mod Post-Test

EMISSION SUMMARY

#1 DRYER CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0343	0.0849	*0.0596*
lbs/hr	0.98	2.36	*1.67*
PM-10 Particulate			
+10μ(%)	57.9	62.7	*60.3*
-10μ(%)	42.1	37.3	*39.7*
+10μ(lbs/hr)	0.57	1.48	*1.02*
-10μ(lbs/hr)	0.41	0.88	*0.65*

Pre Mod. ~~Post~~ Test

EMISSION SUMMARY

SUCTION CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0338	0.0417	*0.0378*
lbs/hr	1.15	1.26	*1.21*
PM-10 Particulate			
+10μ(%)	0.3	0.7	*0.5*
-10μ(%)	99.7	99.3	*99.5*
+10μ(lbs/hr)	0.00	0.01	*0.01*
-10μ(lbs/hr)	1.15	1.25	*1.20*

Pre mod Post-Test

EMISSION SUMMARY

LINT TRAP CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0534	0.0667	*0.0601*
lbs/hr	2.32	2.92	*2.62*
PM-10 Particulate			
+10µ(%)	64.7	54.3	*59.5*
-10µ(%)	35.3	45.7	*40.5*
+10µ(lbs/hr)	1.50	1.59	*1.54*
-10µ(lbs/hr)	0.82	1.33	*1.08*

Pre-mod
Post-Test

EMISSION SUMMARY

MOTE CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0458	0.1653	0.1056
lbs/hr	1.91	6.80	4.36
PM-10 Particulate			
+10μ(%)	75.7	69.5	72.6
-10μ(%)	24.3	30.5	27.4
+10μ(lbs/hr)	1.45	4.73	3.09
-10μ(lbs/hr)	0.46	2.07	1.27

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EMISSION SUMMARY

MOTE CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0458	0.1653	*0.1056*
lbs/hr	1.91	6.80	*4.36*
PM-10 Particulate			
+10μ(%)	75.7	69.5	*72.6*
-10μ(%)	24.3	30.5	[illegible]
+10μ(lbs/hr)	1.45	4.73	[illegible]
-10μ(lbs/hr)	0.46	2.07	[illegible]

VOLATILE

EMISSION SUMMARY

LINT TRAP CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0534	0.0667	*0.0601*
lbs/hr	2.32	2.92	*2.62*
PM-10 Particulate			
+10μ(%)	64.7	54.3	*59.5*
-10μ(%)	35.3	45.7	*40.5*
+10μ(lbs/hr)	1.50	1.59	[illegible]
-10μ(lbs/hr)	0.82	1.33	

EMISSION SUMMARY

SUCTION CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0338	0.0417	*0.0378*
lbs/hr	1.15	1.26	*1.21*
PM-10 Particulate			
+10μ(%)	0.3	0.7	*0.5*
-10μ(%)	99.7	99.3	*99.5*
+10μ(lbs/hr)	0.00	0.01	*0.01*
-10μ(lbs/hr)	1.15	1.25	*1.20*

EMISSION SUMMARY

#1 DRYER CYCLONE

CONSTITUENT	RUN #1	RUN #2	AVERAGE
Total Particulate			
gr/DSCF	0.0343	0.0849	*0.0596*
lbs/hr	0.98	2.36	*1.67*
PM-10 Particulate			
+10μ(%)	57.9	62.7	*60.3*
-10μ(%)	42.1	37.3	*39.7*
+10μ(lbs/hr)	0.57	1.48	*1.02*
-10μ(lbs/hr)	0.41	0.88	*0.65*

I. INTRODUCTION

INTRODUCTION

On December 3 & 4, 1990, BTC Environmental performed source emission tests for PM-10 particulate matter and total particulate matter on various cyclones located at the Hanford Growers cotton gin. The gin is located at 12095 2nd Avenue in Hanford, California. The cylcones were designated as #1 Dryer, Mote, Lint Trap and Suction. A candy cane exhaust duct was attached to the cyclone outlet and routed to ground level producing a uniform flow in a vertical position.

The testing was conducted while the plant was operating at normal conditions and production rates.

SAMPLING AND ANALYTICAL PROCEDURES

STACK GAS ANALYSIS: The stack gas were assumed to be ambient air. The O2 value was 20.9% and the CO2 value was 0.05%.

STACK GAS VELOCITY: The stack gas velocity was determined using an "S" type pitot tube connected to an inclined draft gauge or a magnehelic gauge.

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, equation 3-2. Stack velocities were calculated using E.P.A. Method 2, equation 2-9; gas volumetric flow rate was determined by equation 2-10.

PARTICULATE EMISSIONS: Particulates were collected using a Lace Model 31 stack sampler system that conforms to E.P.A. requirements for particulate sampling. The system consists of a heated probe, heated filter, and cooled impingers (see E.P.A. Method 5). After the weight of the particulates on the filter and in the probe is determined, the total dissolved solids in the the impingers is determined and added to the particulate weight in order to comply with APCD regulations. Blanks for the DI water and acetone were analyzed and substracted from the total particulate weight.

PM-10 PARTICULATE EMISSIONS: Sampling was done isokinetically from each stack at the same time that the total particulate sampling was being done. The sampling was done by using a GII cascade impactor. The impactor consists of a nozzle, two (2) stages with slotted filters, a final stage containing a backup filter, heated probe and cooled impingers containing DI water. The nozzle and the two (2) stages represent the +10µ fraction. The final stage, heated probe and the impingers represent the -10µ fraction.

The weight from each fraction including the filter weights and the rinses are added together to obtain a total weight. The total weight is divided into the weight obtained from each fraction to obtain the percentage for each fraction. The lb/hr values obtained from the total particulate runs were utilized to obtain the lb/hr for the +10µ and the -10µ fractions.

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 standard conditions (60°F & 29.92 in Hg).

If you have any questions concerning this test or if we can be of further assistance, please contact the undersigned at (805) 644-1095.

Respectfully submitted,

BTC Environmental, INC.

Tom Porter
Director-Air Test Division

Copies: 3 Eckley Attn: Bob Eckley

II. WET TEST METHODS DATA SUMMARIES

METHOD 5 FIELD DATA SUMMARY

MOTE CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	9.1	6.2
Vm - Gas volume, meter cond., dcf	45.438	38.385
Y - Meter calibration factor	1.023	1.023
Pbar - Barometric pressure, in. Hg	30.21	30.21
Pg - Stack static pressure, in. H2O	30.20	30.20
ΔH - Avg. meter press. diff., in. H2O	1.559	1.569
Tm - Absolute meter temperature, °R	520.9	536.3
Vm(std) - Standard sample gas vol., dscf	47.0334	38.5973
Bws - Water vapor part in gas stream	0.9	0.7
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.747	28.764
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.731	0.731
Ts - Absolute stack Temp. °R	520.4	534.3
A - Area of stack, square feet	4.276 ~~1.97~~	~~1.97~~ 4.276
Qstd - Volumetric flow rate, dscfm	4858	4800
An - Area of nozzel, square feet	0.0002712	0.0002712
ø - Sampling time, minutes	72	60
I - Isokinetic variation, percent	95.4	95.1

METHOD 5 FIELD DATA SUMMARY

LINT TRAP CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	5.5	7.8
Vm - Gas volume, meter cond., dcf	35.530	37.737
Y - Meter calibration factor	1.023	1.023
Pbar - Barometric pressure, in. Hg	30.10	30.10
Pg - Stack static pressure, in. H2O	30.09	30.09
ΔH - Avg. meter press. diff., in. H2O	0.979	0.999
Tm - Absolute meter temperature, °R	541.6	540.9
Vm(std) - Standard sample gas vol., dscf	35.1947	37.4331
Bws - Water vapor part in gas stream	0.7	1.0
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.766	28.740
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.593	0.598
Ts - Absolute stack Temp. °R	565.5	562.4
A - Area of stack, square feet	2.64	2.64
Qstd - Volumetric flow rate, dscfm	5064	5109
An - Area of nozzel, square feet	0.0002712	0.0002712
ø - Sampling time, minutes	72	72
I - Isokinetic variation, percent	91.8	96.8

METHOD 5 FIELD DATA SUMMARY

SUCTION CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	9.2	9.2
Vm - Gas volume, meter cond., dcf	44.725	37.723
Y - Meter calibration factor	0.969	0.969
Pbar - Barometric pressure, in. Hg	30.27	30.27
Pg - Stack static pressure, in. H2O	30.27	30.27
ΔH - Avg. meter press. diff., in. H2O	1.434	1.443
Tm - Absolute meter temperature, °R	529.3	536.3
Vm(std) - Standard sample gas vol., dscf	43.2069	35.9649
Bws - Water vapor part in gas stream	1.0	1.2
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.738	28.716
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.399	0.404
Ts - Absolute stack Temp. °R	535.5	544.3
A - Area of stack, square feet	2.64	2.64
Qstd - Volumetric flow rate, dscfm	3508	3513
An - Area of nozzel, square feet	0.0004844	0.0004844
ø - Sampling time, minutes	72	60
I - Isokinetic variation, percent	96.2	96.0

METHOD 5 FIELD DATA SUMMARY

#1 DRYER CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	14.8	24.1
Vm - Gas volume, meter cond., dcf	44.377	42.250
Y - Meter calibration factor	0.969	0.969
Pbar - Barometric pressure, in. Hg	30.25	30.25
Pg - Stack static pressure, in. H2O	30.25	30.25
ΔH - Avg. meter press. diff., in. H2O	1.359	1.350
Tm - Absolute meter temperature, °R	539.6	541.0
Vm(std) - Standard sample gas vol., dscf	42.0144	39.8982
Bws - Water vapor part in gas stream	1.6	2.7
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.669	28.548
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.537	0.536
Ts - Absolute stack Temp. °R	590.8	606.9
A - Area of stack, square feet	1.97	1.97
Qstd - Volumetric flow rate, dscfm	3333	3250
An - Area of nozzel, square feet	0.0003547	0.0003547
ø - Sampling time, minutes	72	72
I - Isokinetic variation, percent	100.3	97.7

PM-10 FIELD DATA SUMMARY

MOTE CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	8.0	5.9
Vm - Gas volume, meter cond., dcf	41.340	35.231
Y - Meter calibration factor	0.969	0.969
Pbar - Barometric pressure, in. Hg	30.21	30.21
Pg - Stack static pressure, in. H2O	30.20	30.20
ΔH - Avg. meter press. diff., in. H2O	1.253	1.252
Tm - Absolute meter temperature, °R	522.7	538.9
Vm(std) - Standard sample gas vol., dscf	40.3391	33.3427
Bws - Water vapor part in gas stream	0.9	0.8
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.745	28.755
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.731	0.729
Ts - Absolute stack Temp. °R	521.3	534.9
A - Area of stack, square feet	4.276 1.97	1.97 4.276
Qstd - Volumetric flow rate, dscfm	4853	4782
An - Area of nozzel, square feet	0.0002428	0.0002428
ø - Sampling time, minutes	72	60
I - Isokinetic variation, percent	96.6	97.3

PM-10 FIELD DATA SUMMARY

LINT TRAP CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	4.4	7.6
Vm - Gas volume, meter cond., dcf	32.419	33.678
Y - Meter calibration factor	0.969	0.969
Pbar - Barometric pressure, in. Hg	30.10	30.10
Pg - Stack static pressure, in. H2O	30.09	30.09
ΔH - Avg. meter press. diff., in. H2O	0.804	0.813
Tm - Absolute meter temperature, °R	541.1	540.2
Vm(std) - Standard sample gas vol., dscf	30.4143	31.6498
Bws - Water vapor part in gas stream	0.7	1.1
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.772	28.724
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.598	0.602
Ts - Absolute stack Temp. °R	565.5	562.8
A - Area of stack, square feet	2.64	2.64
Qstd - Volumetric flow rate, dscfm	5112	5138
An - Area of nozzel, square feet	0.0002428	0.0002428
ø - Sampling time, minutes	72	72
I - Isokinetic variation, percent	92.7	96.0

PM-10 FIELD DATA SUMMARY

SUCTION CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	8.7	6.8
Vm - Gas volume, meter cond., dcf	43.776	36.708
Y - Meter calibration factor	1.023	1.023
Pbar - Barometric pressure, in. Hg	30.27	30.27
Pg - Stack static pressure, in. H2O	30.27	30.27
ΔH - Avg. meter press. diff., in. H2O	1.432	1.424
Tm - Absolute meter temperature, °R	527.6	531.2
Vm(std) - Standard sample gas vol., dscf	44.8117	37.3222
Bws - Water vapor part in gas stream	0.9	0.8
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.747	28.753
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.402	0.404
Ts - Absolute stack Temp. °R	535.5	544.4
A - Area of stack, square feet	2.64	2.64
Qstd - Volumetric flow rate, dscfm	3535	3521
An - Area of nozzel, square feet	0.0004779	0.0004779
ø - Sampling time, minutes	72	60
I - Isokinetic variation, percent	95.1	95.4

PM-10 FIELD DATA SUMMARY

#1 DRYER CYCLONE

	Run#1	Run#2
Vlc - Volume of water collected, ml	16.7	20.6
Vm - Gas volume, meter cond., dcf	43.153	42.760
Y - Meter calibration factor	1.023	1.023
Pbar - Barometric pressure, in. Hg	30.25	30.25
Pg - Stack static pressure, in. H2O	30.25	30.25
ΔH - Avg. meter press. diff., in. H2O	1.352	1.340
Tm - Absolute meter temperature, °R	537.3	538.7
Vm(std) - Standard sample gas vol., dscf	43.3422	42.8350
Bws - Water vapor part in gas stream	1.8	2.2
CO2 - Dry concentration, volume %	0.05	0.05
O2 - Dry concentration, volume %	20.9	20.9
Md - Mol wt. stack gas, dry, g/gmole	28.844	28.844
Ms - Mol wt. stack gas, wet, g/gmole	28.653	28.607
Cp - Pitot tube coef., dimensionless	0.850	0.850
Δp - Avg. of sq. roots of each Δp	0.536	0.536
Ts - Absolute stack Temp. °R	591.4	607.2
A - Area of stack, square feet	1.97	1.97
Qstd - Volumetric flow rate, dscfm	3321	3266
An - Area of nozzel, square feet	0.0003773	0.0003773
ø - Sampling time, minutes	72	72
I - Isokinetic variation, percent	92.5	93.0

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-Part**

Wlc	Water Condensate Weight	9.1	g		
Vlc	Water Condensate Volume	**9.1**	**ml**		
Vm	Metered Sample Gas Volume	**45.438**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	45.438	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.21**	**In. Hg**		
Pg	Static Pressure	**-0.15**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.20	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.559**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	60.9	deg. F	**520.9**	**deg. R**
Vm(std)	Sample Gas Volume	**47.0334**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	47.4567	scf		
Vw(std)	Water Vapor Volume	0.4233	scf		
Bws	Water Content of Stack Gas	0.009		**0.9**	**%**
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	**28.747**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.731**	**In. H20**		
Ts	Stack Gas Temperature, Average	**60.4**	deg. F	520.4	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	41.14	ft/sec		
Qa	Actual Flow Rate	10,555 4,860	cfm		
Qad	Actual Flow Rate, Dry	4,817	dcfm		
Q(std)	Stack Gas Flow Rate	**4,858**	**dscfm**		
An	Nozzle Area	**0.0002712**	**sq ft**	0.223	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**95.4**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-Part**

Wlc	Water Condensate Weight	6.2	g		
Vlc	Water Condensate Volume	**6.2**	**ml**		
Vm	Metered Sample Gas Volume	**38.385**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	38.385	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.21**	**In. Hg**		
Pg	Static Pressure	**-0.15**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.20	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.569**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	76.3	deg. F	**536.3**	**deg. R**
Vm(std)	Sample Gas Volume	**38.5973**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	38.8857	scf		
Vw(std)	Water Vapor Volume	0.2884	scf		
Bws	Water Content of Stack Gas	0.007		**0.7**	**%**
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	**28.764**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.731**	**In. H20**		
Ts	Stack Gas Temperature, Average	**74.3**	deg. F	534.3	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	41.67	ft/sec		
Qa	Actual Flow Rate	~~4,923~~ 10,590	cfm		
Qad	Actual Flow Rate, Dry	4,886	dcfm		
Q(std)	Stack Gas Flow Rate	**4,800**	**dscfm**		
An	Nozzle Area	**0.0002712**	**sq ft**	0.223	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**95.1**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-Part**

Wlc	Water Condensate Weight	5.5	g		
Vlc	Water Condensate Volume	**5.5**	**ml**		
Vm	Metered Sample Gas Volume	**35.530**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	35.530	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.10**	**In. Hg**		
Pg	Static Pressure	**-0.1**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.09	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**0.979**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	81.6	deg. F	541.6	**deg. R**
Vm(std)	Sample Gas Volume	**35.1947**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	35.4505	scf		
Vw(std)	Water Vapor Volume	0.2559	scf		
Bws	Water Content of Stack Gas	0.007		**0.7**	**%**
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	**28.766**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.593**	**In. H20**		
Ts	Stack Gas Temperature, Average	**105.5**	deg. F	565.5	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	34.82	ft/sec		
Qa	Actual Flow Rate	5,515	cfm		
Qad	Actual Flow Rate, Dry	5,475	dcfm		
Q(std)	Stack Gas Flow Rate	**5,064**	**dscfm**		
An	Nozzle Area	**0.0002712**	**sq ft**	0.223	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**91.8**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-Part**

Wlc	Water Condensate Weight	7.8	g		
Vlc	Water Condensate Volume	**7.8**	**ml**		
Vm	Metered Sample Gas Volume	**37.737**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	37.737	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.10**	**In. Hg**		
Pg	Static Pressure	**-0.1**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.09	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**0.999**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	80.9	deg. F	**540.9**	**deg. R**
Vm(std)	Sample Gas Volume	**37.4331**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	37.7959	scf		
Vw(std)	Water Vapor Volume	0.3628	scf		
Bws	Water Content of Stack Gas	0.010		**1.0**	**%**
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	**28.740**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.598**	**In. H20**		
Ts	Stack Gas Temperature, Average	**102.4**	deg. F	562.4	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	35.03	ft/sec		
Qa	Actual Flow Rate	5,548	cfm		
Qad	Actual Flow Rate, Dry	5,495	dcfm		
Q(std)	Stack Gas Flow Rate	**5,109**	**dscfm**		
An	Nozzle Area	**0.0002712**	**sq ft**	0.223	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**96.8**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-Part**

Wlc	Water Condensate Weight	9.2	g		
Vlc	Water Condensate Volume	**9.2**	**ml**		
Vm	Metered Sample Gas Volume	**44.725**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	44.725	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.27**	**In. Hg**		
Pg	Static Pressure	**-0.03**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.27	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.434**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	69.3	deg. F	**529.3**	**deg. R**
Vm(std)	Sample Gas Volume	**43.2069**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	43.6349	scf		
Vw(std)	Water Vapor Volume	0.4280	scf		
Bws	Water Content of Stack Gas	0.010		**1.0**	**%**
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	**28.738**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.399**	**In. H20**		
Ts	Stack Gas Temperature, Average	**75.5**	deg. F	535.5	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	22.77	ft/sec		
Qa	Actual Flow Rate	3,606	cfm		
Qad	Actual Flow Rate, Dry	3,571	dcfm		
Q(std)	Stack Gas Flow Rate	**3,508**	**dscfm**		
An	Nozzle Area	**0.0004844**	**sq ft**	0.298	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**96.2**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-Part**

Wlc	Water Condensate Weight	9.2	g		
Vlc	Water Condensate Volume	**9.2**	**ml**		
Vm	Metered Sample Gas Volume	**37.723**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	37.723	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.27**	**In. Hg**		
Pg	Static Pressure	**-0.03**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.27	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.443**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	76.3	deg. F	536.3	deg. R
Vm(std)	Sample Gas Volume	**35.9649**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	36.3929	scf		
Vw(std)	Water Vapor Volume	0.4280	scf		
Bws	Water Content of Stack Gas	0.012		1.2	%
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	**28.716**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.404**	**In. H20**		
Ts	Stack Gas Temperature, Average	**84.3**	deg. F	544.3	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	23.22	ft/sec		
Qa	Actual Flow Rate	3,678	cfm		
Qad	Actual Flow Rate, Dry	3,635	dcfm		
Q(std)	Stack Gas Flow Rate	**3,513**	**dscfm**		
An	Nozzle Area	**0.0004844**	**sq ft**	0.298	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**96.0**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-Part**

Wlc	Water Condensate Weight	14.8	g		
Vlc	Water Condensate Volume	**14.8**	**ml**		
Vm	Metered Sample Gas Volume	**44.377**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	44.377	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.25**	**In. Hg**		
Pg	Static Pressure	**-0.06**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.25	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.359**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	79.6	deg. F	**539.6**	**deg. R**
Vm(std)	Sample Gas Volume	**42.0144**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	42.7029	scf		
Vw(std)	Water Vapor Volume	0.6885	scf		
Bws	Water Content of Stack Gas	0.016		**1.6**	**%**
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	**28.669**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.537**	**In. H20**		
Ts	Stack Gas Temperature, Average	**130.8**	deg. F	590.8	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	32.23	ft/sec		
Qa	Actual Flow Rate	3,807	cfm		
Qad	Actual Flow Rate, Dry	3,746	dcfm		
Q(std)	Stack Gas Flow Rate	**3,333**	**dscfm**		
An	Nozzle Area	**0.0003547**	**sq ft**	0.255	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**100.3**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-Part**

Wlc	Water Condensate Weight	24.1	g		
Vlc	Water Condensate Volume	**24.1**	**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	**0.969**			
Pbar	Barometric Pressure	**30.25**	**In. Hg**		
Pg	Static Pressure	**-0.06**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.25	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.350**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	81.0	deg. F	**541.0**	**deg. R**
Vm(std)	Sample Gas Volume	**39.8982**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	41.0193	scf		
Vw(std)	Water Vapor Volume	1.1211	scf		
Bws	Water Content of Stack Gas	0.027		**2.7**	**%**
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	**28.548**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.536**	**In. H20**		
Ts	Stack Gas Temperature, Average	**146.9**	deg. F	606.9	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	32.65	ft/sec		
Qa	Actual Flow Rate	3,857	cfm		
Qad	Actual Flow Rate, Dry	3,752	dcfm		
Q(std)	Stack Gas Flow Rate	**3,250**	**dscfm**		
An	Nozzle Area	**0.0003547**	**sq ft**	0.255	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**97.7**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-PM10**

Wlc	Water Condensate Weight	8.0	g		
Vlc	Water Condensate Volume	**8.0**	**ml**		
Vm	Metered Sample Gas Volume	**41.340**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	41.340	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.21**	**In. Hg**		
Pg	Static Pressure	**-0.15**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.20	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.253**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	62.7	deg. F	**522.7**	**deg. R**
Vm(std)	Sample Gas Volume	**40.3391**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	40.7112	scf		
Vw(std)	Water Vapor Volume	0.3721	scf		
Bws	Water Content of Stack Gas	0.009		**0.9**	**%**
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	**28.745**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.731**	**In. H20**		
Ts	Stack Gas Temperature, Average	**61.3**	deg. F	521.3	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	41.17	ft/sec		
Qa	Actual Flow Rate	4,864	cfm		
Qad	Actual Flow Rate, Dry	4,820	dcfm		
Q(std)	Stack Gas Flow Rate	**4,853**	**dscfm**		
An	Nozzle Area	**0.0002428**	**sq ft**	0.211	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**96.6**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-PM10**

Wlc	Water Condensate Weight	5.9	g		
Vlc	Water Condensate Volume	**5.9**	**ml**		
Vm	Metered Sample Gas Volume	**35.231**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	35.231	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.21**	**In. Hg**		
Pg	Static Pressure	**-0.15**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.20	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.252**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	78.9	deg. F	**538.9**	**deg. R**
Vm(std)	Sample Gas Volume	**33.3427**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	33.6171	scf		
Vw(std)	Water Vapor Volume	0.2745	scf		
Bws	Water Content of Stack Gas	0.008		**0.8**	**%**
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	**28.755**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.729**	**In. H20**		
Ts	Stack Gas Temperature, Average	**74.9**	deg. F	534.9	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	41.59	ft/sec		
Qa	Actual Flow Rate	4,913	cfm		
Qad	Actual Flow Rate, Dry	4,873	dcfm		
Q(std)	Stack Gas Flow Rate	**4,782**	**dscfm**		
An	Nozzle Area	**0.0002428**	**sq ft**	0.211	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**97.3**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-PM10**

Wlc	Water Condensate Weight	4.4	g		
Vlc	Water Condensate Volume	**4.4**	**ml**		
Vm	Metered Sample Gas Volume	**32.419**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	32.419	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.10**	**In. Hg**		
Pg	Static Pressure	**-0.1**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.09	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**0.804**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	81.1	deg. F	541.1	**deg. R**
Vm(std)	Sample Gas Volume	**30.4143**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	30.6190	scf		
Vw(std)	Water Vapor Volume	0.2047	scf		
Bws	Water Content of Stack Gas	0.007		0.7	%
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	**28.772**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.598**	**In. H20**		
Ts	Stack Gas Temperature, Average	**105.5**	deg. F	565.5	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	35.14	ft/sec		
Qa	Actual Flow Rate	5,565	cfm		
Qad	Actual Flow Rate, Dry	5,528	dcfm		
Q(std)	Stack Gas Flow Rate	**5,112**	**dscfm**		
An	Nozzle Area	**0.0002428**	**sq ft**	0.211	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**92.7**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-PM10**

Wlc	Water Condensate Weight	7.6	g		
Vlc	Water Condensate Volume	**7.6**	**ml**		
Vm	Metered Sample Gas Volume	**33.678**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	33.678	dcf		
Y	Dry Gas Meter Calibration Factor	**0.969**			
Pbar	Barometric Pressure	**30.10**	**In. Hg**		
Pg	Static Pressure	**-0.1**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.09	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**0.813**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	80.2	deg. F	540.2	deg. R
Vm(std)	Sample Gas Volume	**31.6498**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	32.0034	scf		
Vw(std)	Water Vapor Volume	0.3535	scf		
Bws	Water Content of Stack Gas	0.011		1.1	%
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	**28.724**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.602**	**In. H20**		
Ts	Stack Gas Temperature, Average	**102.8**	deg. F	562.8	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	35.30	ft/sec		
Qa	Actual Flow Rate	5,591	cfm		
Qad	Actual Flow Rate, Dry	5,529	dcfm		
Q(std)	Stack Gas Flow Rate	**5,138**	**dscfm**		
An	Nozzle Area	**0.0002428**	**sq ft**	0.211	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**96.0**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-PM10**

Wlc	Water Condensate Weight	8.7	g		
Vlc	Water Condensate Volume	**8.7**	**ml**		
Vm	Metered Sample Gas Volume	**43.776**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	43.776	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.27**	**In. Hg**		
Pg	Static Pressure	**-0.03**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.27	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.432**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	67.6	deg. F	527.6	**deg. R**
Vm(std)	Sample Gas Volume	**44.8117**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	45.2164	scf		
Vw(std)	Water Vapor Volume	0.4047	scf		
Bws	Water Content of Stack Gas	0.009		0.9	%
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	**28.747**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.402**	**In. H20**		
Ts	Stack Gas Temperature, Average	**75.5**	deg. F	535.5	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	22.92	ft/sec		
Qa	Actual Flow Rate	3,631	cfm		
Qad	Actual Flow Rate, Dry	3,598	dcfm		
Q(std)	Stack Gas Flow Rate	**3,535**	**dscfm**		
An	Nozzle Area	**0.0004779**	**sq ft**	0.296	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**95.1**	%		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-PM10**

Wlc	Water Condensate Weight	6.8	g		
Vlc	Water Condensate Volume	**6.8**	**ml**		
Vm	Metered Sample Gas Volume	**36.708**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	36.708	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.27**	**In. Hg**		
Pg	Static Pressure	**-0.03**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.27	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.424**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	71.2	deg. F	**531.2**	**deg. R**
Vm(std)	Sample Gas Volume	**37.3222**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	37.6386	scf		
Vw(std)	Water Vapor Volume	0.3163	scf		
Bws	Water Content of Stack Gas	0.008		**0.8**	**%**
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	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.404**	**In. H20**		
Ts	Stack Gas Temperature, Average	**84.4**	deg. F	544.4	deg. R
As	Area of Stack	**2.64**	**sq ft**	22.0	in. dia.
Vs	Stack Gas Velocity	23.20	ft/sec		
Qa	Actual Flow Rate	3,674	cfm		
Qad	Actual Flow Rate, Dry	3,643	dcfm		
Q(std)	Stack Gas Flow Rate	**3,521**	**dscfm**		
An	Nozzle Area	**0.0004779**	**sq ft**	0.296	in. dia.
Theta	Sampling Time	**60**	**min.**		
I	Isokinetics	**95.4**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-PM10**

Wlc	Water Condensate Weight	16.7	g		
Vlc	Water Condensate Volume	**16.7**	**ml**		
Vm	Metered Sample Gas Volume	**43.153**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	43.153	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.25**	**In. Hg**		
Pg	Static Pressure	**-0.06**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.25	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.352**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	77.3	deg. F	**537.3**	**deg. R**
Vm(std)	Sample Gas Volume	**43.3422**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	44.1190	scf		
Vw(std)	Water Vapor Volume	0.7769	scf		
Bws	Water Content of Stack Gas	0.018		1.8	%
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	**28.653**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.536**	**In. H20**		
Ts	Stack Gas Temperature, Average	**131.4**	deg. F	591.4	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	32.20	ft/sec		
Qa	Actual Flow Rate	3,804	cfm		
Qad	Actual Flow Rate, Dry	3,737	dcfm		
Q(std)	Stack Gas Flow Rate	**3,321**	**dscfm**		
An	Nozzle Area	**0.0003773**	**sq ft**	0.263	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**92.5**	**%**		

FIELD DATA & CALCULATIONS SUMMARY

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-PM10**

Wlc	Water Condensate Weight	20.6	g		
Vlc	Water Condensate Volume	**20.6**	**ml**		
Vm	Metered Sample Gas Volume	**42.760**	**dcf**		
Lp	Avg. Leak Rate	0.000	cf		
Vn	Leak Corrected Sample Gas Volume	42.760	dcf		
Y	Dry Gas Meter Calibration Factor	**1.023**			
Pbar	Barometric Pressure	**30.25**	**In. Hg**		
Pg	Static Pressure	**-0.06**	**In. H2O**		
Ps	Stack Pressure, Absolute	30.25	in. Hg		
Δ H	Dry Gas Meter Press. Differential, Average	**1.340**	**In. H2O**		
Tm	Dry Gas Meter Temperature, Average	78.7	deg. F	**538.7**	**deg. R**
Vm(std)	Sample Gas Volume	**42.8350**	**dscf**		
Vm(wet)	Sample Gas Volume, Wet	43.7932	scf		
Vw(std)	Water Vapor Volume	0.9583	scf		
Bws	Water Content of Stack Gas	0.022		**2.2**	**%**
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	**28.607**	**lb/lb mole**		
Cp	Pitot Calibration Factor	**0.850**			
Δ P	Velocity Head, Average Square Root	**0.536**	**In. H20**		
Ts	Stack Gas Temperature, Average	**147.2**	deg. F	607.2	deg. R
As	Area of Stack	**1.97**	**sq ft**	19.0	in. dia.
Vs	Stack Gas Velocity	32.65	ft/sec		
Qa	Actual Flow Rate	3,857	cfm		
Qad	Actual Flow Rate, Dry	3,773	dcfm		
Q(std)	Stack Gas Flow Rate	**3,266**	**dscfm**		
An	Nozzle Area	**0.0003773**	**sq ft**	0.263	in. dia.
Theta	Sampling Time	**72**	**min.**		
I	Isokinetics	**93.0**	**%**		

III. WET TEST METHODS CALCULATIONS

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-Part**

Total Particulate

Ws	Total Particulate Weight	0.1396	g
Cs	Total Particulate Emissions	0.0458	grain/dscf
CFs	Particulate Flow Rate	1.91	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Moat**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-Part**

Total Particulate

Ws	Total Particulate Weight	0.4136	g
Cs	Total Particulate Emissions	0.1653	grain/dscf
CFs	Particulate Flow Rate	6.80	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **1-Part**

Total Particulate

Ws	Total Particulate Weight	0.1218	g
Cs	Total Particulate Emissions	0.0534	grain/dscf
CFs	Particulate Flow Rate	2.32	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Lint Trap**

Date: **12/4/90**
Type: ***T std = 60 F***
Run: **2-Part**

Total Particulate

Ws	Total Particulate Weight	0.1618	g
Cs	Total Particulate Emissions	0.0667	grain/dscf
CFs	Particulate Flow Rate	2.92	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-Part**

Total Particulate

Ws	Total Particulate Weight	0.1073	g
Cs	Total Particulate Emissions	0.0383	grain/dscf
CFs	Particulate Flow Rate	1.15	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **Suction**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-Part**

Total Particulate

Ws	Total Particulate Weight	0.0973	g
Cs	Total Particulate Emissions	0.0417	grain/dscf
CFs	Particulate Flow Rate	1.26	lb/hr

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **1-Part**

Total Particulate

Ws	Total Particulate Weight	0.0933	g
Cs	Total Particulate Emissions	0.0343	grain/dscf
CFs	Particulate Flow Rate	0.98	lb/hr

BTC Environmental, Inc. - 1989

CALCULATED EMISSION RESULTS

Client: **Hanford/Eckley**
Site: **Hanford Gin**
Unit: **#1 Dryer**

Date: **12/3/90**
Type: ***T std = 60 F***
Run: **2-Part**

Total Particulate

Ws	Total Particulate Weight	0.2195	g
Cs	Total Particulate Emissions	0.0849	grain/dscf
CFs	Particulate Flow Rate	2.36	lb/hr

BTC Environmental, Inc. - 1989

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Moat
Run : 1

Date : 12/4/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.1008 gms. Tare: 0.0891 gms. Net: 0.0117 gms.
Filter Gross: 0.1021 gms. Tare: 0.0885 gms. Net: 0.0136 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 68.2542 gms. Tare: 68.0022 gms. Net: 0.2520 gms.

+10µ Total Weight = 0.2739 gms.

Filter Gross: 0.2124 gms. Tare: 0.1204 gms. Net: 0.0920 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 70.7180 gms. Tare: 70.7108 gms. Net: 0.0016 gms.

-10µ Total Weight = 0.0881 gms.

Total Weight = 0.3620 gms.

+ 10 µ 0.7566 %
- 10 µ 0.2434 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Moat
Run : 2

Date : 12/4/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone — Volume: 100 ml
Gross: 73.2865 gms. Tare: 73.2842 gms. Residue: 0.0023 gms.

DI Water — Volume: 100 ml
Gross: 71.7775 gms. Tare: 71.7764 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.1003 gms. Tare: 0.0886 gms. Net: 0.0117 gms.
Filter Gross: 0.0956 gms. Tare: 0.0885 gms. Net: 0.0071 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 73.0774 gms. Tare: 72.8942 gms. Net: 0.1832 gms.

+10µ Total Weight = 0.1986 gms.

Filter Gross: 0.2107 gms. Tare: 0.1185 gms. Net: 0.0922 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 70.4214 gms. Tare: 70.4152 gms. Net: 0.0006 gms.

-10µ Total Weight = 0.0873 gms.

Total Weight = 0.2859 gms.

+ 10 µ 0.6946 %
- 10 µ 0.3054 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Lint Trap
Run : 1

Date : 12/4/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0916 gms. Tare: 0.0885 gms. Net: 0.0031 gms.
Filter Gross: 0.0912 gms. Tare: 0.0591 gms. Net: 0.0321 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 69.0416 gms. Tare: 68.9736 gms. Net: 0.0680 gms.

+10µ Total Weight = 0.0998 gms.

Filter Gross: 0.1783 gms. Tare: 0.1187 gms. Net: 0.0596 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 65.1148 gms. Tare: 65.1088 gms. Net: 0.0004 gms.

-10µ Total Weight = 0.0545 gms.

Total Weight = 0.1543 gms.

+ 10 µ 0.6468 %
- 10 µ 0.3532 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Lint Trap
Run : 2

Date : 12/4/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0924 gms. Tare: 0.0889 gms. Net: 0.0035 gms.
Filter Gross: 0.0928 gms. Tare: 0.0893 gms. Net: 0.0035 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 68.3186 gms. Tare: 68.2537 gms. Net: 0.0649 gms.

+10µ Total Weight = 0.0685 gms.

Filter Gross: 0.1795 gms. Tare: 0.1194 gms. Net: 0.0601 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 72.4737 gms. Tare: 72.4650 gms. Net: 0.0031 gms.

-10µ Total Weight = 0.0577 gms.

Total Weight = 0.1262 gms.

+ 10 µ 0.5428 %
- 10 µ 0.4572 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Suction
Run : 1

Date : 12/3/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0917 gms. Tare: 0.0901 gms. Net: 0.0016 gms.
Filter Gross: 0.0889 gms. Tare: 0.0871 gms. Net: 0.0018 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 73.9158 gms. Tare: 73.9156 gms. Net: 0.0002 gms.

+10µ Total Weight = 0.0002 gms.

Filter Gross: 0.1589 gms. Tare: 0.1134 gms. Net: 0.0455 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 73.9456 gms. Tare: 73.9098 gms. Net: 0.0302 gms.

-10µ Total Weight = 0.0702 gms.

Total Weight = 0.0704 gms.

+ 10 µ 0.0028 %
- 10 µ 0.9972 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Suction
Run : 2

Date : 12/3/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone — Volume: 100 ml
Gross: 73.2865 gms. Tare: 73.2842 gms. Residue: 0.0023 gms.

DI Water — Volume: 100 ml
Gross: 71.7775 gms. Tare: 71.7764 gms. Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0888 gms. Tare: 0.0875 gms. Net: 0.0013 gms.
Filter Gross: 0.0902 gms. Tare: 0.0891 gms. Net: 0.0011 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 73.9168 gms. Tare: 73.9156 gms. Net: 0.0012 gms.

+10µ Total Weight = 0.0002 gms.

Filter Gross: 0.1509 gms. Tare: 0.1173 gms. Net: 0.0336 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone : 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 72.4668 gms. Tare: 72.4602 gms. Net: 0.0010 gms.

-10µ Total Weight = 0.0291 gms.

Total Weight = 0.0293 gms.

+ 10 µ 0.0068 %
- 10 µ 0.9932 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Drier
Run : 1

Date : 12/3/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0903 gms. Tare: 0.0883 gms. Net: 0.0020 gms.
Filter Gross: 0.0912 gms. Tare: 0.0889 gms. Net: 0.0023 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 68.0188 gms. Tare: 67.9752 gms. Net: 0.0436 gms.

+10µ Total Weight = 0.0445 gms.

Filter Gross: 0.1554 gms. Tare: 0.1182 gms. Net: 0.0372 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone: 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 69.2162 gms. Tare: 69.2099 gms. Net: 0.0007 gms.

-10µ Total Weight = 0.0323 gms.

Total Weight = 0.0768 gms.

+ 10 µ 0.5791 %
- 10 µ 0.4209 %

PARTICULATE WEIGHTS : DATA & CALCULATIONS

Client : Hanford/Eckley
Site : Hanford Gin
Unit : Drier
Run : 2

Date : 12/3/90
Job #: 5019
Lab #: 290-188

BLANKS

Acetone
Gross: 73.2865 gms. Tare: 73.2842 gms. Volume: 100 ml Residue: 0.0023 gms.

DI Water
Gross: 71.7775 gms. Tare: 71.7764 gms. Volume: 100 ml Residue: 0.0011 gms.

WEIGHTS & VOLUMES

Filter Gross: 0.0941 gms. Tare: 0.0891 gms. Net: 0.0050 gms.
Filter Gross: 0.0960 gms. Tare: 0.0891 gms. Net: 0.0069 gms.

+10 µ Rinse -
Acetone: 100 ml * 2E-05 gms./ml = Net: -0.0023 gms.
DI Water: 100 ml * 1E-05 gms./ml = Net: -0.0011 gms.
Gross: 69.2174 gms. Tare: 69.1140 gms. Net: 0.1034 gms.

+10µ Total Weight = 0.1119 gms.

Filter Gross: 0.1851 gms. Tare: 0.1166 gms. Net: 0.0685 gms.

-10 µ Rinse
DI Water: 400 ml * 1E-05 gms./ml = Net: -0.0044 gms.
Acetone: 50 ml * 2E-05 gms./ml = Net: -0.0012 gms.
Total: 400 ml Aliquot: 400 ml
Gross: 70.8788 gms. Tare: 70.8696 gms. Net: 0.0036 gms.

-10µ Total Weight = 0.0666 gms.

Total Weight = 0.1785 gms.

+ 10 µ 0.6269 %
- 10 µ 0.3731 %

V. LABORATORY ANALYSIS

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Moat

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	1	Stack box#:	E	Nozzle#:	0.223
Hot box#:	-	Cold box#:	5	Pitot#:	0.85

Imp. #1:	gross	598.9	
	tare	598.8	
	final	0.1	
Imp. #2:	gross	603.5	
	tare	604.0	
	final	-0.5	
Imp. #3:	gross	466.9	
	tare	466.4	
	final	0.5	
Imp. #4:	gross	607.3	
	tare	598.3	
	final	9.0	
	Total	9.1	

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-24	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	150.1	ml
Amount Gained:		0.1	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	149.5	ml
Amount Gained:		-0.5	ml
Total Vol #1 #2 & Rinse		400.0	ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Moat

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	2	Stack box#:	E	Nozzle#:	0.223
Hot box#:	-	Cold box#:	10	Pitot#:	0.85

Imp. #1:	gross	588.5
	tare	589.5
	final	-1.0
Imp. #2:	gross	600.4
	tare	600.0
	final	0.4
Imp. #3:	gross	469.4
	tare	469.9
	final	-0.5
Imp. #4:	gross	623.0
	tare	615.7
	final	7.3
	Total	6.2

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-25	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	149.0	ml
Amount Gained:		-1.0	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	150.4	ml
Amount Gained:		0.4	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Lint Trap

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#: 5
Run#: 1
Hot box#: -

Probe#: 7
Stack box#: E
Cold box#: 5

Pryo#: T-5
Nozzle#: 0.223
Pitot#: 0.85

Imp. #1:	gross	591.3
	tare	593.0
	final	-1.7
Imp. #2:	gross	624.3
	tare	624.6
	final	-0.3
Imp. #3:	gross	466.7
	tare	466.6
	final	0.1
Imp. #4:	gross	614.4
	tare	607.0
	final	7.4

Total 5.5

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-26	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	148.3	ml
Amount Gained:		-1.7	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	149.7	ml
Amount Gained:		-0.3	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Lint Trap

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	2	Stack box#:	E	Nozzle#:	0.223
Hot box#:	-	Cold box#:	10	Pitot#:	0.85

Imp. #1:	gross	600.5
	tare	602.4
	final	-1.9
Imp. #2:	gross	593.5
	tare	593.4
	final	0.1
Imp. #3:	gross	469.0
	tare	469.3
	final	-0.3
Imp. #4:	gross	632.9
	tare	623.0
	final	9.9
	Total	7.8

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-27	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	148.1	ml
Amount Gained:		-1.9	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	150.1	ml
Amount Gained:		0.1	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Suction

Date : 12/3/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	1	Stack box#:	D	Nozzle#:	0.298
Hot box#:	-	Cold box#:	5	Pitot#:	0.85

Imp. #1:	gross	583.5	
	tare	583.3	
	final	0.2	
Imp. #2:	gross	604.9	
	tare	605.1	
	final	-0.2	
Imp. #3:	gross	465.7	
	tare	465.0	
	final	0.7	
Imp. #4:	gross	607.3	
	tare	598.8	
	final	8.5	
	Total	9.2	

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-20	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	150.2	ml
Amount Gained:		5.1	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	149.8	ml
Amount Gained:		-0.2	ml
Total Vol #1 #2 & Rinse		400.0	ml

Comments:

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Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Suction

Date : 12/3/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	2	Stack box#:	D	Nozzle#:	0.298
Hot box#:	-	Cold box#:	10	Pitot#:	0.85

Imp. #1:	gross	604.9
	tare	605.3
	final	-0.4
Imp. #2:	gross	582.1
	tare	580.5
	final	1.6
Imp. #3:	gross	469.0
	tare	468.4
	final	0.6
Imp. #4:	gross	620.8
	tare	613.4
	final	7.4
	Total	9.2

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-21	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	149.6	ml
Amount Gained:		-0.4	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	151.6	ml
Amount Gained:		1.6	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

BTC Enviromental, Inc. - 1989

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: #1 Dryer

Date : 12/3/90
Job #: 5019
Lab #: 290-188

Method#: 5
Run#: 1
Hot box#: -

Probe#: 7
Stack box#: D
Cold box#: 5

Pryo#: T-5
Nozzle#: 0.255
Pitot#: 0.85

Imp. #1:	gross	604.4
	tare	597.8
	final	6.6
Imp. #2:	gross	606.6
	tare	604.6
	final	2.0
Imp. #3:	gross	466.5
	tare	465.7
	final	0.8
Imp. #4:	gross	612.7
	tare	607.3
	final	5.4

Total 14.8

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-22	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	156.6	ml
Amount Gained:		6.6	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	152.0	ml
Amount Gained:		2.0	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: #1 Dryer

Date : 12/3/90
Job #: 5019
Lab #: 290-188

Method#:	5	Probe#:	7	Pryo#:	T-5
Run#:	2	Stack box#:	D	Nozzle#:	0.255
Hot box#:	-	Cold box#:	10	Pitot#:	0.85

Imp. #1:	gross	604.3
	tare	595.1
	final	9.2
Imp. #2:	gross	617.8
	tare	614.7
	final	3.1
Imp. #3:	gross	470.0
	tare	469.0
	final	1.0
Imp. #4:	gross	631.4
	tare	620.6
	final	10.8
Total		24.1

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	D-23	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	159.2	ml
Amount Gained:		9.2	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	153.1	ml
Amount Gained:		3.1	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Moat

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#:	PM-10	Probe#:	7	Pryo#:	T-5
Run#:	1	Stack box#:	D	Nozzle#:	0.211
Hot box#:	-	Cold box#:	4	Pitot#:	0.85

Imp. #1:	gross	594.0
	tare	594.0
	final	0.0
Imp. #2:	gross	621.4
	tare	621.3
	final	0.1
Imp. #3:	gross	476.6
	tare	476.4
	final	0.2
Imp. #4:	gross	629.5
	tare	621.8
	final	7.7
	Total	8.0

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	F4,X41,X42	
Filter Tare wt.		

	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	150.0	ml
Amount Gained:		0.0	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	150.1	ml
Amount Gained:		0.1	ml
Total Vol #1 #2 & Rinse		400.0	ml

Comments:

BTC Enviromental, Inc. - 1989

Run Set Up Sheet

Client : Hanford/Eckley
Site : Hanford Gin
Unit: Moat

Date : 12/4/90
Job #: 5019
Lab #: 290-188

Method#:	PM-10	Probe#:	7	Pryo#:	T-5
Run#:	2	Stack box#:	D	Nozzle#:	0.211
Hot box#:	-	Cold box#:	9	Pitot#:	0.85

Imp. #1:	gross	572.9
	tare	573.8
	final	-0.9
Imp. #2:	gross	611.4
	tare	611.5
	final	-0.1
Imp. #3:	gross	480.7
	tare	480.9
	final	-0.2
Imp. #4:	gross	632.3
	tare	625.2
	final	7.1
	Total	5.9

Probe blank	-	ml
Probe rinse	200	ml
Solution blank	DI	
Solution blank	Acetone	
Filter No:	F5,X43,X44	
Filter Tare wt.		

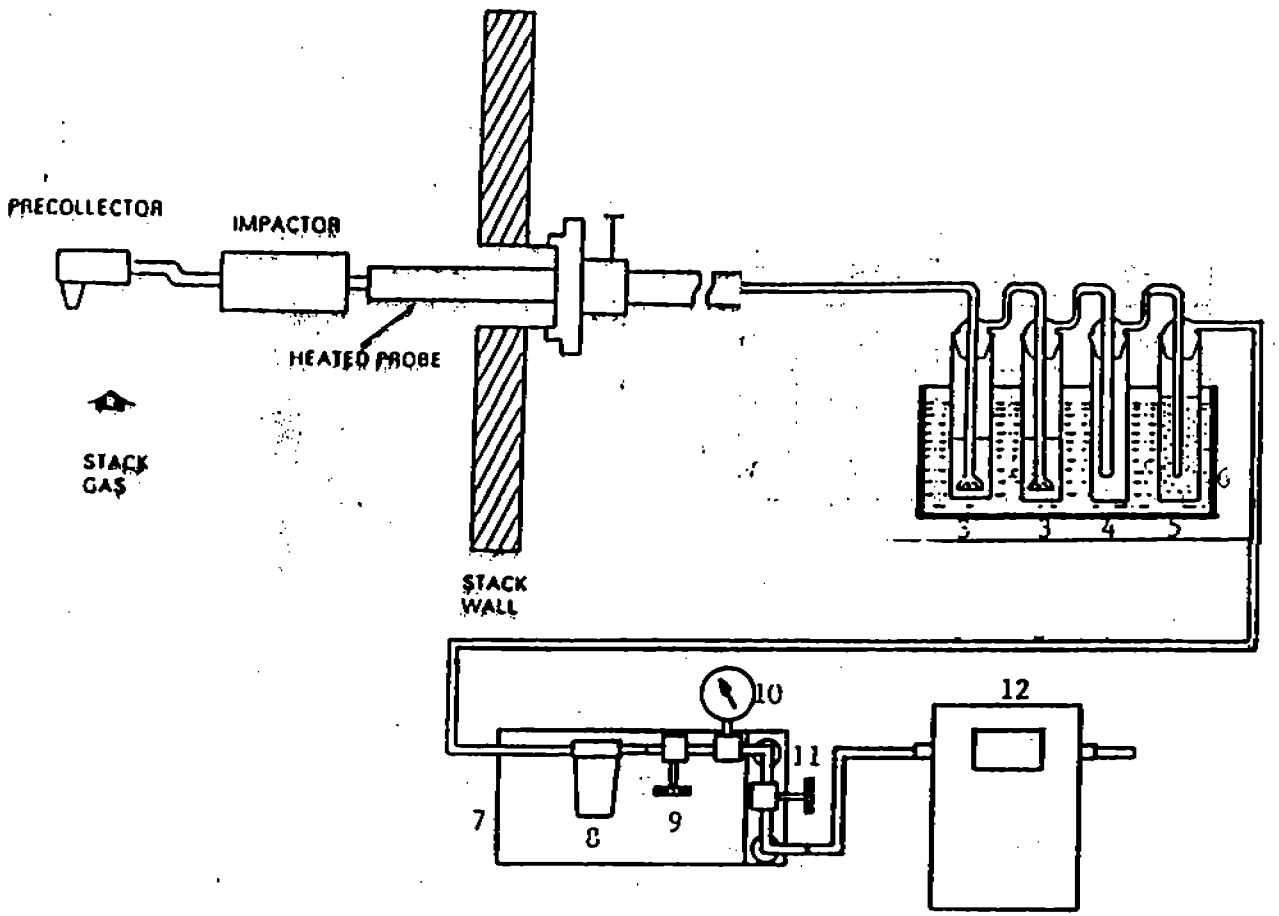
	#	date
Solution Container		
Solution Container		

Sample Vol:	start	150.0	ml
Imp#1	finsh	149.1	ml
Amount Gained:		-0.9	ml
Sample Vol:	start	150.0	ml
Imp #2	finsh	149.9	ml
Amount Gained:		-0.1	ml

Total Vol #1 #2 & Rinse 400.0 ml

Comments:

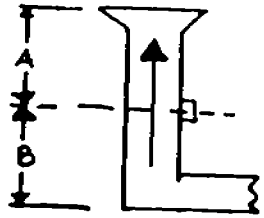
PM-10 PARTICULATE SAMPLING TRAIN

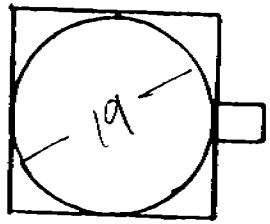


1. Stack Wall
2. Probe
3. Impinger with 100 ml of H_2O
4. Empty Bubbler
5. Bubbler with Silica Gel
6. Ice Bath
7. Sealed Pump (Leak Fre
8. Filter for Pump
9. Metering Valve
10. Vacuum Gauge
11. By-pass Valve
12. Temperature Compensated Dry Gas Meter

VII. RAW DATA

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Mobe
DATE: 12/4/90
RUN NO./METHOD: 1A ~ Part
COLD BOX NO.: 5
METER BOX NO.: E
METER FACTOR: 1.0231 AH@= 2.1201
PITOT #/ FACTOR: 1 ~ .8500
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995





FILTER NO. D-24
AMBIENT TEMP.: 44
BARAMETRIC PRESS.,IN.HG.: 30.21
ASSUMED MOISTURE: 5?
HEATER BOX SETTING: /
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING: /
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): /
STATIC PREASURE: -.15 "H2O
OFFSET: ∅ in. PORT DIA.: 3 in. (M / -)

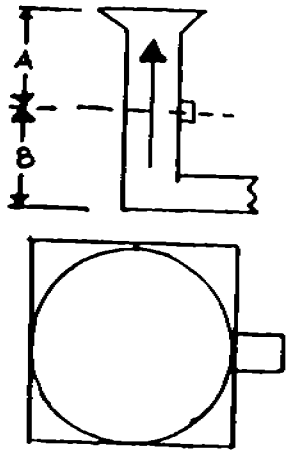
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Bail # 3323% 1				3:55 0	55	.45		1.28	474.862	45	44		
2				3	55	.60		1.70	476.5	47	45		
3				6	55	.60		1.71	478.5	50	45		
4				9	56	.65		1.85	480.5	52	46		
5				12	56	.65		1.85	482.4	57	48	10	
6				15	56	.60		1.71	484.5	59	49		
7				18	56	.50		1.44	486.5	61	49		
8				21	57	.50		1.44	488.5	62	49		
9				24	59	.50		1.44	490.3	66	52		
10				27	60	.55		1.59	492.1	67	53		
11				30	61	.55		1.59	494.1	70	53		
12				33	61	.55		1.59	495.9	71	53		
	ZERO			36					497.8				
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.2 BOTTOM ΔP= 3.6
ΔP= 3.2 ΔP= 3.6
AFTER: TOP ΔP= BOTTOM ΔP=
ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= 5.005 CFM@ 15 IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: Mob
DATE: 12/4/90
RUN NO./METHOD: 1B: Part
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M / -)

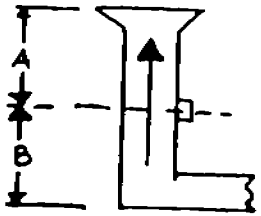
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				9:37 0	61	.35		1.01	497.8	60	60		
2				3	62	.40		1.15	499.4	70	58		
3				6	62	.40		1.15	501.0	73	60		
4				9	63	.42		1.23	502.7	73	60		
5				12	64	.43		1.25	504.4	73	61		
6				15	64	.45		1.31	506.1	74	63		
7				18	64	.55		1.61	507.9	75	63		
8				21	64	.60		1.76	509.8	76	63		
9				24	64	.60		1.76	511.8	76	63		
10				27	64	.67		1.96	513.8	79	63		
11				30	65	.65		1.90	516.0	80	64		
12				33	66	.72		2.13	518.1	80	64	10	
	ZERO			36					520.300				
	SPAN												
AVERAGE		20.9	0.105	12	60.4		0.731	1.559	45.438	60.9			

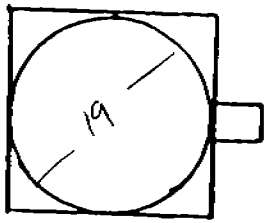
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Klote
DATE: 12/4/90
RUN NO./METHOD: 2A ~ Part
COLD BOX NO.: 10
METER BOX NO.: ~~#~~ E
METER FACTOR: 1.0231 ΔH@ = 2.1201
PITOT #/ FACTOR: 7 - 0.8500
PYROMETER #:
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995





FILTER NO. D-25
AMBIENT TEMP.: ~~#~~ 65
BARAMETRIC PRESS.,IN.HG.: 30.21
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: /
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING: /
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): /
STATIC PREASURE: -.15 "H2O
OFFSET: 8 in. PORT DIA.: 3 in. (M /)

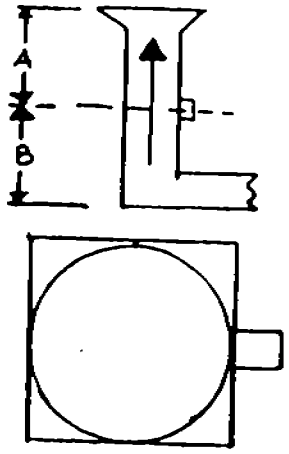
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Batch # 33265 1				10:46 0	64	.45		1.30	520.867	64	64		
2				2.5	68	.60		1.75	522.4	68	64		
3				5	69	.60		1.75	524.0	69	64		
4				7.5	70	.65		1.87	525.7	75	64		
5				10	72	.65		1.87	527.6	76	64		
6				12.5	73	.60		1.79	529.4	82	68		
7				15	74	.50		1.45	531.1	82	68		
8				17.5	75	.50		1.45	532.6	83	68		
9				20	75	.50		1.45	534.1	84	68		
10				22.5	75	.55		1.59	535.7	86	69		
11				25	75	.55		1.59	537.2	90	72		
12				27.5	79	.55		1.59	538.8	91	73		
	ZERO			30					540.4				
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.2 ΔP= 3.2 BOTTOM ΔP= 3.5 ΔP= 3.5
AFTER: TOP ΔP= 3.7 ΔP= 3.7 BOTTOM ΔP= 3.1 ΔP= 3.1

SAMPLE TRAIN LEAK:
BEFORE= <.002 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS: PURGE .

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: Mote
DATE: 12/4/90
RUN NO./METHOD: 2B - Pact
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: 3/8 in. (M /)

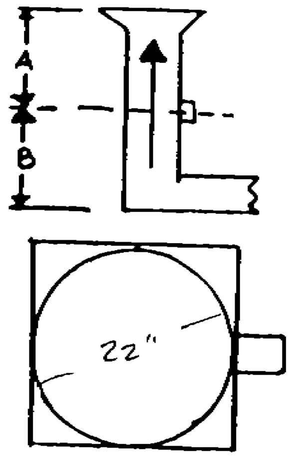
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				11:30 0	76	.35		1.01	540.4	76	76		
2				2.5	76	.40		1.16	541.7	85	76		
3				5	76	.40		1.17	543.2	88	76	3	
4				7.5	76	.42		1.22	544.5	90	77		
5				10	76	.43		1.25	545.9	93	79		
6				12.5	76	.45		1.32	547.4	94	80		
7				15	77	.55		1.62	548.9	94	79		
8				17.5	77	.60		1.76	550.5	95	80		
9				20	77	.60		1.76	552.1	97	80		
10				22.5	77	.67		1.96	553.8	97	81		
11	Point # 33290			25	77	.65		1.91	555.6	98	81	5	
12				27.5	77	.72		2.11	557.4	99	81		
	ZERO			30					559.252				
	SPAN												
AVERAGE		20.9	0.05	60	76.7		0.731	1.569	38.395	76.3			

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Lint Trap
DATE: 12/4/90
RUN NO./METHOD: 1A - Part
COLD BOX NO.: 5
METER BOX NO.: BE
METER FACTOR: 1.0231, ΔH@ = 2.1201
PITOT #/ FACTOR: 7 - .8500
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.955



FILTER NO. D-26
AMBIENT TEMP.: 75
BARAMETRIC PRESS.,IN.HG.: 30.1
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT.: 5'
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -.10 "H2O
OFFSET: Ø In.
PORT DIA.: 3 in. (M / ‾)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm)	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Baila# 3330A 1				1:10 0	98	.40		1.10	559.532	68	67		
2				3	97	.42		1.16	561.2	72	70		
3				6	97	.45		1.25	562.8	76	73		
4				9	98	.45		1.25	564.6	78	71		
5				12	99	.45		1.25	566.3	80	69	8	
6				15	100	.41		1.14	568.0	83	70		
7				18	100	.30		.83	569.7	84	71		
8				21	101	.30		.83	571.2	85	73		
9				24	102	.32		.90	572.6	88	74		
10				27	102	.38		1.07	574.1	90	75		
11				30	102	.38		1.07	575.7	91	76		
12				33	102	.38		1.07	577.3	92	77		
	ZERO			36					578.9				
	SPAN												
AVERAGE									35.53				

PITOT LEAK CHECK:

BEFORE: TOP ΔP= 3.2 ΔP= 3.2 BOTTOM ΔP= 3.1 ΔP= 3.1

AFTER: TOP ΔP= 3.0 ΔP= 3.0 BOTTOM ΔP= 3.8 ΔP= 3.8

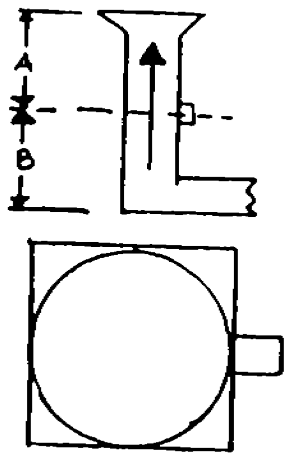
SAMPLE TRAIN LEAK:
BEFORE= <.005 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS:

PURGE

84

PLANT:
LOCATION:
COUNTY:
UNIT: Lint Trap
DATE: 12/4/90
RUN NO./METHOD: 1B - Part
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BAROMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M / ¯)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm)	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				1:55 0	110	.26		.71	578.9	78	78		
2				3	110	.28		.76	580.3	81	78		
3				6	111	.30		.82	581.7	89	80		
4				9	111	.30		.92	583.2	89	80		
5				12	111	.30		.82	584.5	91	81		
6				15	111	~~.30~~ .30		.82	586.0	92	81		
7				18	112	.30		.82	587.4	93	83		
8				21	112	.32		.88	588.9	93	81		
9				24	112	.35		.97	590.4	95	82		
10				27	112	.38		1.05	591.9	95	82	8	
11				30	111	.38		1.05	~~593.4~~	95	82		
12				33	110	.38		1.05	593.4	96	83		
	ZERO			36					595.062				
	SPAN												
AVERAGE		20.9	0.05	72	105.5		0.593	0.979	35.530	81.6			

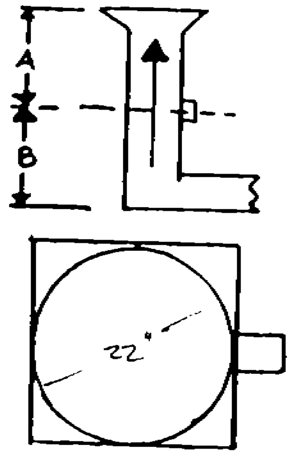
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

88

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Lint Trap
DATE: 12/4/96
RUN NO./METHOD: 2A - Part
COLD BOX NO.:
METER BOX NO.: 3E
METER FACTOR: 1.0231 ΔH@ = 2.1201
PITOT #/ FACTOR: 7 ~ .8400
PYROMETER #:
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995



FILTER NO. D-22
AMBIENT TEMP.: 75
BARAMETRIC PRESS.,IN.HG.: 30.1
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT.: 5'
NOZZLE DIAMETER,IN.: .223
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -.10 "H2O
OFFSET: Ø in. PORT DIA.: 3 in. (M / -)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm)	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Box # 33346 1				2:51 0	110	.40		1.09	595.201	75	75		
2				3	110	.43		1.17	596.7	81	75		
3				6	110	.43		1.17	598.4	82	75		
4				9	111	.45		1.22	600.1	87	75		
5				12	111	.45		1.23	601.9	87	75		
6				15	110	.40		1.10	603.9	88	77		
7				18	109	.30		.83	605.2	90	77		
8				21	110	.30		.83	606.7	91	78		
9	Gin shutdown, restart @ 3:42			24	110	.35		.97	608.1	91	78		
10				27	96	.38		1.05	609.7	73	73		
11				30	96	.38		1.06	611.2	70	73		
12				33	96	.38		1.05	612.9	83	77		
	ZERO			36					614.5				
	SPAN												
AVERAGE													

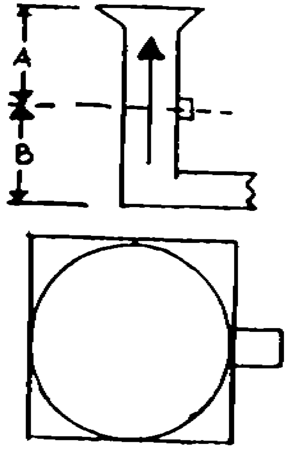
PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.6 ΔP= 3.6 BOTTOM ΔP= 3.2 ΔP= 3.2
AFTER: TOP ΔP= 3.8 ΔP= 3.8 BOTTOM ΔP= 3.1 ΔP= 3.1

BEFORE= <.005 AFTER= <.005
SAMPLE TRAIN LEAK: CFM@ 15 IN. HG. CFM@ 15 IN. HG.

COMMENTS:
PURGE

86

PLANT:
LOCATION:
COUNTY:
UNIT: Unit Trap
DATE: 12/4/90
RUN NO./METHOD: 2B - Part
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS., IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH, FT.
NOZZLE DIAMETER, IN.: .223
PROBE HEATER SETTING:
APPROX. WIND VEL., MPH:
SAMPLE BOX TEMP., (F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M / ¯)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM), FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm)	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				3:58 0	96	.25	.692	~~[illegible]~~	614.5	72	72		
2				3	97	.28	.774	~~[illegible]~~	615.9	75	73		
3				6	97	.3	.83	~~[illegible]~~	617.3	80	73		
4				9	98	.3	.84	.84	618.8	85	75		
5				12	98	.3		.84	620.3	88	76		
6				15	99	.28		.79	621.7	89	76		
7				18	99	.29		.81	623.2	91	76		
8				21	102	.35		.99	624.6	92	77		
9				24	101	.37		1.05	626.2	94	79		
10				27	98	.4		1.13	627.9	94	81		
11				30	97	.42		1.19	629.5	95	79		
12				33	97	.45		1.27	631.2	96	80		
	ZERO			36					632.938				
	SPAN												
AVERAGE		20.9	0.05	72	102.4		0.5958	0.999	37.737	80.9			

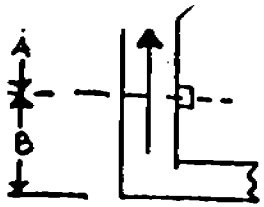
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

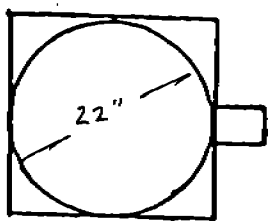
SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PI : Le y L G

LOCATION: Hanford
COUNTY: Kings
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 1A ~ Meth 5
COLD BOX NO.: 5
METER BOX NO.: D
METER FACTOR: .9685
PITOT #/ FACTOR: 7 ~ 0.8500
PYROMETER #: 7-5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH .952





FILTER NO. D-20
AMBIENT TEMP.: 40F
BARAMETRIC PRESS.,IN.HG.: 30.27
ASSUMED MOISTURE: 5%
HEATER BOX SETTING:
PROBE LENGTH,FT. 5
NOZZLE DIAMETER,IN.: .298
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: -.03 "H2O
OFFSET: 9 In. PORT DIA.: 3 In. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEM. LAST IMPINGER (F)
Build# 32760 1		20.9	0.1	9:30 0	72	.120		1.02	319.959	49	49		
2				3	73	.125		1.07	321.5	54	50		
3				6	73	.110		.94	323.1	60	53	7	
4				9	73	.140		1.20	324.7	64	51	8	
5				12	74	.160		1.37	326.4	70	54	9	
6				15	74	.20		1.75	328.3	72	54		
7				18	74	.21		1.84	330.1	74	57		
8				21	74	.21		1.84	332.1	75	57	12	
9				24	75	.21		1.84	334.2	77	60		
10				27	75	.195		1.71	336.4	77	60		
11				30	75	.185		1.62	338.5	80	65	13	
12				33	75	.17		1.51	340.3	81	65		
	ZERO			36					342.3				
	SPAN												
AVERAGE						.170							

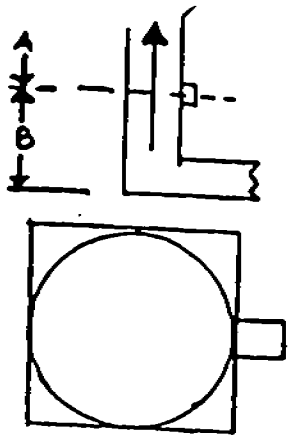
PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.9 ΔP= 3.9
AFTER: TOP ΔP= 4.2 ΔP= 4.2
BOTTOM ΔP= 3.5 ΔP= 3.5
BOTTOM ΔP= 3.3 ΔP= 3.3

SAMPLE TRAIN LEAK:
BEFORE= .002 CFM@ 15 IN. HG.
AFTER= .005 CFM@ 15 IN. HG.

COMMENTS: PURGE

$M_d = 28.852$ $\Delta P_{av} = .164$
$M_w = 28.309$ D_n ideal = .325

LOCATION: [illegible]
COUNTY:
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 1B ~ Meth 5
COLD BOX NO.: 5
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO. D-20
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O		PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER		PUMP VACUUM IN.HG	TEM.. LAST IMPINGER (F)
						ΔP	√ΔP			INLET (Tm),	OUTLET (TM)		
1				10:05 0	77	.115		1.0	342.3	67	67	6	
2				3		.135		1.18	343.8	75	68		
3				6		.155		1.36	345.6	78	69	9	
4				9		.170		1.50	347.5	83	68	10	
5				12		.170		1.50	349.4	84	69		
6				15		.180		1.59	351.2	84	69		
7				18		.185		1.63	353.3	85	69	11	
8				21		.180		1.60	355.2	85	69		
9				24		.165		1.47	357.4	86	69		
10				27		.150		1.33	359.2	86	71		
11				30		.145		1.3	361.0	86	71		
12				33		.140		1.24	362.8	88	72		
	ZERO			36									
	SPAN								364.684				
AVERAGE		20.9	0.105	22	75.5	.158	0.399	1.434	44.725	69.3			

68

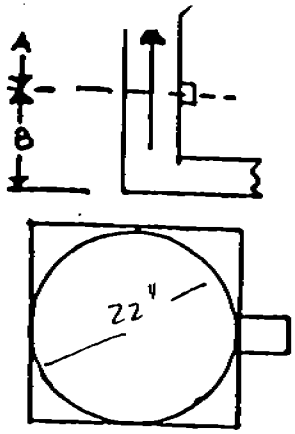
PULL # 12/7/90

PITOT LEAK CHECK:
BEFORE: TOP ΔP= BOTTOM ΔP=
ΔP= ΔP=
AFTER: TOP ΔP= BOTTOM ΔP=
ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

LOCATION: Hayford
COUNTY: Kings
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 2A ~ Part
COLD BOX NO.: 18
METER BOX NO.: D
METER FACTOR: .9685 ΔH@ = 2.1055
PITOT #/ FACTOR: 7 ~ .850D
PYROMETER #: T5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH .952



FILTER NO. D-21
AMBIENT TEMP.: 52
BARAMETRIC PRESS.,IN.HG.: 30.27
ASSUMED MOISTURE: 5%
HEATER BOX SETTING:
PROBE LENGTH,FT. 5
NOZZLE DIAMETER,IN.: .298
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: -.03 "H2O
OFFSET: 0 in. PORT DIA.: 3 in. (M / F)

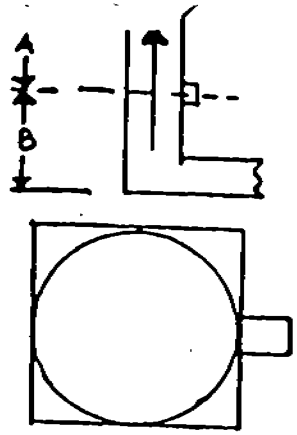
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM), FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Bail # 32804 1				11:00 0	82	.115		1.00	364.918	68	67		
2				2.5	82	.135		1.18	366.5	73	67	2	
3				5	83	.155		1.35	367.7	76	67		
4				7.5	84	.170		1.49	369.4	81	69		
5				10	84	.175		1.53	370.9	66	67		
6				12.5	85	.180		1.59	372.4	86	67		
7				15	84	.185		1.64	374.3	87	68	5	
8				17.5	85	.185		1.64	375.8	86	69	5	
9				20	85	.165		1.46	377.5	88	70	4	
10				22.5	84	.155		1.37	379.1	88	70		
11				25	85	.145		1.29	38.8	89	70		
12				27.5	85	.140		1.24	382.1	89	71		
	ZERO			30					383.5				
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.6 BOTTOM ΔP= 3.2
ΔP= 3.6 ΔP= 3.2
AFTER: TOP ΔP= 3.9 BOTTOM ΔP= 3.4
ΔP= 3.9 ΔP= 3.4

SAMPLE TRAIN LEAK:
BEFORE= <.002 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS: PURGE

LOCATION: [illegible]
COUNTY:
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 2B ~ Part
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO. D-21
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: In. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm)	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP LAST IMPINGER (F)
1				11:40 0	85	.120		1.04	383.5	76	73		
2				2.5	85	.125		1.09	385.0	80	71		
3				5	85	.110		.96	386.3	86	71		
4				7.5	85	.135		1.18	~~418~~ 387.6	88	72		
5				10	85	.165		1.45	389.1	89	72		
6				12.5	85	.245		1.9	390.7	91	72		
7				15	85	.21		1.85	392.4	92	76	6	
8				17.5	85	.21		1.85	394.1	91	75		
9				20	85	.21		1.85	395.9	92	76		
10	Bail 3@12:28			22.5	82	.190	@19	1.63	397.9	64	64		
11	Restart @ 12:36			25	84	.19		1.64	399.4	70	65		
12				27.5	84	.165		1.43	401.1	73	64		
	ZERO	Stop @ Bail		30					402.641				
	SPAN	# 32830		32									
AVERAGE		20.9	0.05	60	84.3		0.404	1.443	37.723	76.3			

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

81

PL : C Hy G

LOCATION: Hayford

COUNTY: Kings

UNIT : #1 Dryer

DATE : 12/3/90

RUN NO./METHOD : 14 ~ Part 5

COLD BOX NO. : 5

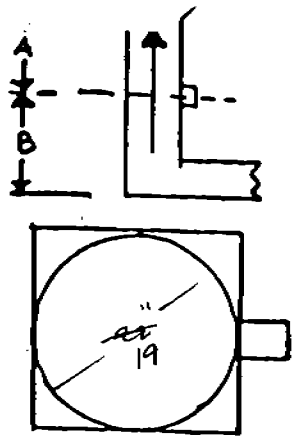
METER BOX NO. : D

METER FACTOR : .9685, ΔH@ = 2.1055

PITOT #/ FACTOR : 7 ~ .8500

PYROMETER # : T-5

MAGNEHELIC FACTOR : ΔP 1.008 ΔH 0.952



FILTER NO. D-cc

AMBIENT TEMP.: 65

BARAMETRIC PRESS.,IN.HG.: 30.25

ASSUMED MOISTURE: 5%

HEATER BOX SETTING: —

PROBE LENGTH,FT. 5

NOZZLE DIAMETER,IN.: .256

PROBE HEATER SETTING: —

APPROX.WIND VEL.,MPH: Calm

SAMPLE BOX TEMP.,(F): —

STATIC PREASURE: -.06 "H2O = -.004" Hg

OFFSET: 0 in. PORT DIA.: 3 in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TE LAST IMPINGER (F)
	Bail #												
1	32858			1:55 0	114	.3	.27	1.29	402.975	63	62		
2				3	115	.35	.28	1.32	404.8	64	61		
3				6	115	.35	.28	1.33	406.5	72	64	9	
4				9	117	.35	.28	1.33	408.2	75	62		
5				12	120		.275	1.31	410.2	79	63		
6				15	125		.285	1.34	412.1	82	66		
7				18	127		.30	1.43	413.9	85	67		
8				21	130		.31	1.47	415.7	87	68		
9				24	131		.315	1.49	417.5	89	69		
10				27	137		.30	1.41	419.5	90	71		
11				30	137		.285	1.33	421.3	91	72		
12				33	137		.285	1.33	423.2	91	73		
	ZERO			36					425.1				
	SPAN												
AVERAGE							.284						

20

PITOT LEAK CHECK:

BEFORE: TOP ΔP= 3.7 BOTTOM ΔP= 3.3

ΔP= 3.7 ΔP= 3.3

AFTER: TOP ΔP= 3.8 BOTTOM ΔP= 3.3

ΔP= 3.8 ΔP= 3.3

SAMPLE TRAIN LEAK:

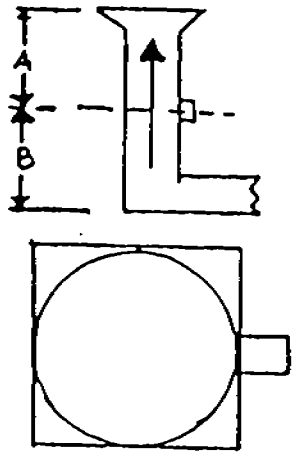
BEFORE= <.002 CFM@ 15 IN. HG.

AFTER= <.002 CFM@ 15 IN. HG.

COMMENTS: PURGE .

D_n = .283

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: #1 Dryer
DATE: 12/3/90
RUN NO./METHOD: IB's Test
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BAROMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M / F)

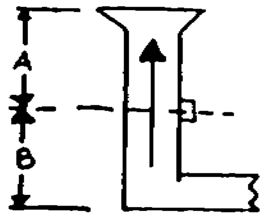
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				2:35 0	141	.285		1.32	425.1	77	76		
2				3	142	.30		1.40	426.9	88	76		
3				6	142	.30		1.41	428.8	90	79	9	
4				9	141	.31		1.45	430.6	91	80		
5				12	140	.315		1.48	432.5	91	80		
6				15	137	.315		1.48	434.4	93	80		
7				18	135	.30		1.41	436.5	93	80		
8				21	130	.28		1.31	438.3	94	80		
9				24	136	.275		1.29	440.1	95	80		
10				27	135	.27		1.27	441.9	96	80		
11				30	130	.26		1.22	439.9	97	80		
12				33	125	.26		1.22	445.6	97	81		
	ZERO			36					447.352				
	SPAN												
AVERAGE		20.9	0.05	72	136.9	.284	0.537	1.359	44.377	79.6			

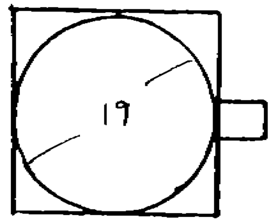
PITOT LEAK CHECK:
BEFORE: TOP ΔP= BOTTOM ΔP=
ΔP= ΔP=
AFTER: TOP ΔP= BOTTOM ΔP=
ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: #1 Dryer
DATE: 12/3/90
RUN NO./METHOD: 2A ~ Part
COLD BOX NO.: 10
METER BOX NO.: D
METER FACTOR: .9685, ΔH@ = 2.1055
PITOT #/ FACTOR: 7 ~ .850
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH 0.952





FILTER NO. D-23
AMBIENT TEMP.: 68
BARAMETRIC PRESS.,IN.HG.: 30.25
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .255
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -.06 "H2O
OFFSET: Ø In. PORT DIA.: 3 in. (M / ¯)

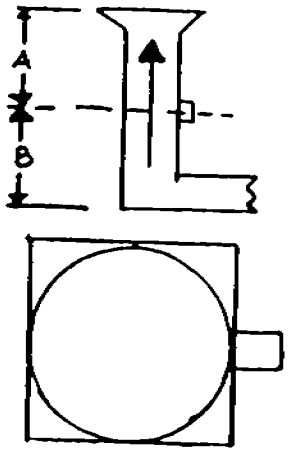
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	√ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Bdl #32006 1				3:45 0	138	.27		1.25	447.442	77	77		
2				3	145	.28		1.28	449.2	72	70		
3				6	147	.28		1.28	451.0	80	70		
4				9	147	.28		1.28	452.8	80	71		
5				12	147	.275		1.27	454.4	85	73	4	
6				15	148	.27		1.24	456.3	87	70		
7				18	148	.30		1.40	458.1	89	71		
8				21	148	.315		1.65	459.8	89	72		
9				24	147	.315		1.65	461.8	90	73		
10				27	147	.285		1.32	464.0	92	73		
11				30	147	.285		1.32	465.8	93	74		
12				33	147	.285		1.32	467.6	94	75		
	ZERO			36									
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.5 ΔP= 3.5 BOTTOM ΔP= 3.2 ΔP= 3.2
AFTER: TOP ΔP= 4.2 ΔP= 4.2 BOTTOM ΔP= 3.9 ΔP= 3.9

SAMPLE TRAIN LEAK:
BEFORE= <.005 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS:
PURGE -

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: Dryer #1
DATE: 12/3/90
RUN NO./METHOD: 2B ~ Part.
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M / -)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				4:25 0	147	.285		1.31	467.6	74	74		
2				3		.295		1.36	469.5	84	75		
3				6		.30		1.39	471.3	85	75		
4				9		.31		1.44	473.3	88	74		
5				12	147	.315		1.48	475.1	89	75	4	
6				15	148	.315		1.48	477.0	90	76		
7				18	148	.30		1.41	478.9	91	76		
8				21	148	.285		1.34	480.8	91	77		
9				24	148	.275		1.29	482.7	95	79		
10				27	147	.270		1.27	1184.4	95	79		
11	Bank 3296			30	148	.255		1.19	486.2	95	78		
12				33	148	.255		1.19	4879	96	78		
	ZERO			36					489.692				
	SPAN												
AVERAGE		20.9	0.05	72	146.9		0.536	1.350	42,250	81.0			

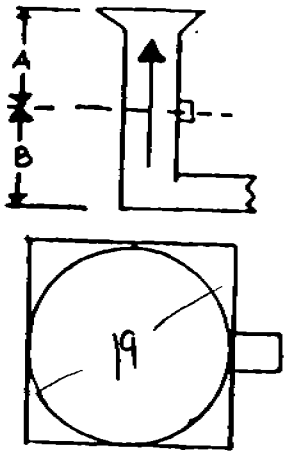
SB

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Mote
DATE: 12/4/90
RUN NO./METHOD: 1A ~~Part~~ PM10
COLD BOX NO.: 4
METER BOX NO.: D
METER FACTOR: .9685 ΔH@ = 2.1055
PITOT #/ FACTOR: #7 - 0.850
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH



FILTER NO.
AMBIENT TEMP.: 44 F
BARAMETRIC PRESS.,IN.HG.: 30.21
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: /
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING: /
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): /
STATIC PREASURE: -0.15 "H2O
OFFSET: 0 In. PORT DIA.: 3 in. (M /)

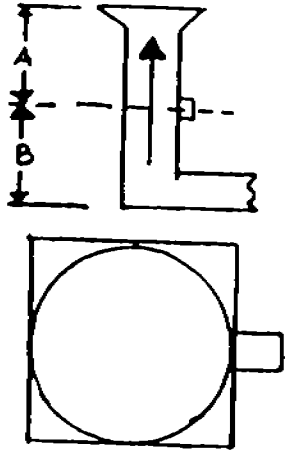
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				9:00 0	55	.35		.79	520.871	43	43		
2				3	56	.40		.91	522.2	45	43		
3				6	56	.40		.92	523.6	51	46		
4				9	56	.42		.96	525.1	55	46		
5				12	58	.43		.99	526.6	57	46		
6				15	59	.45		1.04	528.2	62	50		
7				18	59	.55		1.26	529.8	65	50		
8				21	60	.60		1.38	531.6	66	50		
9				24	60	.60		1.38	533.3	67	51		
10				27	60	.67		1.55	535.1	69	54		
11				30	61	.65		1.51	537.1	70	55		
12				33	61	.72		1.67	539.0	75	60	13	
	ZERO			36					540.9				
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____
AFTER: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____

SAMPLE TRAIN LEAK:
BEFORE= <.005 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS: PURGE .

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: Moto
DATE: 12/4/98
RUN NO./METHOD: ~~2~~ 1B - PM10
COLD BOX NO.: 4
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				9:40 0	61	.45		1.04	540.9	61	60		
2				3	62	.60		1.40	542.5	71	62		
3				6	64	.60		1.4	544.3	73	63		
4				9	64	.65		1.52	546.2	75	63	12	
5				12	64	.65		1.52	548.1	76	63		
6				15	64	.60		1.40	550.1	77	63		
7				18	64	.50		1.17	551.9	77	64		
8				21	64	.50		1.17	553.6	79	65		
9				24	65	.50		1.17	555.2	82	66		
10				27	65	.55		1.31	556.9	83	67		
11				30	66	.55		1.31	558.7	83	67		
12				37	66	.55		1.31	560.5	84	67		
	ZERO			36					562.211				
	SPAN												
AVERAGE		20.9	0.05	22	64.37		0.731	1.253	41,340	62.7			

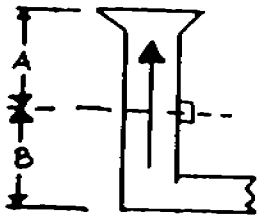
40

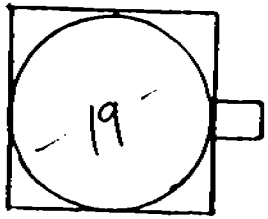
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Mote
DATE: 12/4/90
RUN NO./METHOD: 2A - PM10
COLD BOX NO.: 9
METER BOX NO.: #D
METER FACTOR: .9685 ΔH@ = 2.1055
PITOT #/ FACTOR: #7 - .85
PYROMETER #: T5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH 0.952





FILTER NO.
AMBIENT TEMP.: 65
BARAMETRIC PRESS.,IN.HG.: 30.21
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT.: 8'
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: Calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -.15 "H2O
OFFSET: ϕ In. PORT DIA.: 3 in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				10:46 0	70	.75		.81	562.651	64	64		
2				2.5	71	.40		.94	563.9	67	63		
3				5	72	.40		.94	565.2	69	63		
4				7.5	72	.42		.96	566.4	70	63		
5				10	72	.43		.99	567.6	76	64		
6				12.5	73	.45		~~1.26~~ 1.04	569.2	~~83~~	65		
7				15	74	.55		1.27	570.5	86	65		
8				17.5	74	.60		1.40	571.9	87	65		
9				20	74	.60		1.40	573.5	89	70		
10				22.5	75	.67		1.56	575.0	89	70		
11				25	75	.65		1.52	576.7	91	73		
12				27.5	75	.70		1.63	578.3	92	73	7	
	ZERO			30					579.9				
	SPAN												
AVERAGE													

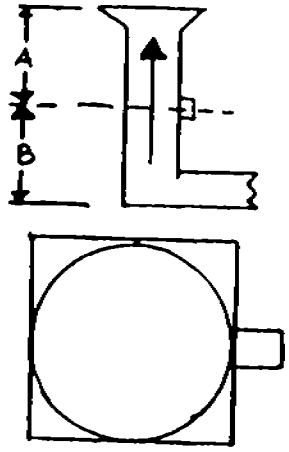
8b

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____
AFTER: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____

SAMPLE TRAIN LEAK:
BEFORE= ≤.002 CFM@ 15 IN. HG.
AFTER= ≤.005 CFM@ 15 IN. HG.

COMMENTS: PURGE .

PLANT: County Line Gin
LOCATION:
COUNTY:
UNIT: Mote
DATE: 12/4/90
RUN NO./METHOD: 2B - Port 10
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				11:23 0	76	.45		1.04	579.9	76	76		
2				2.5	76	.60		1.39	581.3	80	77		
3				5	76	.60		1.39	582.8	87	76	6	
4				7.5	76	.65		1.52	584.3	87	76		
5				10	77	.65		1.52	586.0	91	76		
6				12.5	77	.60		1.41	587.6	92	76		
7				15	77	.50		1.18	589.1	93	77		
8				17.5	77	.50		1.18	590.6	93	76		
9				20	77	.50		1.18	592.6	95	76		
10				22.5	77	.55		1.30	~~595.0~~	95	77		
11				25	77	.55		1.30	595.0	97	86		
12				27.5	77	.50		1.18	596.4	97	86		
	ZERO			30					597.882				
	SPAN												
AVERAGE		20.9	0.05	60	74.9		0.29	1.252	35.231	88.9			

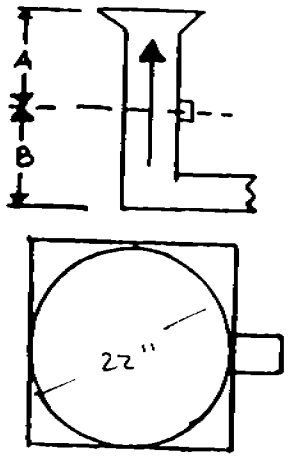
60

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Unit Trap
DATE: 12/4/90
RUN NO./METHOD: 1A - PM 10
COLD BOX NO.: 4
METER BOX NO.: D
METER FACTOR: .9685, ΔH@ = 2.1055
PITOT #/ FACTOR: #7 - 0.850
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.008 ΔH 0.952



FILTER NO.
AMBIENT TEMP.: 75
BARAMETRIC PRESS.,IN.HG.: 30.2
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT.: 5'
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -0.10 "H2O
OFFSET: ____ in. PORT DIA.: ____ in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				1:11 0	98	.25		.55	598.121	66	66		
2				3	99	.28		.62	599.3	71	66		
3				6	97	.30		.67	600.5	71	66		
4				9	98	.30		.67	601.7	78	68		
5				12	99	.29		.66	603.1	78	68		
6				15	100	.29		.65	604.2	81	69		
7				18	100	.30		.67	605.5	86	71		
8				21	101	.32		.71	606.8	87	72		
9				24	102	.37		.83	608.2	90	74		
10				27	102	.42		.95	609.6	91	75		
11				30	100	.42		.99	611.2	92	76		
12				33	103	.45		1.02	612.7	94	77		
	ZERO			36					614.2				
	SPAN												
AVERAGE													

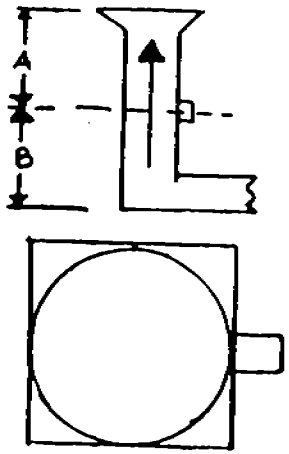
(20)

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____
AFTER: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____

SAMPLE TRAIN LEAK:
BEFORE= <.005 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS: PURGE ____

PLANT:
LOCATION:
COUNTY:
UNIT: Limit Trap
DATE: 12/9/90
RUN NO./METHOD: 1B - PM10
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1A				0	110	.41		.90	614.2	79	79		
2B				3	110	.42		.93	615.7	88	78		
3				6	111	.45		~~.99~~ 1.0	617.3	89	78		
4				9	111	.45		1.0	618.8	91	78		
5				12	111	.41		.91	620.4	91	79		
6				15	111	.30		.66	621.9	91	80		
7				18	112	.30		.66	622.1	91	80		
8				21	112	.32		.71	623.2	91	80		
9				24	112	.39		.82	624.7	95	81		
10				27	112	.42		.93	626.0	96	82		
11				30	111	.42		.93	627.5	96	82		
12				33	110	.40		.90	629.1	97	82		
	ZERO			36					630.540				
	SPAN												
AVERAGE		20.9	0.05	72	105.5		0.598	0.80	32.419	81			

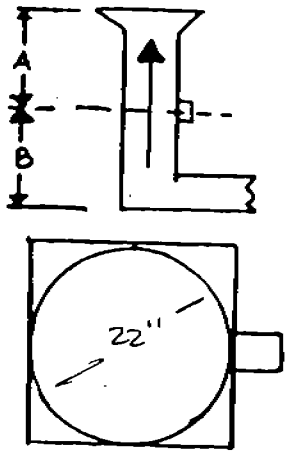
101

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE .

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Lint V Trap
DATE: 12/4/90
RUN NO./METHOD: 2A - PM10
COLD BOX NO.: 9
METER BOX NO.: D
METER FACTOR: .9685 ΔH@ = 2.1055
PITOT #/ FACTOR: #7 ~0.85
PYROMETER #: JLS
MAGNEHELIC FACTOR: ΔP 1.008 ΔH 0.952



FILTER NO.
AMBIENT TEMP.: 75
BARAMETRIC PRESS.,IN.HG.: 30.1
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: /
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING: /
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): /
STATIC PREASURE: -.10 "H2O
OFFSET: 0 in. PORT DIA.: 3 in. (M / -)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				2:58 0	110	.25		.54	630.652	74	74		
2				3	110	.28		.61	631.8	78	71		
3				6	110	.3		.66	633.0	80	71		
4				9	111	.3		.66	634.2	83	75		
5				12	111	.3		.66	635.5	84	73		
6				15	111	.28		.62	636.7	87	75		
7				18	110	.29		.64	638.0	90	80 75		
8				21	109	.35		.77	639.2	96	75		
9				24	109	.37		.81	640.6	72	72		
10				27	109	.4		.88	642.1	79	73		
11	Gin Shutdown	Restart @	3:42	30	109	.42	@.5	.92	643.5	83	73		
12				33	96	.45		.99	645.1	86	73		
	ZERO			36					646.5				
	SPAN												
AVERAGE													

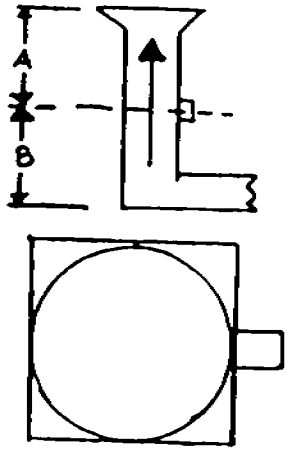
201

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= <.005 CFM@ 15 IN. HG.
AFTER= <.005 CFM@ 15 IN. HG.

COMMENTS: PURGE

PLANT:
LOCATION:
COUNTY:
UNIT: Limit Trap
DATE: 12/4/90
RUN NO./METHOD: 2B - PM10
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.: .211
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				3:59 0	96	.40		.89	646.5	73	73		
2				3	97	.43		.96	648.0	80	73		
3				6	97	.43		.96	649.6	86	74		
4				9	98	.45		1.01	651.1	86	74		
5				12	98	.45		1.01	652.9	90	75		
6				15	99	.45		1.01	654.3	91	75		
7				18	99	.40		.91	655.9	92	77		
8				21	100	.30		.68	657.4	93	78		
9				24	98	.30		.68	658.6	92	78		
10				27	93	.35		.79	659.9	94	78		
11				30	94	.42		.95	661.3	94	79		
12				33	94	.40		.91	662.8	95	80		
	ZERO			36					664.336				
	SPAN												
AVERAGE		20.9	0.05	72	102.8		0.602	0.813	33.678	80.2			

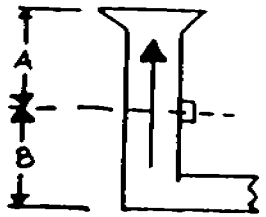
601

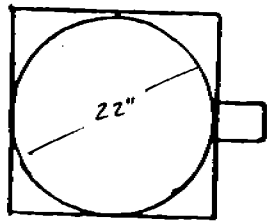
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: Section
DATE: 12/3/90
RUN NO./METHOD: 1A - PM10
COLD BOX NO.: ~~10~~ 4
METER BOX NO.: E
METER FACTOR: 1.0231
PITOT #/ FACTOR: ~~#7~~ - 0.850
PYROMETER #:
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995





FILTER NO.
AMBIENT TEMP.: 40F
BAROMETRIC PRESS.,IN.HG.: 30.27
ASSUMED MOISTURE: 5%
HEATER BOX SETTING:
PROBE LENGTH,FT. 5
NOZZLE DIAMETER,IN.: .296
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: -0.03 "H2O
OFFSET: 0 in. PORT DIA.: 3 in. (M /)

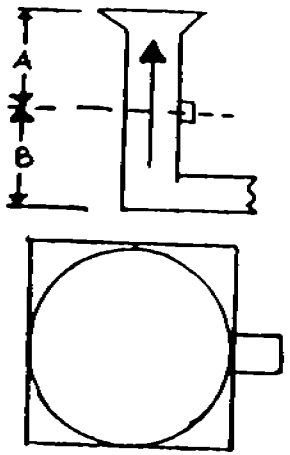
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
Bail # 32760 1				7:31 0	72	.115		.98	279.764	50	50		
2				3	73	.140		1.19	281.3	51	50	7	
3				6	73	.150		1.28	283.1	56	50		
4				9	74	.165		1.42	284.7	62	51	8	
5				12	74	.165		1.42	286.5	66	51		
6				15	74	.180		1.57	288.3	69	55		
7				18	74	.180		1.57	290.4	71	55	9	
8				21	74	.185		1.62	292.1	73	57		
9				24	74	.165		1.44	294	75	58		
10				27	75	.155		1.38	295.9	77	60		
11				30	75	.145		1.29	297.7	77	60		
12				33	75	.140		1.24	299.4	78	63		
	ZERO			36	4				301.1				
	SPAN												
AVERAGE													

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____
AFTER: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____

SAMPLE TRAIN LEAK:
BEFORE= 2.002 CFM@ 15 IN. HG.
AFTER= ____ CFM@ ____ IN. HG.

COMMENTS: PURGE ____

PLANT: County Law Grin
LOCATION:
COUNTY:
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 1B ~ PM 10
COLD BOX NO.: 4
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				10:06 0	77	.12		1.04	301.1	65	65	7	
2				3		.12		1.05	302.7	75	66		
3				6		.115		1.02	304.4	77	68		
4				9		.135		1.30	305.9	79	69		
5				12		.155		1.37	307.6	80	70		
6				15		.185		1.73	309.4	81	70		
7				18		.21		1.86	311.3	81	69		
8				21		.21		1.86	313.3	82	70		
9				24		.21		1.86	315.5	82	69		
10				27		.2		1.78	317.6	83	71		
11				30		.185		1.64	319.6	83	70		
12				33		.175		1.56	321.6	84	72		
	ZERO			36									
	SPAN								323-540				
AVERAGE		20.9	0.05	22	75.5		0.402	1.432	43.776	67.6			

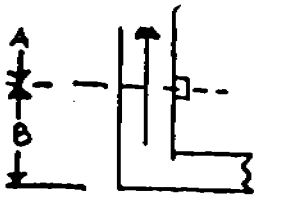
505

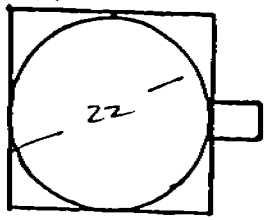
PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE .

LOCATION: Hanford
COUNTY: Kings
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 2A ~ PM10
COLD BOX NO.: 9
METER BOX NO.: E
METER FACTOR: 1.0231 ΔH@ = 2.1201
PITOT #/ FACTOR: #7 - 0.850
PYROMETER #: T-5
MAGNEHELIC FACTOR: ΔP 1.005 ΔH .995





FILTER NO.:
AMBIENT TEMP.: 52
BARAMETRIC PRESS.,IN.HG.: 30.27
ASSUMED MOISTURE: 5%
HEATER BOX SETTING:
PROBE LENGTH,FT.: 5'
NOZZLE DIAMETER,IN.: .296
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: -0.03 "H2O
OFFSET: ____ in. PORT DIA.: ____ in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF. ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP LAST IMPINGER (F)
1				11:05 0	83	.120		1.03	323.541	63	63		
2				.25	83	.125		1.07	324.9	65	63		
3				5	84	.110		.95	326.2	71	63		
4				7.5	85	.135		1.16	327.5	73	65.	4	
5				10	85	.170		1.46	329.0	75	63		
6				12.5	85	.20		1.74	330.7	78	64	6	
7				15	85	.2		1.73	332.0	77	64		
8				17.5	85	.205		1.78	333.7	82	65		
9				20	85	.21		1.83	335.5	83	66		
10				22.5	85	.21		1.83	337.1	83	67		
11				25	85	.19		1.66	338.9	85	68		
12				27.5	85	.165		1.44	340.5	85	69		
	ZERO			30					342.0				
	SPAN												
AVERAGE													

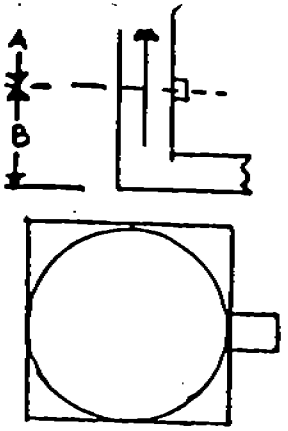
901

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____
AFTER: TOP ΔP= ____ BOTTOM ΔP= ____
ΔP= ____ ΔP= ____

SAMPLE TRAIN LEAK:
BEFORE= 2.005 CFM@ 15 IN. HG.
AFTER= ____ CFM@ ____ IN. HG.

COMMENTS: PURGE ____

LOCATION:
COUNTY:
UNIT: Suction
DATE: 12/3/90
RUN NO./METHOD: 2B - PM 10
COLD BOX NO.: 9
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.:
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: In. (M / F)

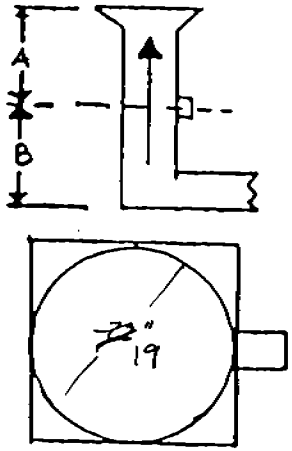
TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM), FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEM LAST IMPINGER (F)
1				11:45 0	85	.115		.997	342.0	72	72		
2				2.5	85	.130		1.13	343.3	78	72		
3				5	85	.155		1.35	344.7	82	70		
Restart @ 12:35 4	Bail 32	(Stop)		7.5	85	.170	0.1	1.49	346.3	84	70		
5		(Start)		10	80	.175		1.51	348.1	65	64	5	
6				12.5	84	.18		1.55	349.7	70	63		
7				15	84	.18		1.55	351.2	73	64		
8				17.5	84	.19		1.64	352.8	73	63		
9				20	84	.165		1.42	354.3	78	65		
10				22.5	84	.155		1.34	356.1	80	65		
11				25	85	.145		1.26	357.5	81	66		
12				27.5	85	.145		1.26	358.8	82	66		
	ZERO			30					360.249				
	SPAN												
AVERAGE		20.9	0.05	60	84.4		0.484	1.424	361.708	76.2			

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: #1 Dryer
DATE: 12/3/96
RUN NO./METHOD: 1A ~ PM10
COLD BOX NO.: 4
METER BOX NO.: E
METER FACTOR: 1.0231 ΔH@ = 2.1201
PITOT #/ FACTOR: ~~87~~ 87-0850
PYROMETER #:
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995



FILTER NO.
AMBIENT TEMP.: 65
BARAMETRIC PRESS.,IN.HG.: 30.25
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: —
PROBE LENGTH,FT. 5%
NOZZLE DIAMETER,IN.: .263
PROBE HEATER SETTING: —
APPROX.WIND VEL.,MPH: calm
SAMPLE BOX TEMP.,(F): —
STATIC PREASURE: -.06 "H2O
OFFSET: 0 In. PORT DIA.: 3 in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				1:56 0	114	.285		1.34	360.822	61	61	9	
2				3	116	.295		1.39	362.100	67	61		
3				6	117	.295		1.40	364.0	71	62		
4				9	122	.310		1.46	365.8	73	62		
5				12	124	.315		1.5	367.6	76	64		
6				15	126	.315		1.49	369.5	78	64		
7				18	130	.305		1.46	371.4	81	67	10	
8				21	130	.28		1.32	373.4	81	68		
9				24	132	.275		1.29	375.0	82	69		
10				27	136	.27		1.26	376.9	85	72		
11				30	137	.26		1.21	378.6	86	72		
12				33	137	.255		1.19	380.2	81	73		
	ZERO			36					381.9				
	SPAN												
AVERAGE													

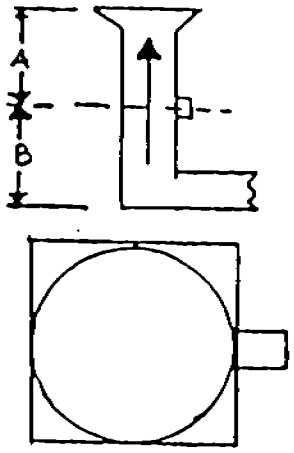
80

PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.7 ΔP= 3.7 BOTTOM ΔP= 3.4 ΔP= 3.4
AFTER: TOP ΔP= 3.2 ΔP= 3.2 BOTTOM ΔP= 3.7 ΔP= 3.7

SAMPLE TRAIN LEAK:
BEFORE= <.002 CFM@ 15 IN. HG.
AFTER= <.002 CFM@ 15 IN. HG.

COMMENTS: PURGE

...: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: #1 Dryer
DATE: 12/3/90
RUN NO./METHOD: 2B - PM10
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH



FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: in. PORT DIA.: in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				2:36 0	140	.27		1.25	381.9	76	75		
2				3	142	.275		1.28	383.7	85	75		
3				6	142	.28		1.30	385.3	84	75	9	
4				9	141	.28		1.30	387.2	88	76		
5				12	140	.27		1.27	388.9	89	76		
6				15	137	.285		1.34	390.7	90	79		
7				18	135	.3		1.41	392.5	91	77		
8				21	140	.31		1.45	394.4	90	77		
9				24	136	.31		1.45	396.2	90	80		
10				27	135	.3		1.44	398.1	90	78		
11				30	130	.29		1.36	399.9	90	82		
12				33	125	.28		1.31	401.7	91	83		
	ZERO			36					403.475				
	SPAN												
AVERAGE		20.9	0.05	72	131.4		0.536	1.352	43.153	77.3			

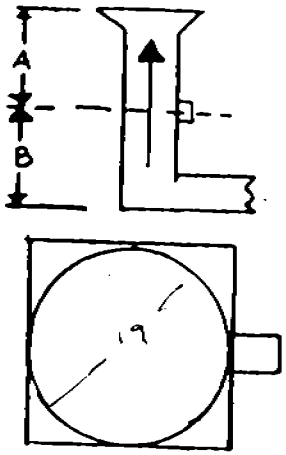
101

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

PLANT: County Line Gin
LOCATION: Hanford
COUNTY: Kings
UNIT: #1 Dryer
DATE: 12/3/98
RUN NO./METHOD: 2A - PM10
COLD BOX NO.: 9
METER BOX NO.: E
METER FACTOR: 1.0231, ΔH@ = 2.1201
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP 1.005 ΔH 0.995



FILTER NO.
AMBIENT TEMP.: 68
BARAMETRIC PRESS.,IN.HG.: 30.25
ASSUMED MOISTURE: 5%
HEATER BOX SETTING: /
PROBE LENGTH,FT. 5'
NOZZLE DIAMETER,IN.: .263
PROBE HEATER SETTING: /
APPROX.WIND VEL.,MPH: Calm
SAMPLE BOX TEMP.,(F): /
STATIC PREASURE: -.06 "H2O
OFFSET: ϕ in. PORT DIA.: 3 in. (M /)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				0	142	.285		1.29	403.562	66	69		
2				3	146	.30		1.36	405.4	70	68		
3				6	147	.30		1.38	407.1	75	69		
4				9	147	.31		1.41	408.7	77	69	6	
5				12	146	.315		1.44	410.8	81	71		
6				15	148	.315		1.44	412.5	81	70		
7				18	148	.30		1.57	414.3	82	70		
8				21	148	.285		1.32	416.3	85	72		
9				24	148	.275		1.27	418.1	87	72		
10				27	148	.27		1.26	419.9	87	72		
11				30	149	.255		1.19	421.5	88	73		
12				33	150	.255		1.19	~~423.3~~ 424.9	~~89~~	74		
	ZERO			36									
	SPAN												
AVERAGE													

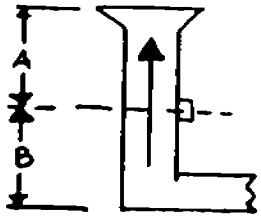
01

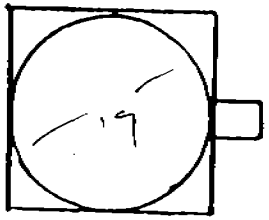
PITOT LEAK CHECK:
BEFORE: TOP ΔP= 3.2 ΔP= 3.2 BOTTOM ΔP= 3.5 ΔP= 3.5
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= .005 CFM@ 15 IN. HG.
AFTER= .005 CFM@ 15 IN. HG.

COMMENTS: PURGE

PLANT: Coventry Linn Gin
LOCATION:
COUNTY:
UNIT: #1 Dryer
DATE: 12/3/96
RUN NO./METHOD: 2B ~ PM 10
COLD BOX NO.:
METER BOX NO.:
METER FACTOR:
PITOT #/ FACTOR:
PYROMETER #:
MAGNEHELIC FACTOR: ΔP ΔH





FILTER NO.
AMBIENT TEMP.:
BARAMETRIC PRESS.,IN.HG.:
ASSUMED MOISTURE:
HEATER BOX SETTING:
PROBE LENGTH,FT.
NOZZLE DIAMETER,IN.:
PROBE HEATER SETTING:
APPROX.WIND VEL.,MPH:
SAMPLE BOX TEMP.,(F):
STATIC PREASURE: "H2O
OFFSET: In. PORT DIA.: in. (M / F)

TRAVERSE POINT NUMBER	DISTANCE INCHES	O2 (%)	CO2 (%)	SAMPLE TIME MIN.	STACK TEMP. (Ts), F	VELOCITY HEAD IN. H2O ΔP	VELOCITY HEAD IN. H2O √ΔP	PRESSURE DIFF ORIFICE METER (ΔH) IN.H2O	DRY GAS SAMPLE VOLUME (VM),FT.	GAS SAMPLE TEMP. @DRY GAS METER INLET (Tm),	GAS SAMPLE TEMP. @DRY GAS METER OUTLET (TM)	PUMP VACUUM IN.HG	TEMP. LAST IMPINGER (F)
1				4:26 0	147	~~.285~~	.27	1.24	424.9	75	75		
2				3	147	~~.285~~	.28	1.30	426.6	85	77		
3				6	147	.285	.285	1.33	428.5	86	75		
4				9	148	.280		1.30	430.2	86	75		
5				12	146	.275		1.28	432.0	88	76	7	
6				15	147	.270		1.26	433.7	87	76		
7				18	148	.30		1.41	435.5	89	77		
8				21	148	.31		1.43	437.3	90	76		
9				24	147	.315		1.48	439.0	90	76		
10				27	147	.29		1.35	440.9	90	77		
11				30	146	.285		1.33	442.7	90	78		
12				33	148	.285		1.33	444.5	91	78		
	ZERO			36					446.322				
	SPAN												
AVERAGE		20.9	0.05	12	147.2		0.526	1.340	42.760	78.7			

PITOT LEAK CHECK:
BEFORE: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=
AFTER: TOP ΔP= ΔP= BOTTOM ΔP= ΔP=

SAMPLE TRAIN LEAK:
BEFORE= CFM@ IN. HG.
AFTER= CFM@ IN. HG.

COMMENTS: PURGE

VIII. QUALITY ASSURANCE

DRY GAS METER CALIBRATION

Date: 10/3/90 Unit: D

Ambient Conditions

Temp: 78 F/C

Baro: 29.86 in.Hg

ORIFICE MANOMETER SETTING D,H	GAS VOL WET TEST METER V,w	GAS VOL DRY GAS METER Vb,	wet test tw	Temperature				Y	DH@Y
				Dry IN TD, IN	Dry Out Tdo,	Ave f Td,	Time e min		
0.5	5	743.814	74	78	73	79.75	13.53	0.9681	2.0535
		738.600	74	91	77				
1.0	5	749.390	74	93	80	89.75	9.88	0.9527	2.1501
		744.000	74	102	84				
1.5	5	754.906	74	105	86	96.25	7.97	0.9789	2.0742
		749.605	74	107	87				
2.0	5	760.540	74	107	87	98.25	7.03	0.9741	2.1440
		755.200	74	110	89				
								0.968	2.105

Calibration by: SALLY

Reviewed by: _____

Meter Factor: 0.9685

Delta H: 2.1055

Equations:

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

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

DRY GAS METER CALIBRATION

Date: 10/3/90 Unit: E

Ambient Conditions

Temp: 76 F/C

Baro: 29.86 in.Hg

ORIFICE MANOMETER SETTING D,H	GAS VOL WET TEST METER V,w	GAS VOL DRY GAS METER Vb,	wet test tw	Temperature				Y	DH@Y
				Dry IN TD, IN	Dry Out Tdo,	Ave f Td,	Time e min		
0.5	5	207.685	72	77	70	79.75	14.3	0.9587	2.2767
		202.400	72	94	78				
1.0	6	213.415	72	96	80	91.25	10.13	1.1669	1.5537
		208.100	72	105	84				
1.5	5	219.035	72	104	86	97.75	8.43	0.9790	2.2970
		213.700	72	112	89				
2.0	5	224.920	73	112	90	103.00	7.41	0.9879	2.3531
		219.600	73	117	93				
								1.023	2.12

Calibration by: SALLY

Reviewed by: _____

Meter Factor: 1.0231

Delta H: 2.1201

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: 9/4/90

UNIT NUMBER: 7

TEMPERATURE 83 F

RH: _____ %

BAROMETER: 29.96 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	4005	*1.00*	*1.42*	*1.41*	0.831	0.002	0.834	0.001
2		*1.00*	*1.41*	*1.42*	0.834	0.001	0.831	0.002
3		*1.00*	*1.41*	*1.41*	0.834	0.001	0.834	0.001
Avg		1.00	1.41	1.41	~0.833	0.001*	~0.833	0.001*

AVERAGE: (Cp(s)A+Cp(s)B)/2 = 0.833

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

1	4478	*1.25*	*1.64*	*1.65*	0.864	0.001	0.864	0.001
2		*1.25*	*1.65*	*1.65*	0.862	0.002	0.862	0.002
3		*1.25*	*1.64*	*1.65*	0.864	0.001	0.864	0.001
Avg		1.25	1.64	1.65	~0.863	0.001*	~0.863	0.001*

AVERAGE: (Cp(s)A+Cp(s)B)/2 = 0.863

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

1	4549	*1.29*	*1.73*	*1.77*	0.855	0.000	0.855	0.000
2		*1.29*	*1.74*	*1.77*	0.852	0.002	0.852	0.002
3		*1.29*	*1.72*	*1.77*	0.857	0.002	0.857	0.002
Avg		1.29	1.73	1.77	~0.855	0.002*	~0.855	0.002*

AVERAGE: (Cp(s)A+Cp(s)B)/2 = 0.855

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

PITOT CALIBRATION VALUE: 0.850

~ Denotes average value

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

Calibrated by: RTR *Reviewed by:* _____

THERMO COUPLE CALIBRATION

Date: 11/20/90 Unit: T-5

Point	* Standard Temperature *Tstd* deg. F	Pyrometer Temperature *Tpyr* deg. F	Error % ** *(Tstd-Tpyr)/Tstd*
1 Ambient	69.8	70.6	0.15%
2 Ice	32.0	32.8	0.16%
3 Boil	213.4	213.6	0.03%
4 Oil			0.00%

Std. Corr. Factor 0.988

Calibration by: RTR * Standard ID: LABCRAFT #227-694

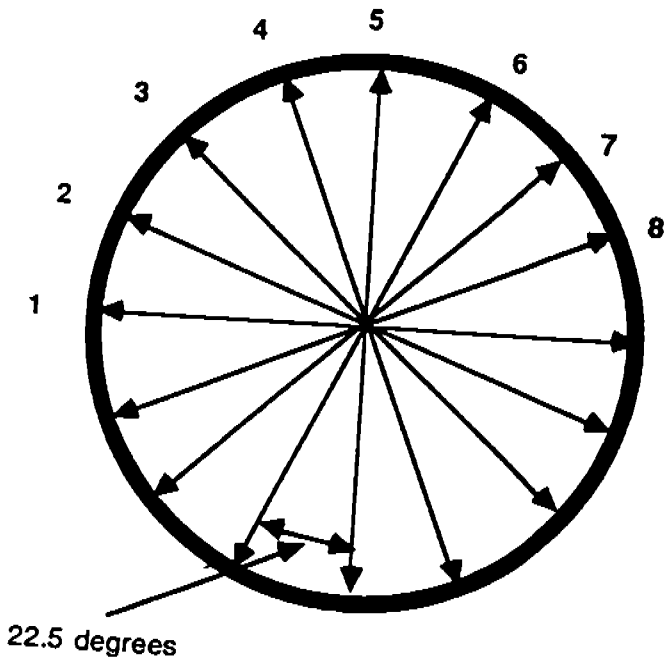
Reviewed by: ___

* * in deg. K

Nozzle Calibration

Nozzle I.D. : 21

Date : 7/28/90



Points

1 - 0.212
2 - 0.210
3- 0.211
4- 0.211
5- 0.210
6- 0.212
7- 0.211
8- 0.213

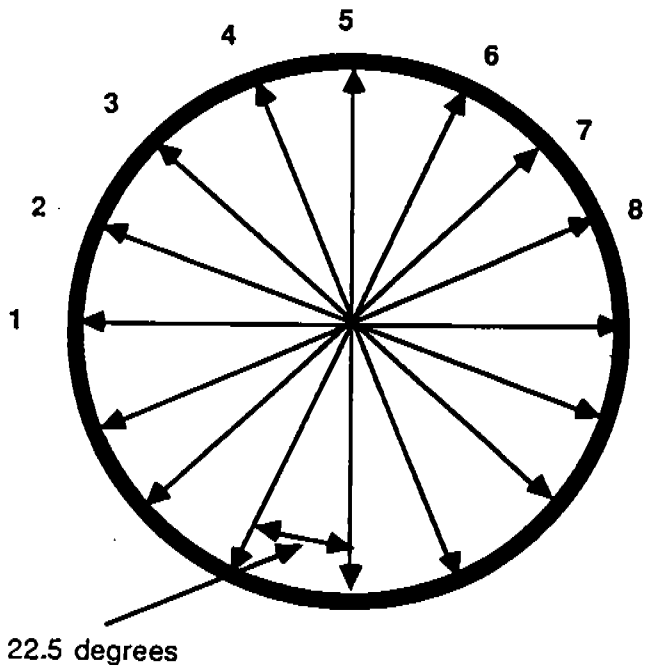
Average Nozzle Diameter = 0.211

Analyst : RTR

Reviewed :

Nozzle Calibration

Nozzle I.D. : 22 Date : 8/24/90



Points	
1 -	0.221
2 -	0.223
3-	0.223
4-	0.223
5-	0.223
6-	0.223
7-	0.224
8-	0.221

Average Nozzle Diameter = 0.223

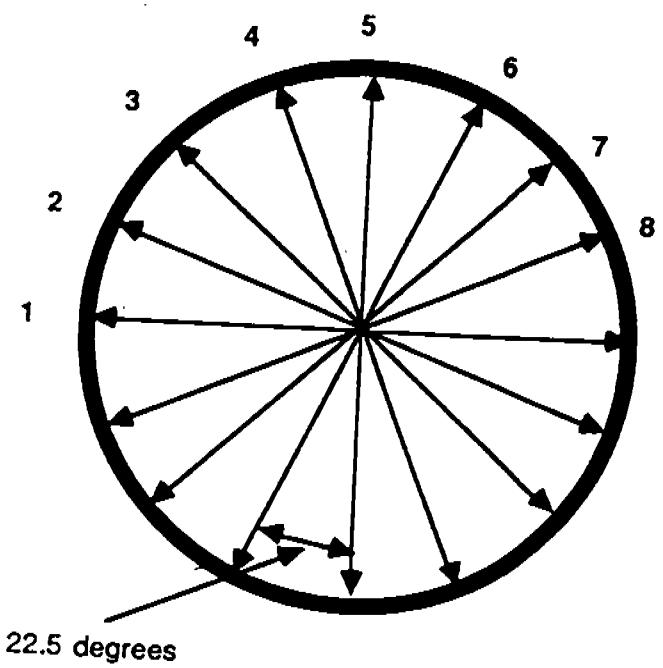
Analyst : SW Reviewed :

BTC Environmental, Inc. - 1989

Nozzle Calibration

Nozzle I.D. : #25

Date : 7/28/90



Points	
1 -	0.254
2 -	0.256
3-	0.256
4-	0.257
5-	0.254
6-	0.254
7-	0.258
8-	0.256

Average Nozzle Diameter = 0.255

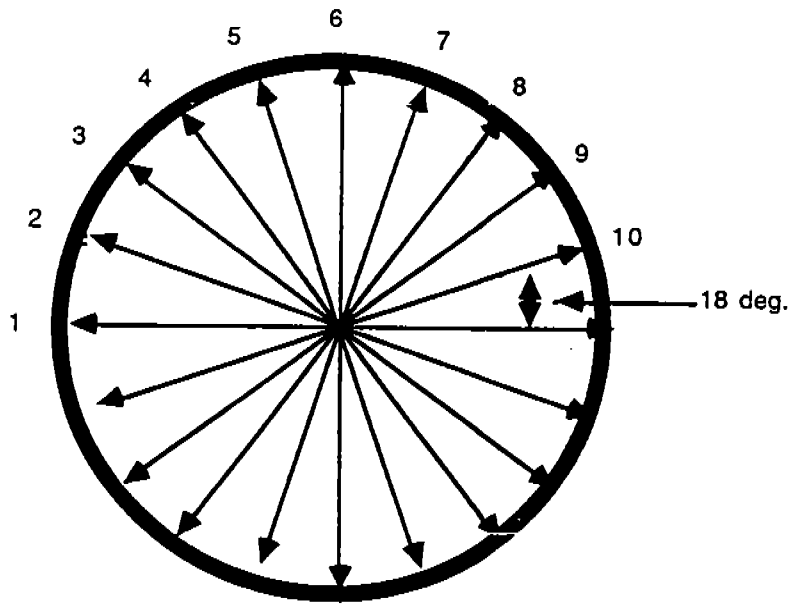
Analyst : CDD

Reviewed : MRP

BTC Environmental, Inc. - 1989

Nozzle Calibration

Nozzle I.D. #15/25



Points	
1	0.268
2	0.270
3	0.267
4	0.267
5	0.267
6	0.265
7	0.268
8	0.265
9	0.265
10	

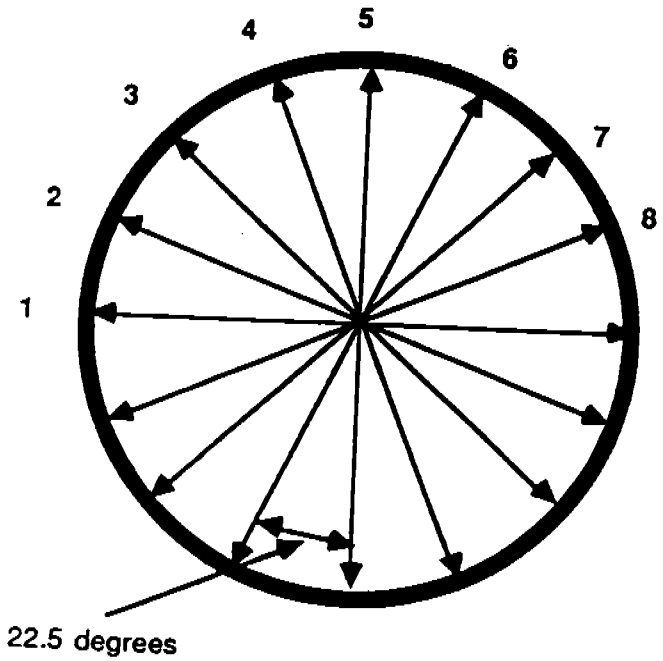
Average Nozzle Diameter = 0.268

Analyst RTR Date 6/23/89

Nozzle Calibration

Nozzle I.D. : #33

Date : 7/28/90



Points	
1 -	0.397
2 -	0.398
3-	0.398
4-	0.399
5-	.0399
6-	0.399
7-	0.397
8-	0.398

Average Nozzle Diameter = 0.298

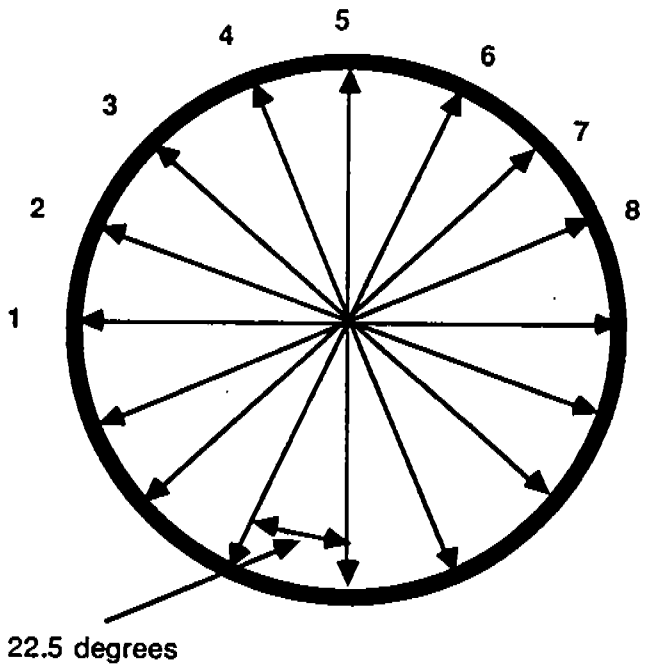
Analyst : CDD

Reviewed : MRP

BTC Environmental, Inc. - 1989

Nozzle Calibration

Nozzle I.D. : #34 Date : 01/08/90



Points	
1 -	0.297
2 -	0.296
3-	0.296
4-	0.294
5-	0.294
6-	0.295
7-	0.296
8-	0.296

Average Nozzle Diameter = 0.296

Analyst : RTR Reviewed :

BTC Environmental, Inc. - 1989

MAGNEHELIC CALIBRATION

DATE: 8/23/89
GAGE ID # M-2
RANGE 0-2 in. H20

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

REFERENCE ID # #424 0-10

LEAK CHECK :

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

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	0.400	0.41	2.500%
	0.400	0.41	2.500%
	0.400	0.41	2.500%
average	*0.400*	*0.41*	** 2.500%
2	0.800	0.80	0.000%
	0.800	0.80	0.000%
	0.800	0.80	0.000%
average	*0.800*	*0.80*	** 0.000%
3	1.200	1.20	0.000%
	1.200	1.20	0.000%
	1.200	1.20	0.000%
average	*1.200*	*1.20*	** 0.000%
4	1.600	1.60	0.000%
	1.600	1.60	0.000%
	1.600	1.60	0.000%
average	*1.600*	*1.60*	** 0.000%
5	2.000	2.00	0.000%
	2.000	2.00	0.000%
	2.000	2.00	0.000%
average	*2.000*	*2.00*	** 0.000%

STANDARD CORRECTION FACTOR	**0.995**
AVERAGE DEVIATION	0.005
STANDARD DEVIATION	0.010
95% CONFIDENCE INTERVAL	0.025
PRECISION(within +/- 3%)	-0.99

† 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: RTR *Reviewed by:* CDD

MAGNEHELIC CALIBRATION

DATE: 7/27/90
GAGE ID # M-11
RANGE 0-1.0 in. H20

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

REFERENCE ID # DWYER 0-10 MANO

LEAK CHECK :

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

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	0.200	0.20	0.000%
	0.200	0.19	5.000%
	0.200	0.20	0.000%
average	*0.200*	*0.20*	** 1.667%
2	0.400	0.40	0.000%
	0.400	0.40	0.000%
	0.400	0.40	0.000%
average	*0.400*	*0.40*	** 0.000%
3	0.600	0.60	0.000%
	0.600	0.60	0.000%
	0.600	0.60	0.000%
average	*0.600*	*0.60*	** 0.000%
4	0.800	0.80	0.000%
	0.800	0.80	0.000%
	0.800	0.80	0.000%
average	*0.800*	*0.80*	** 0.000%
5	1.000	1.00	0.000%
	1.000	1.00	0.000%
	1.000	1.00	0.000%
average	*1.000*	*1.00*	** 0.000%

STANDARD CORRECTION FACTOR	**1.003**
AVERAGE DEVIATION	0.003
STANDARD DEVIATION	0.012
95% CONFIDENCE INTERVAL	0.031
PRECISION(within +/- 3%)	-1.00

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

Calibration by: RTR *Reviewed by:* _____

MAGNEHELIC CALIBRATION

DATE: 7/27/90
GAGE ID # M-12
RANGE 0-2 in. H20

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

REFERENCE
ID # 0-10 DWYER MANO

LEAK CHECK :

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

Point	Incline Delta P *Pinc*	Magnehelic Delta P *Pmag*	% Deviation *(Pinc-Pmag)/Pinc x 100*
1	0.400	0.45	12.500%
	0.400	0.45	12.500%
	0.400	0.45	12.500%
average	0.40	0.45	** 12.500%
2	0.800	0.85	6.250%
	0.800	0.85	6.250%
	0.800	0.85	6.250%
average	0.80	0.85	** 6.250%
3	1.200	1.23	2.500%
	1.200	1.23	2.500%
	1.200	1.24	3.333%
average	1.20	1.23	** 2.778%
4	1.600	1.62	1.250%
	1.600	1.63	1.875%
	1.600	1.64	2.500%
average	1.60	1.63	** 1.875%
5	2.000	2.05	2.500%
	2.000	2.05	2.500%
	2.000	2.05	2.500%
average	2.00	2.05	** 2.500%

STANDARD CORRECTION FACTOR	**0.952**
AVERAGE DEVIATION	0.052
STANDARD DEVIATION	0.040
95% CONFIDENCE INTERVAL	0.099
PRECISION(within +/- 3%)	-0.90

† 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: RTR *Reviewed by:* _____

MAGNEHELIC CALIBRATION

DATE: 7/27/90
GAGE ID # M-7
RANGE 0-5 in. H20

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

REFERENCE
ID # 0-10 DWYER MANO

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	1.000	0.95	5.000%
	1.000	0.95	5.000%
	1.000	0.95	5.000%
average	1.00	0.95	** 5.000%
2	2.000	2.05	2.500%
	2.000	2.00	0.000%
	2.000	2.00	0.000%
average	2.00	2.02	** 0.833%
3	3.000	3.05	1.667%
	3.000	3.05	1.667%
	3.000	3.05	1.667%
average	3.00	3.05	** 1.667%
4	4.000	4.00	0.000%
	4.000	4.00	0.000%
	4.000	4.00	0.000%
average	4.00	4.00	** 0.000%
5	5.000	4.95	1.000%
	5.000	4.95	1.000%
	5.000	4.95	1.000%
average	5.00	4.95	** 1.000%

STANDARD CORRECTION FACTOR	**1.008**
AVERAGE DEVIATION	0.017
STANDARD DEVIATION	0.018
95% CONFIDENCE INTERVAL	0.045
PRECISION(within +/- 3%)	-0.99

† 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: RTR *Reviewed by:* _____

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

CHAIN OF CUSTODY RECORD

BILL TO Company: ______
Address: ______
______
Phone #: (____) ______ Contact: ______

PROJ. NO.: AC188
PROJECT NAME: Eckley – Hanford
SAMPLERS: (Signature)

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Gross wt	% Residue				REMARKS
99	12-3-90		✓		Run 1 PM10 - 10 rinse "Suction"			✓				
100					+10 rinse			✓				
101					Filters X-34, X-35, J		✓					
102					Run 1 Part Imps "Suction"			✓				
103					Probe			✓				
104					Filter D-20		✓					
105					Run 2 Suction PM10 -10 rinse			✓				
106					+10 Rinse			✓				
107					Filters F-1, X-35, X-36.		✓					
108					Run 2 Suction Part Imps.			✓				
109					Probe			✓				
110					Filter D-21		✓					
111					Run 1 Dryer PM10-10 rinse			✓				
112					+10 rinse			✓				
113					Filters F-2, X-37, X-38		✓					

CHECK IF RUSH ☐

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

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

WHITE COPY______ CANARY COPY______ PINK COPY______

BTC ENVIRONMENTAL INCORPORATED

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

CHAIN OF CUSTODY RECORD

BILL TO Company: _____

Address: _____

Phone #: (___) _____ Contact: _____

PROJ. NO.: A0188 | PROJECT NAME: Eckley - Hanford

SAMPLERS: (Signature)

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Trace Elements	REMARKS	CHECK IF RUSH
114	12-3-90		✓		Run1 Dryer Part Imps.		✓		
115					Probe		✓		
116					Filter D-22		✓		
117					Run2 Dryer PM10 -10 rinse		✓		
118					+10 rinse		✓		
119					Filters F-3, X39, X-40		✓		
120					Run2 Dryer Part Imps		✓		
121					Probe		✓		
122					Filter D-23		✓		
123	12-4-90				Run1 Mate PM10 -10 rinse		✓		
124					+10 rinse		✓		
125					Filters F-41, X42		✓		
126					Run1 Mate Part Imps		✓		
127					Probe		✓		
128					Filter D-24		✓		

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

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

WHITE COPY_____ CANARY COPY_____ PINK COPY_____

BIR ENVIRONMENTAL INCORPORATED

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

CHAIN OF CUSTODY RECORD

BILL TO Company: _____

Address: _____

Phone #: (____) _____ Contact: _____

PROJ. NO.: 40-188

PROJECT NAME: Eckley - Hanford

SAMPLERS: *(Signature)*

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Gross Wt, C. Metals	REMARKS	CHECK IF RUSH
129	12-4-90		✓		Run 2 Mate PM10 - 10 rinse		✓		
130					+10 rinse		✓		
131					Filters F5, X-43, X-44		✓		
132					Run 2 Mate Part Empty		✓		
133					Probe		✓		
134					Filter D-25		✓		
135					Run 1 Lint Trap PM10 40		✓		
136					+10 rinse		✓		
137					Filters F-6, X45, X46		✓		
138					Run 1 Lint Trap Part Empty		✓		
139					Probe		✓		
140					Filter D-26		✓		
141					Run 2 Lint Trap PM10 - 10		✓		
142					+10 rinse		✓		
143					Filters F-7, X-47, X-48		✓		

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

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

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

WHITE COPY_____ CANARY COPY_____ PINK COPY_____

BI ENVIRONMENTAL INCORPORATED

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

CHAIN OF CUSTODY RECORD

BILL TO Company: _____

Address: _____

Phone #: (____) _____ Contact: _____

PROJ. NO. AG-88 | PROJECT NAME Eckley - Hanford

SAMPLERS: (Signature)

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS	REMARKS
144	12-4-90		✓		2w 2 Lint trap Part Emps		✓	
145	↓		↓		Probe		✓	
146	↓		↓		Filter D-27		✓	

CHECK IF RUSH

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

WHITE COPY_____ CANARY COPY_____ PINK COPY_____