Field Data

AIRTECH ENVIRONMENTAL SERVICES INC.

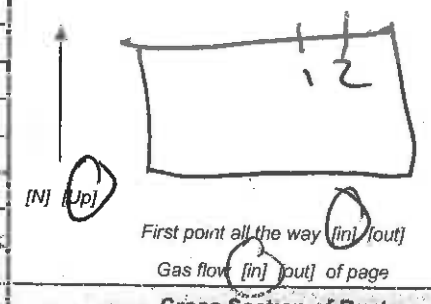
General Testing Data Sheet

TESTING TYPE: 7|C|

RUN NO. 1 METHOD NO. 26A

Page 1 of 3

Client	Big Rivers						
Plant	Robards, KY						
Location	Unit 2 inlet A						
Date	7/29/11	Project No	3648				
Meter Operator	NL						
Probe Operator	DG						
Meter ID	M-17	Yd	1.0141	Pitot Cp	.84		
ΔH@	1.712	Kf	3.88	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)			
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	68	Silica gel (g)	
Static (inH2O)	-.7	Total Vlc	
Probe ID	HES-4	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID			
Train ID	D3	Train Type	Imp
Duct Dim. (in)	13'6" x 16'6"	Port Lngth (in)	36"
Start Time	7:15	Stop Time	9:24

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l] (21.55)	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1-1	5	.49	1.9	676.49	320	250	250	57	92	89	9			
2	10	.41	1.6	680.01	322	250	250	57	93	89	8			
3	15	.39	1.5	683.35	323	250	250	56	96	89	8			
4	20	.33	1.3	686.72	332	252	250	56	99	90	8			
5	25	.29	1.1	689.40	328	250	250	58	99	90	7			
6	30	.30	1.2	692.33	332	250	251	56	101	91	6			
7	35	.25	.97	694.99	331	250	250	59	101	92	6			
8	40	.26	.99	697.64	330	250	250	59	102	92	6			
9	45	.14	.14	699.97	329	251	250	54	102	91	5			
10	50	.26	1.0	702.62	331	250	250	60	104	93	8			
11	55	.29	1.12	705.51	332	250	250	60	104	93	8			
12	60	.24	.93	708.19	330	250	250	60	104	93	6			
Total		14.1089	30.37	72.31	4535				2683	2410				
Average		.5424	1.168		328.269				97.942					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

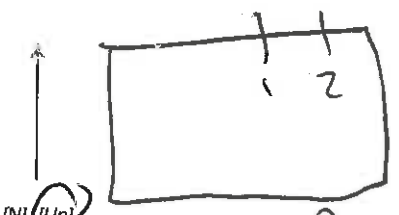
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 1 METHOD NO. 26A

Page 2 of 3

Client	Big Rivers						
Plant	Robards, Ky						
Location	Unit 2 Inlet A						
Date	7/19/11	Project No	3648				
Meter Operator	MC						
Probe Operator	DG						
Meter ID	M-17	Yd	1.014	Pitot Cp	.84		
ΔH@	1.772	Kf	3.88	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)			
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)			



First point all the way [in] [out]

Gas flow [in] [out] of page

Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	88	Silica gel (g)	
Static (inH_2O)	-12	Total Vlc	
Probe ID	AE5424	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	—		
Train ID	IB	Train Type	IMP
Duct Dim. (in)	83.6" X 16.6"	Port Lngth (in)	36"
Start Time	7:15	Stop Time	9:24

Traverse Point	Min/Pcint 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft^3] [l] (677.65)	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1-13	65	.70	.48	711.09	329	250	250	60	105	93	6			
2-1	70	.49	1.9	714.06	330	250	252	60	105	93	9			
2	75	.42	1.6	716.43	332	250	250	60	105	94	4			
3	80	.29	1.5	719.95	326	249	250	60	106	94	4			
4	85	.34	1.5	722.79	330	249	250	61	106	94	7			
5	90	.27	1.1	725.80	330	250	250	61	106	94	6			
6	95	.31	1.2	728.43	340	250	250	61	106	94	6			
7	100	.26	1.0	731.42	332	250	251	62	106	94	6			
8	105	.26	1.0	734.51	331	250	250	62	106	94	6			
9	110	.19	.74	737.46	329	250	250	62	107	94	6			
10	115	.25	.97	740.12	330	250	250	62	107	94	6			
11	120	.30	1.2	743.11	329	250	250	62	107	93	7			
Total		14.658	20.37	76.31	45375				2665	2410				
Average		.549	1.164		329.89				97.942					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

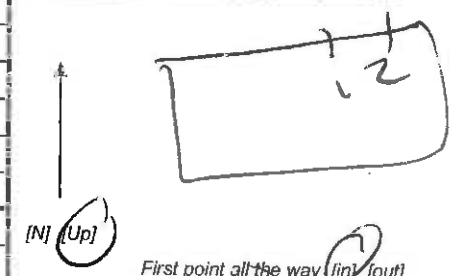
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 1 METHOD NO. 26A

Client	Big Rivers				
Plant	Robards, KY				
Location	unit 2 inlet A				
Date	7/29/11	Project No.	3646		
Meter Operator	ML				
Probe Operator	DG				
Meter ID	m-1	Yd	1.014	Pitot Cp	.84
ΔH@	1.772	Kf	3.480	Leak check	✓
Pre Leak Check	.000	[cfm] [lpm] @	15	[inHg]	
Post Leak Check	.000	[cfm] [lpm] @	15	[inHg]	



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	86	Silica gel (g)	
Static (inH2O)	-.12	Total Vlc	
Probe ID	AE5-12-4	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	—		
Train ID	IB	Train Type	Dmp
Duct Dim. (in)	86"x166"	Port Length (in)	36"
Start Time	7:15	Stop Time	9:24

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				(671.55)		250	250							
2-12	115	.24	.93	746.78	320	251	250	63	101	95	6			
B	130	.21	.82	748.96	320	250	250	63	101	93	6			
Total		14.1048	30.28	76.41	9535				2683	2410				
Average		.5424	1.164		318.166				97.442					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

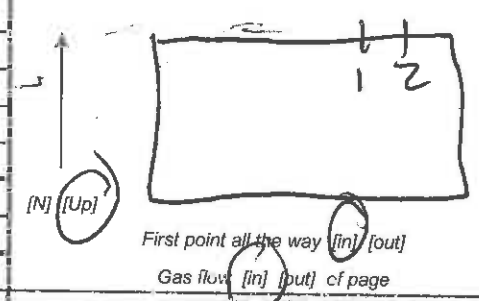
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: 9|C|

RUN NO. 2 **METHOD NO.** 26A

Client	Big Rivers						
Plant	Robards, Ky						
Location	Unit 2 Inlet A						
Date	7/29/11	Project No.	3648				
Meter Operator	MR						
Probe Operator	NG						
Meter ID	M-17	Yd	1.014	Pitot Cp	.84		
ΔH@	1.732	Kf	3.83	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)			
Post Leak Check	.000	[cfm] [lpm] @	12	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	96	Silica gel (g)	
Static (inH2O)	-12	Total Vlc	
Probe ID	AE5-12-4	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	—		
Train ID	IB24	Train Type	IMP
Duct Dim. (in)	76"x36"	Port Length (in)	
Start Time	9:48	Stop Time	12:54

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft3] [l] 751.11	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1-1	5	.46	1.8	755.18	334	250	250	58	104	98	9			
2	10	.43	1.6	756.70	336	250	250	56	106	98	9			
3	15	.36	1.4	762.41	336	250	250	59	107	98	8			
4	20	.35	1.3	765.33	337	250	250	59	104	98	8			
5	25	.27	1.0	768.21	332	251	250	59	105	99	6			
6	30	.30	1.1	771.49	331	250	250	59	104	99	6			
7	35	.25	.93	775.19	336	250	252	59	109	99	6			
8	40	.26	.97	777.72	335	250	250	60	105	99	6			
9	45	.16	.62	780.04	334	250	250	60	108	99	5			
10	50	.25	.93	782.70	331	250	251	60	109	100	6			
11	55	.30	1.1	785.51	340	249	250	60	109	100	6			
12	60	.25	.93	788.12	332	250	250	60	109	100	6			
Total		14.09	26.97	36.80	9960				2526	2404				
Average		.5496	1.114		332.64				104.539					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

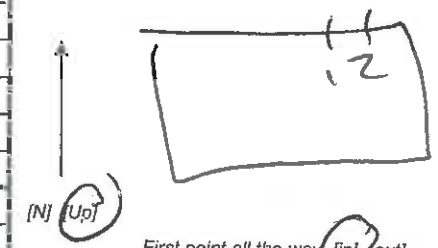
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 2 METHOD NO. 26A

Client	Big Rivers				
Plant	Robert, KY				
Location	unit 2 inlet A				
Date	7/29/11	Project No.	3644		
Meter Operator	MK				
Probe Operator	DB				
Meter ID	M17	Yd	1.0141	Pitot Cp	.841
ΔH@	1.772	Kf	3.73	Leak check	√
Pre Leak Check	.000	[cfm] [lpm] @	12	(inHg)	
Post Leak Check		[cfm] [lpm] @		(inHg)	



Cross Section of Duct

Barometric (inHg)	27.56	Water [ml] [g]	
Ambient Temp (°F)	96	Silica gel (g)	
Static (inH2O)	-12	Total Vlc	
Probe ID	.275 S	Liner Type	TFE
Nozzle ID	AE5-R-4	Nozzle Dia (in)	.275
Filter ID	—		
Train ID	TB24	Train Type	SMP
Duct Dim (in)	16'6"x136"	Port Length (in)	36"
Start Time	9:48	Stop Time	12:01

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l] 751.11	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
2/3	65	.22	.92	790.63	336	250	250	60	110	101	6			
1-1	70	.47	1.8	794.31	331	250	250	60	110	101	10			
2	75	.43	1.6	798.20	332	250	250	61	109	101	10			
3	80	.40	1.5	801.37	334	250	250	61	106	101	10			
4	85	.32	1.2	804.23	330	251	250	61	109	101	8			
5	90	.28	1.0	807.15	334	250	250	61	109	101	8			
6	95	.29	1.1	810.120	332	250	250	61	110	101	8			
7	100	.24	.90	812.59	335	250	250	62	110	102	7			
8	105	.24	.90	815.15	336	252	250	62	110	102	7			
9	110	.19	.71	817.48	333	250	246	62	110	102	8			
10	115	.20	.77	820.14	332	250	250	62	110	102	8			
11	120	.30	1.1	822.96	334	250	250	62	110	102	8			
Total		14.0491	18.817	71.85	8630				2426	2009				
Average		.5426	1.114		332.08				64.539					

AIRTECH ENVIRONMENTAL SERVICES INC.

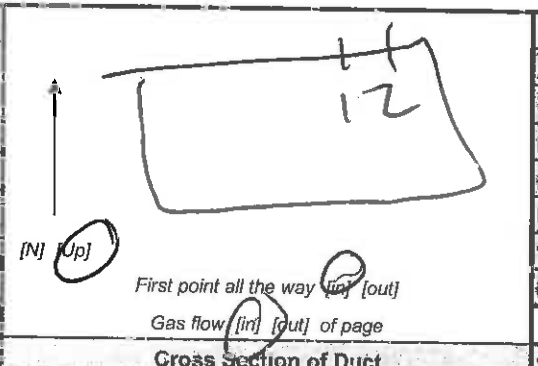
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 2 METHOD NO. 26A

Page 3 of 3

Client	Big Rivers						
Plant	Robards, Ky						
Location	Unit 2 inlet A						
Date	7/29/11	Project No	3644				
Meter Operator	NR						
Probe Operator	DG						
Meter ID	M-17	Yd	1.0141	Pitot Cp	.84		
ΔH@	1.772	Kf	3.73	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @		15	(inHg)		
Post Leak Check		[cfm] [lpm] @			(inHg)		



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	96	Silica gel (g)	
Static (inH2O)	-12	Total Vlc	
Probe ID	ABS-12-4	Liner Type	TFE
Nozzle ID	.245	Nozzle Dia (in)	.245
Filter ID	—		
Train ID	IB24	Train Type	IMP
Duct Dim. (in)	136" x 166"	Port Length (in)	36"
Start Time	9:48	Stop Time	12:01

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l] 751.11	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
12	115	.23	.90	825.54	323	250	250	62	110	102	7			
13	130	.21	.76	827.97	324	250	250	62	110	102	6			
Total		14.3731	1.66	76.86	8650				2918	2604				
Average		.5496	1.114		324.692				104.539					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

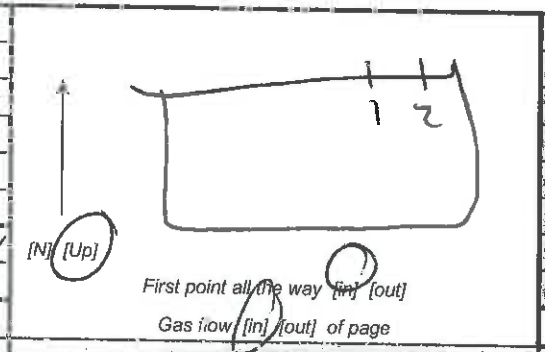
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 3 METHOD NO. 26A

Page 1 of 3

Client	Big Rivers				
Plant	Robards, KY				
Location	Unit 2, Inlet A				
Date	7/21/11	Project No.	3648		
Meter Operator	MC				
Probe Operator	DG				
Meter ID	M-17	Yd	1.0141	Pitot Cp	.84
ΔH@	1.77	Kf	3.76	Leak check	✓
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)	
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)	



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	105	Silica gel (g)	
Static (inH_2O)	-1.2	Total Vlc	
Probe ID	AES-12-4	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID			
Train ID	D3	Train Type	IMP
Duct Dim. (in)	136"x166"	Port Lngth (in)	IMP 36" ARC
Start Time	12:12	Stop Time	14:34

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l] 83190	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1-1	5	.49	1.8	835.51	336	250	250	59	111	103	9			
2	10	.42	1.6	838.89	334	250	250	59	113	103	8			
3	15	.38	1.4	842.13	331	250	250	59	113	103	7			
4	20	.31	1.2	845.16	333	252	251	59	114	103	6			
5	25	.29	1.1	848.05	332	250	250	59	114	104	6			
6	30	.24	.91	850.89	331	250	250	60	114	104	6			
7	35	.25	.94	853.90	334	250	250	60	114	104	6			
8	40	.23	.87	856.04	335	250	250	60	114	104	5			
9	45	.19	.71	858.29	331	250	250	60	114	105	5			
10	50	.24	.90	860.80	329	250	250	60	115	105	5			
11	55	.29	1.1	863.63	326	250	250	60	115	106	6			
12	60	.25	.94	866.26	324	250	251	60	115	106	5			
Total		14.016	26.44	73.9	4519				2776	2734				
Average		.5569	1.113		377.6				109,500					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

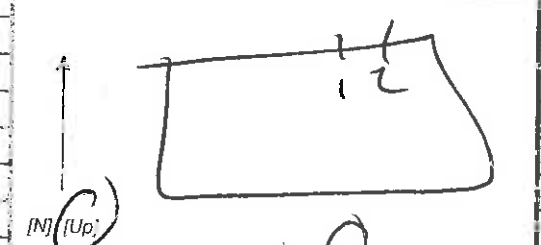
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 3

METHOD NO. 26A

Client	Big Rivers				
Plant	Robards, KY				
Location	Unit 2 inlet A				
Date	7/29/11	Project No.	3648		
Meter Operator	MC				
Probe Operator	DG				
Meter ID	MT	Yd	1.0141	Pitot Cp	.84
ΔH@	1.772	Kf	3.76	Leak check	✓
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)	
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)	



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	108	Silica gel (g)	
Static (inH2O)	-12	Total Vic	
Probe ID	AE S12	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	-		
Train ID	T3	Train Type	IMP
Duct Dim. (in)	136"X166"	Port Lngth (in)	36"
Start Time	1224	Stop Time	1438

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l] 831.90	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1-13	65	.20	.75	868.64	329	251	250	60	115	106	5			
2-1	70	.47	1.5	872.32	330	250	250	61	115	106	10			
2	75	.43	1.6	875.81	328	250	250	61	115	106	9			
3	80	.36	1.4	879.06	329	250	252	61	115	106	8			
4	85	.35	1.3	882.14	330	250	250	61	115	106	7			
5	90	.27	1.0	884.94	327	249	250	61	116	106	6			
6	95	.30	1.1	887.77	324	250	250	61	115	106	6			
7	100	.26	.94	890.44	321	250	250	62	115	106	6			
8	105	.26	.96	893.13	324	250	250	62	115	106	6			
9	110	.19	.71	895.36	323	250	250	62	115	106	5			
10	115	.23	.84	897.81	321	250	250	62	115	106	6			
11	120	.29	1.1	900.70	321	250	250	62	115	106	6			
Total		14.0116	26.64	73.9	46519				2476	7734				
Average		.53881	1.113		327.654				109,486					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

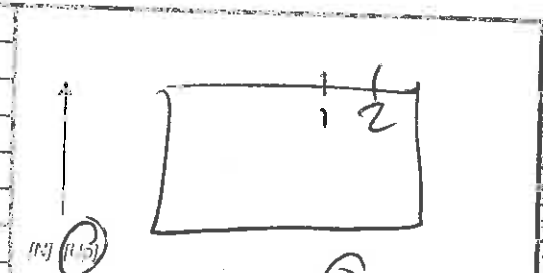
TESTING TYPE: 7-1C1

RUN NO. 3

METHOD NO. 26A

Page 3 of 3

Client	Big Rivers						
Plant	Robards, KY						
Location	Unit 2 Inlet A						
Date	7/29/11	Project No.	3646				
Meter Operator	MR						
Probe Operator	DG						
Meter ID	M-1A	Yd	1.014	Pitot Cp	.84		
ΔH@	1.772	Kf	3.76	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @		15	(inHg)		
Post Leak Check	.000	[cfm] [lpm] @		15	(inHg)		



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	108	Silica gel (g)	
Static (inH2O)	-12	Total Vlc	
Probe ID	AES 12-4	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	-		
Train ID	1B	Train Type	IMP
Duct Dim. (in)	13'6" X 46'6"	Port Length (in)	36"
Start Time	1212	Stop Time	1438

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial [ft³] [l] 63190	Stack Temp (°F)	Probe Temp (°F) 250	Filter Temp (°F) 250	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
2-12	125	.29	.90	903.19	319	249	250	62	115	106	6			
13	130	.21	.71	905.40	314	249	250	62	115	106	5			
Total		14.0116	26.14	73.9	6518				2976	2739				
Average		.5581	1.113		326.69				109.86					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.
Impinger Weights Data Sheet

PROJECT NO. 3648

Page	1	of	1

Client	Big Rivers - Green Station
Plant	Robards, KY
Location	ESP Inlet
Date	7-28-11 Unit 2A
Operator	AL

Run No. 1
Method No. 26A
Train ID
Filter No. NA

	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	704.5	840.1	+50	
Impinger No. 2	H_2SO_4	737.3	788.6		
Impinger No. 3	Empty	640.5	634.7		
Impinger No. 4	Silica	894.5	946.3		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No. 2
Method No. 26A
Train ID
Filter No. NA

	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	639.2	729.2		
Impinger No. 2	H_2SO_4	722.5	743.4	+50	
Impinger No. 3	Empty	518.3	533.1		
Impinger No. 4	Silica	937.6	953.7		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No. 3
Method No. 26A
Train ID
Filter No. NA

	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	729.1	833.7		
Impinger No. 2	H_2SO_4	734.0	765.5	+50	
Impinger No. 3	Empty	637.9	653.5		
Impinger No. 4	Silica	859.9	876.0		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

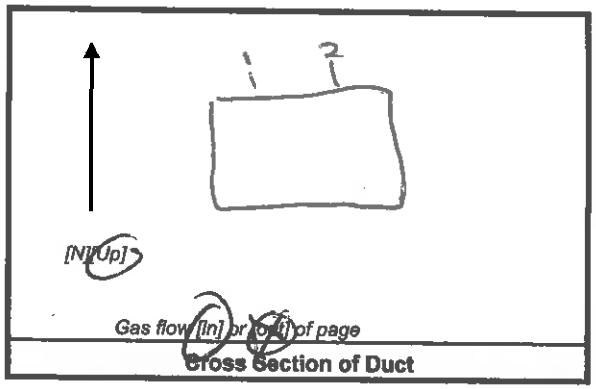
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 1

Page	1	of	2

Client	BIG RIVERS - GREEN
Plant	ROBARDS, KY
Location	UNIT 2 - INLET (A) (B)
Date	7-29-11
Project No.	3648-GREEN
Meter Reader	BK



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	88
Start Time	~~0745~~ 0715 (BW)
Stop Time	0852

Sample Train A UNSPIKED

Trap ID	951816	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.004		lpm @	15	(In. Hg)
Post Leak Check	0.002		lpm @	7	(In. Hg)

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (In Hg)	TRAP TEMP Notes
2-1	5	.40 LPM	2.132	322	97	2	231
	10		3.994	326	97	4	233
	15		5.991	327	98	4	232
2	20		7.919	330	100	4	233
	25		10.074	329	103	4	232
	30		11.997	329	105	4	233
3	35		14.041	330	108	4	233
	40		16.112	331	111	4	233
	45		18.043	330	111	4	233
4-1	50		19.989	332	113	4	232
	55		22.029	329	114	5	232
	60	↓	24.039	330	114	5	233
Total			36.155	3946	1273		
Average				329.56	110.08		

Sample Train B SPIKED

Trap ID	95188	Meter ID	M-26	Yd	.9902
Pre Leak Check	0.000		lpm @	15	(In. Hg)
Post Leak Check	0.001		lpm @	60	(In. Hg)

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (In Hg)	TRAP TEMP Notes
2-1	5	.40 LPM	1.981	322	98	2	231
	10		3.998	326	97	2	233
	15		6.004	327	99	2	232
2	20		7.934	330	102	2	233
	25		9.997	329	106	3	232
	30		12.004	329	108	3	233
3	35		13.982	330	111	3	233
	40		16.086	331	112	3	233
	45		18.008	330	114	3	233
4-1	50		20.087	332	115	3	232
	55		22.094	329	117	3	232
	60	↓	24.096	330	117	3	233
Total			36.182	3945	1296		
Average				329.56	112.00		

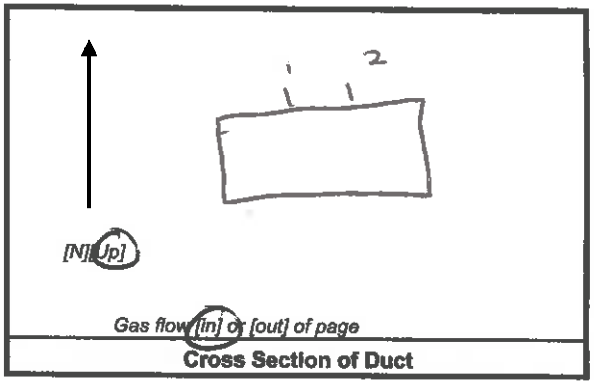
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 1

Page	2	of	2

Client	BIG RIVERS - GREEN
Plant	ROBARDS, KY
Location	UNIT 2 - INLET B/A (BW)
Date	7-29-11
Project No.	3648 - GREEN
Meter Reader	BK



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	88
Start Time	0715
Stop Time	0852

Sample Train A UNSPIKED

Trap ID	95186	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.004	lpm @	15	(in. Hg)	
Post Leak Check	0.002	lpm @	7	(in. Hg)	

Sample Train B SPIKED

Trap ID	95188	Meter ID	M-26	Yd	.9903
Pre Leak Check	0.000	lpm @	15	(in. Hg)	
Post Leak Check	0.001	lpm @	6	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
65	.40 LPM	26.037	331	116	5	233
70		28.063	331	116	5	233
75		30.058	330	118	5	234
80		32.040	332	118	5	234
85		34.019	331	119	5	233
90	↓	36.155	332	120	5	233
Total		36.155	1987	707		
Average						

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
65	.40 LPM	26.153	331	118	3	233
70		27.997	331	118	3	233
75		30.133	330	120	3	234
80		32.031	332	121	4	234
85		33.998	331	121	3	233
90	↓	36.182	332	122	3	233
Total		36.182	1987	720		
Average						

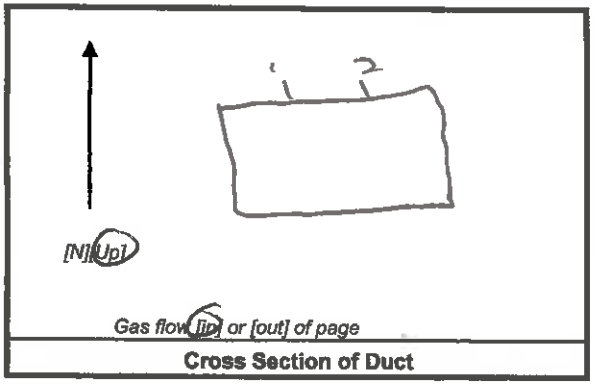
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 2

Page	1	of	2

Client	BIG RIVERS - GREEN
Plant	ROBBINS, KY
Location	UNIT 2 - INLET ~~A~~ B
Date	7-29-11
Project No.	3648 - GREEN
Meter Reader	BK



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	96
Start Time	0948
Stop Time	1126

Sample Train A (UNSPIKED)

Trap ID	95161	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.007		lpm @	15	(in. Hg)
Post Leak Check	0.005		lpm @	14	(in. Hg)

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
1-1	5	.40 lpm	2.075	324	106	3	230
	10		3.933	325	107	4	231
	15		6.128	326	106	4	233
2	20		8.096	326	107	4	233
	25		10.047	328	109	4	234
	30		12.031	327	110	5	233
3	35		14.027	328	112	5	233
	40		16.071	328	114	5	233
	45		18.022	327	116	5	233
2-1	50		19.929	327	117	5	234
	55		22.039	325	118	5	233
	60		24.034	325	118	7	233
Total			36.003	3911	1340		
Average				325.89	116.10		

Sample Train B SPIKED

Trap ID	95130	Meter ID	M-26	Yd	.9902
Pre Leak Check	0.005		lpm @	15	(in. Hg)
Post Leak Check	0.001		lpm @	5	(in. Hg)

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
1-1	5	.40 lpm	2.048	324	106	2	230
	10		3.931	325	106	3	231
	15		6.012	326	107	3	233
2	20		8.183	326	108	3	233
	25		10.014	328	111	3	234
	30		12.012	327	112	3	233
3	35		14.065	328	115	3	233
	40		16.127	328	116	3	233
	45		18.211	327	118	3	233
2-1	50		19.974	327	119	3	234
	55		22.104	325	120	3	233
	60		24.028	325	121	3	233
Total			35.988	3916	1359		
Average				325.89	116.10		

116.55 OD

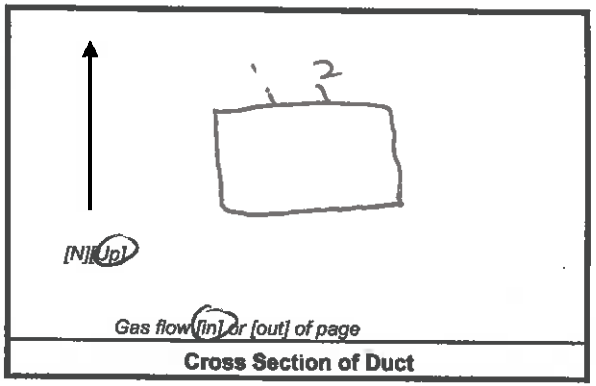
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 2

Page	2	of	2

Client	BIG RIVERS - GREEN
Plant	ROBARDS, KY
Location	UNIT 2 - INLET A
Date	7-29-11
Project No.	3648 - GREEN
Meter Reader	BK



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	96
Start Time	0948
Stop Time	1126

Sample Train A UNSPIKED

Trap ID	95161	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.007		lpm @	15	(In. Hg)
Post Leak Check	0.005		lpm @	14	(in. Hg)

Sample Train B SPIKED

Trap ID	95130	Meter ID	M-26	Yd	.9902
Pre Leak Check	0.005		lpm @	15	(in. Hg)
Post Leak Check	0.001		lpm @	5	(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [f] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
65	.40 LPM	25.989	323	120	7	234
70		28.015	325	121	7	233
75		30.098	326	122	9	233
80		32.109	326	122	9	233
85		34.008	325	123	10	233
90	↓	36.003	325	123	10	234
Total		36.003	1950	731		
Average						

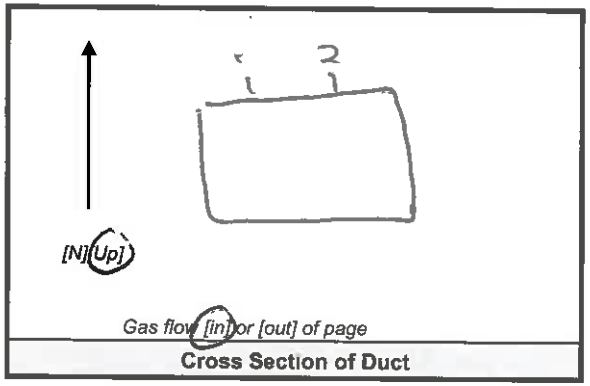
Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [f] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
65	.40 LPM	26.011	323	122	3	234
70		28.116	325	123	3	233
75		30.102	326	123	3	233
80		32.113	326	123	3	233
85		34.002	325	124	3	233
90	↓	35.988	325	124	3	234
Total		35.988	1950	739		
Average						

AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 3

Client	BIG RIVERS GREEN
Plant	ROBARDS, KY
Location	UNIT 2 - INLET A
Date	7-29-11
Project No.	30618 - GREEN
Meter Reader	BJL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	108
Start Time	1221
Stop Time	1359

Sample Train A Unspiked Trap

Trap ID	95101	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.008	lpm @	17	(in. Hg)	
Post Leak Check	0.002	lpm @	15	(in. Hg)	

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
2-1	5	.40 lpm	2.029	318	111	3	231
	10		4.078	324	111	4	231
	15		5.984	326	111	4	233
2	20		8.097	325	111	4	234
	25		9.996	325	113	5	233
	30		11.993	327	114	5	233
3	35		13.996	326	116	5	233
	40		15.980	326	118	6	232
	45		18.018	325	120	6	233
1-1	50		20.040	327	121	6	234
	55		22.072	327	122	7	233
	60		24.008	326	123	7	233
	Total		35.997	3902	1391		
	Average			325.16	119.22		

Sample Train B Spiked Trap

Trap ID	95135	Meter ID	M-26	Yd	.9902
Pre Leak Check	0.005	lpm @	16	(in. Hg)	
Post Leak Check	0.000	lpm @	5	(in. Hg)	

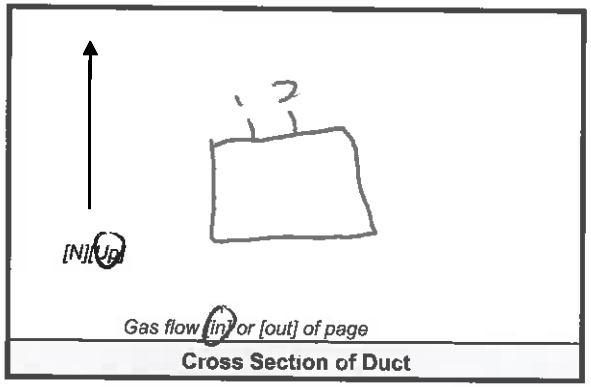
	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
2-1	5	.40 lpm	2.123	318	110	2	231
	10		4.133	324	111	2	231
	15		5.979	326	112	2	233
2	20		8.111	325	112	2	234
	25		10.033	325	115	3	233
	30		12.111	327	116	3	233
3	35		14.052	326	118	3	233
	40		15.991	326	120	3	232
	45		18.022	325	121	3	233
1-1	50		20.053	327	124	3	234
	55		22.011	327	124	3	233
	60		23.984	326	126	3	233
	Total		36.025	3902	1409		
	Average			325.16	120.89		

AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 3

Client	BIG RIVERS - GREEN
Plant	ROBARDS, KY
Location	UNIT 2 - INLET A
Date	7-29-11
Project No.	3648 - GREEN
Meter Reader	BK



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-12.0
Ambient Temp. (°F)	108
Start Time	1221
Stop Time	1359

Sample Train A Unspiked Trap

Trap ID	95101	Meter ID	M-26	Yd	.9958
Pre Leak Check	0.008	lpm @	17	(in. Hg)	
Post Leak Check	0.002	lpm @	15	(in. Hg)	

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
1-2	65	.40 LPM	26.003	326	124	7	233
	70		28.051	327	125	7	233
	75		30.033	326	126	8	234
3	80		31.998	327	126	8	234
	85		33.989	327	127	8	234
	90	↓	35.997	326	127	10	233
Total			35.997	1959	765		
Average							

Sample Train B Spiked Trap

Trap ID	95135	Meter ID	M-26	Yd	.9902
Pre Leak Check	0.005	lpm @	16	(in. Hg)	
Post Leak Check	0.000	lpm @	5	(in. Hg)	

	Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] 0.000	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	TRAP TEMP Notes
1-2	65	.40 LPM	26.011	326	126	3	233
	70		28.038	327	127	3	233
	75		30.021	326	128	3	234
3	80		32.039	327	128	3	234
	85		34.053	327	129	4	234
	90	↓	36.025	326	129	4	233
Total			36.025	1959	767		
Average							

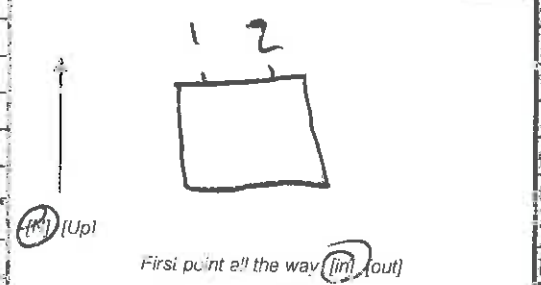
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCL

RUN NO. 1 METHOD NO. 26A

Client	BIG RIVERS				
Plant	PADUCAH, KY				
Location	GREEN UNIT 2 INLET 2				
Date	07/29/11	Project No.	3648		
Meter Operator	JD				
Probe Operator	PC				
Meter ID	M-16	Yd	.9907	Pitot Cp	.84
ΔH@	1.845	Kf	4.10	Leak check	✓
Pre Leak Check	0.000	[cfm] [lpm] @	26	(inHg)	
Post Leak Check	0.000	[cfm] [lpm] @	15	(inHg)	



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	100°F	Silica gel (g)	
Static (inH2O)	-10.5	Total Vic	
Probe ID	AES-123	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	NA		
Train ID	IR-16	Train Type	IMP
Duct Dim. (in)	162.0"	Port Lngth (in)	
Start Time	07:15	Stop Time	8:30

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial (ft3) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				949.10		250	250							
2-1	5	.51	2.1	953.08	261	249	252	46	97	95	11	N/A		
2	10	.60	2.5	957.45	263	250	251	47	102	96	11			
3	15	.57	2.3	961.70	264	251	250	48	106	97	11			NEW NOZZLE .250
4	20	.51	2.1	965.89	265	250	250	49	108	98	11			NEW KF - 2.85 JD
5	25	.50	1.4	968.98	264	252	250	50	109	99	9			
6	30	.43	1.2	972.00	265	251	250	51	110	100	9			
7	35	.22	.62	974.18	264	252	250	52	111	101	6			
8	40	.25	.71	976.50	263	251	250	53	111	102	6			
9	45	.28	.79	978.96	262	250	249	54	112	103	7			
10	50	.24	.68	981.22	265	251	250	55	113	104	7			
11	55	.23	.65	983.47	263	252	250	56	114	105	6			
12	60	.25	.71	985.82	264	253	250	57	114	105	7			
Total	130		15.77	69.84	3166.00				2941.00	2775.00				
Average	5.0		.9812		263.830				91.387					
			15.76		3163				1307	.265				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCL

RUN NO. 1 METHOD NO. 26A

Client	BIG RIVERS						
Plant	ROBARDS, KY						
Location	GREEN UNIT 2 INLET 2B						
Date	07/29/11	Project No.	B648				
Meter Operator	JD						
Probe Operator	PC						
Meter ID	M-16	Yd	.9907	Pitot Cp	.84		
ΔH@	1.845	Kf	~~4.70~~ 30	Leak check	✓		
Pre Leak Check	0.000	(cfm) [lpm] @	20	(inHg)			
Post Leak Check	0.000	(cfm) [lpm] @	15	(inHg)			

(In) [Up]

First point all the way [in] [out]

Gas flow [in] [out] of page

Cross Section of Duct

Barometric (inHg)	29.56	Water (ml) [g]	
Ambient Temp (°F)	100°F	Silica gel (g)	
Static (inH2O)	-10.5	Total Vlc	
Probe ID	AES-12-3	Liner Type	TFE
Nozzle ID	.275	Nozzle Dia (in)	.275
Filter ID	MK	—	—
Train ID	IB-10	Train Type	IMP
Duct Dim (in)	162.0"	Port Length (in)	
Start Time	07:15	Stop Time	8:30

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial (ft³) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				949.10		250	250							JD
13	65	.30	.85	987.97	264	252	250	57	116	107	7	N/A		KF: 2.83
1-1	70	.27	.76	990.86	272	253	251	55	117	107	7			Nozzle .250
2	75	.40	1.1	993.76	274	253	250	52	118	108	9			
3	80	.24	.68	996.07	274	252	250	50	118	109	7			
4	85	.23	.65	998.99	273	253	250	49	118	109	6			
5	90	.18	.51	1,000.32	272	252	250	49	117	109	6			
6	95	.24	.68	1,002.61	269	253	250	50	117	109	7			
7	100	.21	.59	1,004.38	268	252	250	50	117	109	6			
8	105	.22	.62	1,006.98	264	253	250	51	117	110	7			
9	110	.25	.71	1,009.35	262	253	249	52	117	109	8			
10	115	.28	.79	1,011.90	260	251	250	53	116	109	8			
11	12	.24	.68	1,014.20	260	252	251	54	116	109	7			
Total														
Average			8.62		3212				1409	1304				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

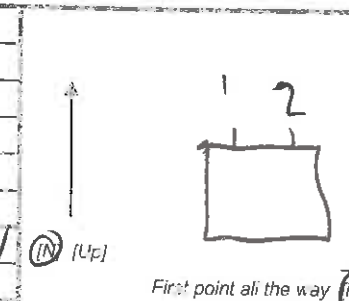
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 1 METHOD NO. 26A

Client	BIG RIVERS						
Plant	ROBARDS, KY						
Location	GREEN UNIT 2 INLET 2B						
Date	07/29/11	Project No.	3648				
Meter Operator	JD						
Probe Operator	PC						
Meter ID	M-16	Yd	.9907	Pitot Cp	.84		
ΔH@	1.845	Kf	~~4.7650~~	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @	20	(inHg)			
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water (ml) [g]	
Ambient Temp (°F)	100°F	Silica gel (g)	
Static (inH_2O)	-10.5	Total Vlc	
Probe ID	AES-12-3	Liner Type	TFE
Nozzle ID	~~.275~~	Nozzle Dia (in)	~~.275~~
Filter ID	N/A		
Train ID	IB-16	Train Type	IMP
Duct Dim. (in)	162.0"	Port Length (in)	
Start Time	07:15	Stop Time	8:30

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				949.10		260	250							JD
12	125	.26	.74	1,016.64	261	252	250	55	115	108	8	N/A		KF: 2.83
13	130	.23	.65	1,018.94	260	251	250	56	115	108	7	↓		Nozzle .250
Total														
Average														

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

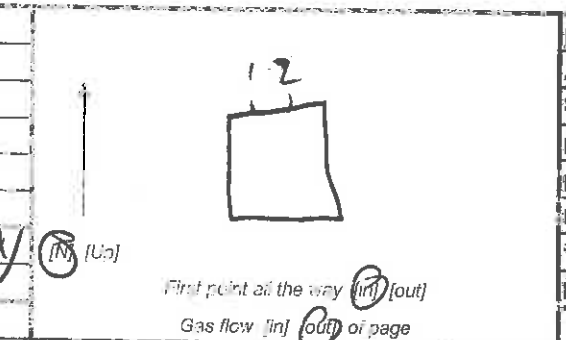
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 2 METHOD NO. 26A

Client	BIG RIVERS						
Plant	ROBARDS, KY						
Location	GREEN UNIT 2 INLET B						
Date	07/29/11	Project No.	3648				
Meter Operator	JP						
Probe Operator	PC						
Meter ID	M-16	Yd	.9907	Pitot Cp	.84		
ΔH@	1.845	Kf	2.83	Leak check	✓		
Pre Leak Check	0.000	[cfm] [lpm] @	19	(inHg)			
Post Leak Check	0.000	[cfm] [lpm] @	16	(inHg)			



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	103°F	Silica gel (g)	
Static (inH_2O)	-10.5	Total Vic	
Probe ID	AES-12-S	Liner Type	TFE
Nozzle ID	.250	Nozzle Dia (in)	.250
Filter ID	NA	—	—
Train ID	IB-9	Train Type	IMP
Duct Dim. (in)	162.00	Port Length (in)	
Start Time	09:48	Stop Time	11:07

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				21.44		250	250							
2-1	5	.65	1.8	25.20	265	249	250	46	106	104	9	N/A		
2	10	.59	1.7	28.80	267	250	252	47	109	103	9			
3	15	.57	1.6	32.30	268	251	250	48	112	104	9			
4	20	.56	1.6	35.80	268	252	250	49	114	104	10			
5	25	.52	1.5	39.23	270	253	250	50	114	104	10			
6	30	.45	1.3	42.40	267	252	250	51	115	105	9			
7	35	.26	.74	44.82	263	251	250	52	114	105	6			
8	40	.24	.68	47.10	263	250	250	53	113	105	6			
9	45	.27	.72	49.53	267	252	250	54	113	105	6			
10	50	.24	.68	51.81	269	253	250	55	112	104	6			
11	55	.23	.65	54.09	267	252	250	56	111	104	6			
12	60	.25	.71	56.41	266	251	249	57	111	104	6			
Total	130		25.35	70.46	6922.00				2795.00	2709.00				
Average	5.0		.975		266.23				88.774					
			13.66		3700				1254	1251				
									1349					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

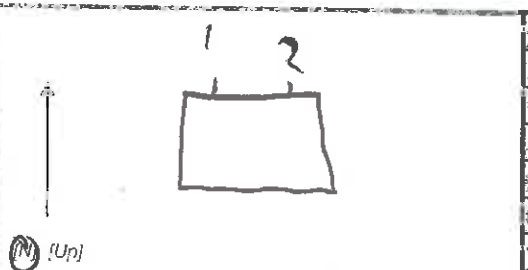
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 2 METHOD NO. 26A

Client	BIG RIVERS			Barometric (inHg)	29.56	Water [ml] [g]	
Plant	ROBARDS, KY			Ambient Temp (°F)	103°F	Silica gel (g)	
Location	GREEN UNIT 2 INLET B			Static (inH_2O)	-10.5	Total Vlc	
Date	07/29/11	Project No.	3648	Probe ID	AES-12-3	Liner Type	TFE
Meter Operator	JD			Nozzle ID	.250	Nozzle Dia (in)	.250
Probe Operator	PC			Filter ID	NA		—
Meter ID	M-16	Yd	.9907	Train ID	FB-9	Train Type	Imp
ΔH@	1.845	Kf	2.83	Duct Dim. (in)	162.00"	Port Length (in)	
Pre Leak Check	0.000	cfm [lpm] @	19 (inHg)				
Post Leak Check	0.000	cfm [lpm] @	16 (inHg)	Start Time	9:48	Stop Time	11:07
Pitot Cp	84	Leak check	✓				



Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume initial (ft^3) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				71.44		250	250							
13	65	.29	.82	58.95	267	251	250	57	110	103	7	N/A		
1-1	70	.45	1.3	62.07	267	250	251	54	111	104	8			
2	75	.42	1.2	65.10	270	251	250	51	113	104	8			
3	80	.30	.85	67.67	272	252	250	50	113	104	7			
4	85	.26	.74	70.08	271	253	251	50	113	105	7			
5	90	.23	.65	72.32	269	252	250	51	113	105	6			
6	95	.25	.71	74.68	264	251	249	52	112	105	7			
7	100	.27	.76	77.10	262	250	250	53	111	104	7			
8	105	.29	.82	79.65	263	251	250	54	111	104	8			
9	110	.30	.85	82.23	264	252	250	55	111	104	8			
10	115	.25	.71	84.58	263	252	250	56	111	104	7			
11	120	.27	.76	87.04	262	251	250	57	111	104	7			
Total	130													
Average	5.0													
		10.17			3194				1227	1250				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

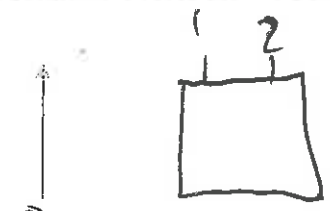
General Testing Data Sheet

TESTING TYPE: HCL

RUN NO. 2 METHOD NO. 26A

Page 3 of 3

Client	BIG RIVERS						
Plant	ROBARDS, KY						
Location	GREEN UNIT 2 INLET B						
Date	07/29/11	Project No.	3648				
Meter Operator	JD						
Probe Operator	PC						
Meter ID	M-16	Yd	.9907	Pitot Cp	.84		
ΔH@	1.845	Kf	2.83	Leak check	✓		
Pre Leak Check	0.000	[cfm] [lpm] @	19	(inHg)			
Post Leak Check	0.000	[cfm] [lpm] @	16	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	105°F	Silica gel (g)	
Static (inH_2O)	-10.5	Total Vlc	
Probe ID	AES-12-3	Liner Type	TFE
Nozzle ID	.250	Nozzle Dia (in)	.250
Filter ID	NA		
Train ID	IB-9	Train Type	IMP
Duct Dim. (in)	162.0"	Port Length (in)	
Start Time	9:48	Stop Time	11:0

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				71.44		250	250							
12	125	.29	.82	89.58	265	251	250	57	112	104	7	N/A		
13	130	.24	.68	91.90	263	250	250	58	112	104	6	↓		
Total														
Average														

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

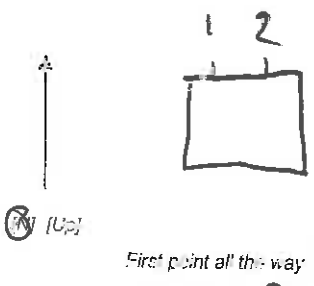
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 3 METHOD NO. 26A

Page 1 of 3

Client	Big Rivers						
Plant	Robards, KY						
Location	Green Unit 2 Inlet B						
Date	07/29/11	Project No.	3649				
Meter Operator	SD						
Probe Operator	PC						
Meter ID	M-16	Yd	.9907	Pitot Cp	.84		
ΔH@	1.845	Kf	2.83	Leak check	✓		
Pre Leak Check	0.000	[cfm] [lpm] @	19	(inHg)			
Post Leak Check	0.000	[cfm] [lpm] @	12	(inHg)			



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	103°F	Silica gel (g)	
Static (inH_2O)	-10.5	Total Vlc	
Probe ID	AE5-12-3	Liner Type	TFE
Nozzle ID	.250	Nozzle Dia (in)	.250
Filter ID	N/A	—	—
Train ID	IT-10	Train Type	Imp
Duct Dim. (in)	162.00"	Port Lngth (in)	
		Start Time	12:25
		Stop Time	14:36

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l] 94.58	Stack Temp (°F)	Probe Temp (°F) 250	Filter Temp (°F) 250	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
2-1	5	.69	1.8	98.19	260	251	252	45	102	99	8	N/A		
2	10	.61	1.7	101.80	264	250	249	46	106	100	8			
3	15	.56	1.6	105.31	263	251	250	47	109	100	9			
4	20	.50	1.4	108.64	265	256	250	48	111	101	9			
5	25	.52	1.5	112.01	265	254	251	49	112	101	10			
6	30	.45	1.3	115.20	262	253	250	50	112	102	9			
7	35	.35	.99	118.01	260	252	250	51	111	102	9			
8	40	.33	.93	120.70	258	250	249	51	109	101	8			
9	45	.30	.85	123.23	257	251	250	53	108	100	7			
10	50	.26	.74	125.59	259	252	250	54	107	100	7			
11	55	.25	.71	127.90	260	257	249	55	107	100	7			
12	60	.28	.79	130.33	261	251	250	56	107	100	7			
Total	130		26.31	71.07	6853.00				2843.00	2645.50				
Average	5.0		1.012		263.58				88.516					
			14.31		3134				1301	1206				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

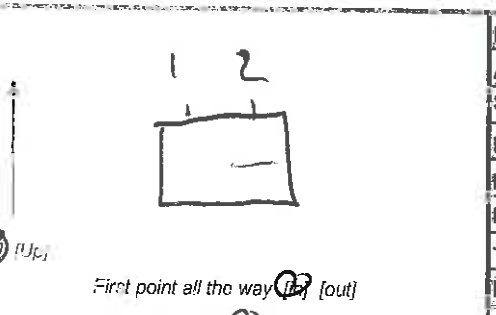
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCL

RUN NO. 3 METHOD NO. 26A

Client	BIG RIVERS				
Plant	ROBARDS, KY				
Location	GREEN UNIT 2 INLET B				
Date	07/29/11	Project No.	J648		
Meter Operator	JD				
Probe Operator	PC				
Meter ID	M-16	Yd	.9907	Pitot Cp	.84
ΔH@	1.845	Kf	2.83	Leak check	✓
Pre Leak Check	0.000	[cfm] [lpm] @	19	(inHg)	
Post Leak Check		[cfm] [lpm] @		(inHg)	



Barometric (inHg)	29.56	Water (ml) [g]	
Ambient Temp (°F)	103°F	Silica gel (g)	
Static (inH_2O)	-10.5	Total Vlc	
Probe ID	AES-123	Liner Type	TFE
Nozzle ID	.250	Nozzle Dia (in)	.250
Filter ID			
Train ID	IB-10	Train Type	Imp
Duct Dim. (in)	162.66	Port Length (in)	
Start Time	12:25	Stop Time	

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial (ft³) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				94.58		250	250							
13	65	.33	.93	133.04	260	251	249	57	108	100	8	N/A		
1-1	70	.41	1.2	135.96	261	249	251	58	109	101	10			
2	75	.51	1.4	139.17	267	250	250	58	111	102	11			
3	80	.40	1.1	142.04	270	251	250	56	112	103	10			
4	85	.30	.85	144.57	272	252	250	54	112	103	8			
5	90	.26	.74	146.92	272	253	250	54	112	104	8			
6	95	.28	.79	149.37	269	252	250	55	112	104	8			
7	100	.23	.65	151.60	266	251	250	56	110	103	8			
8	105	.26	.74	153.96	265	250	249	57	109	103	8			
9	110	.29	.82	156.46	265	251	250	58	110	103	9			
10	115	.24	.68	158.72	264	252	251	58	110	104	8			
11	120	.26	.74	161.09	263	251	250	59	109	103	8			
Total	130													
Average	5.0		10.64		3194				1324	1233				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

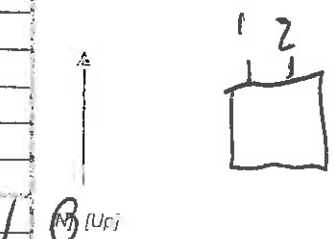
General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 3 METHOD NO. 26A

Page 3 of

Client	BIG RIVERS						
Plant	~~CREEK~~ ROBARDS, KY						
Location	GREEN UNIT 2 INLET B						
Date	07/29/11	Project No.	3648				
Meter Operator	JD						
Probe Operator	PC						
Meter ID	M-1L	Yd	.9907	Pitot Cp	84		
ΔH@	1.845	Kf	2.83	Leak check	✓		
Pre Leak Check	0.000	(cfm) [lpm] @	19	(inHg)			
Post Leak Check		(cfm) [lpm] @		(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water (ml) [g]	
Ambient Temp (°F)	103°F	Silica gel (g)	
Static (inH2O)	-10.5	Total Vlc	
Probe ID	AES-12-3	Liner Type	
Nozzle ID	.250	Nozzle Dia (in)	
Filter ID			
Train ID	IB-10	Train Type	
Duct Dim. (in)	162.00"	Port Length (in)	
Start Time	12:25	Stop Time	14:36

Traverse Point	Min/Point 5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial (ft³) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				94.58		250	250							
12	125	.25	.71	163.41	263	251	249	59	109	103	8	N/A		
13	130	.23	.65	165.65	262	250	250	60	109	103	8	↓		
Total														
Average														

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.
Impinger Weights Data Sheet

PROJECT NO. 3648

Page 1 of 1

Client	Big Rivers - Green Station
Plant	Robards, KY
Location	ESP Inlet
Date	7-28-11 Unit 2B
Operator	AL

Run No.	1				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	722.0	790.3		-50
Impinger No. 2	H_2SO_4	719.1	754.0		
Impinger No. 3	Empty	620.0	654.5		
Impinger No. 4	Silica	925.8	922.8		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	2				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	662.7	804.2		-50
Impinger No. 2	H_2SO_4	695.6	716.5		
Impinger No. 3	Empty	608.2	616.4		
Impinger No. 4	Silica	899.4	913.4		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	3				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	711.5	795.2		
Impinger No. 2	H_2SO_4	736.7	743.1		-50
Impinger No. 3	Empty	640.5	645.2		
Impinger No. 4	Silica	922.8	940.0		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

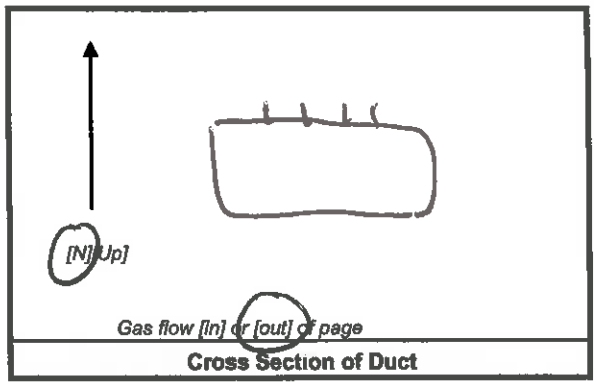
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 1 Green unit 2 Inlet B

Page	1	of	2

Client	Big Rivers
Plant	Robards Ky
Location	Green unit 2 Inlet B
Date	7-29-11
Project No.	3648
Meter Reader	CS



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.05
Ambient Temp. (°F)	100
Start Time	7:45
Stop Time	8:48

Sample Train A Rent 1.0072 OB

Trap ID	95165	Meter ID	R-2007B	Yd	1.00
Pre Leak Check	.000	lpm @	16		(in. Hg)
Post Leak Check	.000	lpm @	13		(in. Hg)

Sample Train B .9985

Trap ID	95171	Meter ID	R-2007B	Yd	
Pre Leak Check	1000	lpm @	15		(in. Hg)
Post Leak Check	1000	lpm @	15		(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.4	2.16	300	100	5	232
10	.4	4.21	300	103	5	232
15	.4	6.30	300	104	6	234
20	.4	8.42	301	106	6	233
25	.4	10.46	300	112	7	235
30	.4	12.49	300	114	7	237
35	.4	14.51	295	117	7	237
40	.4	16.50	295	119	7	237
45	.4	18.42	295	123	7	238
50	.4	20.32	295	125	8	238
55	.4	22.29	295	127	8	238
60	.4	24.12	295	128	8	238
Total		36.33	3571	1378		
Average			2960	120.88		

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.4	2.39	300	100	2	232
10	.4	4.29	300	103	2	232
15	.4	6.32	300	104	2	234
20	.4	8.26	300	106	2	235
25	.4	10.28	300	112	3	235
30	.4	12.08	300	114	2	237
35	.4	14.21	295	117	3	237
40	.4	16.30	295	119	3	237
45	.4	18.31	295	123	3	238
50	.4	20.33	295	125	3	238
55	.4	22.30	295	127	3	238
60	.4	24.01	295	128	3	238
Total		36.5	3571	1378		
Average			2960	120.88		

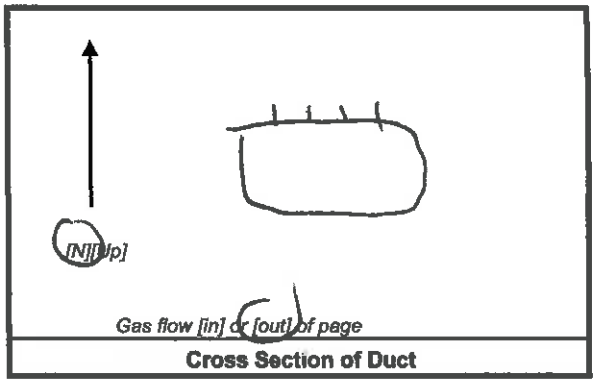
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 1 Green unit 2 Inlet B

Page	2	of	2

Client	Big River
Plant	Robards Ky
Location	Green unit 2 Inlet B
Date	7-29-11
Project No.	3648
Meter Reader	C-S



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-10.5
Ambient Temp. (°F)	100
Start Time	7:15
Stop Time	8:48

Sample Train A Rental

Trap ID	95165	Meter ID	R-20028	Yd	1.0003
Pre Leak Check	.010	lpm @	16	(in. Hg)	
Post Leak Check	.000	lpm @	13	(in. Hg)	

Sample Train B

Trap ID	95171	Meter ID	R-20018	Yd	.9985
Pre Leak Check	.000	lpm @	15	(in. Hg)	
Post Leak Check	.000	lpm @	15	(in. Hg)	

Min/Point / Elapsed Time	Flow Meter Setting	Gas Sample Initial [l]	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes (Flow)
5		0.00				
65	.4	25.80	293	130	8	238
70	.4	27.89	293	131	8	239
75	.4	29.99	293	132	8	239
80	.4	32.19	293	134	8	240
85	.4	34.26	293	135	8	240
90	.4	36.33	293	136	8	240
			1758			
Total		36.33	~~4398~~	~~798~~		
Average			29605	120.88		

3571

Min/Point / Elapsed Time	Flow Meter Setting	Gas Sample Initial [l]	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes (Trap)
5		0.00				
65	.4	26.60	293	130	3	238
70	.4	28.19	293	131	3	239
75	.4	30.00	293	132	3	239
80	.4	32.40	293	134	3	240
85	.4	34.44	293	135	3	240
90	.4	36.51	293	136	3	240
Total		36.51	~~4398~~	~~798~~		
Average			29605	120.88		

1375

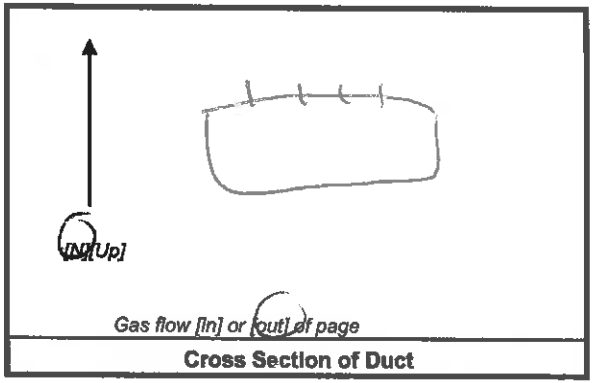
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 2 Green unit 2 Inlet B

Page	1	of	2

Client	Big Rivers
Plant	Robbins KY
Location	Green unit 2 Inlet B
Date	7-29-14
Project No.	3648
Meter Reader	C.S



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-10.5
Ambient Temp. (°F)	103
Start Time	9:48
Stop Time	11:28

Rental

Sample Train A

Trap ID	95141	Meter ID	R-20078	Yd	1.0012
Pre Leak Check	.000	lpm @	16	(In. Hg)	
Post Leak Check	.000	lpm @	14	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes (tom)
5	.4	2.39	274	106	5	227
10	.4	4.15	274	107	5	227
15	.4	6.08	274	109	5	228
20	.4	8.13	274	112	5	228
25	.4	10.08	274	113	6	228
30	.4	12.10	274	115	6	228
35	.4	14.11	274	117	7	230
40	.4	16.19	274	120	7	230
45	.4	18.22	275	121	7	234
50	.4	20.33	275	121	7	234
55	.4	22.35	275	122	7	234
60	.4	24.30	275	123	7	234
Total		36.49	3292	1386		
Average			274.33	118.99		

Sample Train B

Trap ID	95137	Meter ID	R-20078	Yd	.9988
Pre Leak Check	.000	lpm @	15	(in. Hg)	
Post Leak Check	.000	lpm @	10	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.4	1.89	274	106	3	227
10	.4	3.96	274	107	3	227
15	.4	6.01	274	109	3	227
20	.4	8.12	274	112	3	228
25	.4	10.20	274	113	3	228
30	.4	12.42	274	115	3	228
35	.4	14.50	274	117	3	230
40	.4	16.44	274	120	3	230
45	.4	18.45	275	120	3	234
50	.4	20.42	275	121	3	234
55	.4	22.48	275	122	3	234
60	.4	24.54	275	123	3	234
Total		36.98	3292	1386		
Average			274.33	118.99		

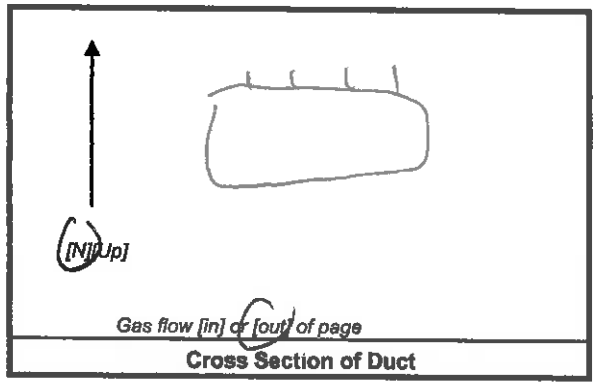
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 2 Green unit 2 Inlet B

Page	2	of	8

Client	Big Rivers
Plant	Robbins Ky
Location	Green unit 2 Inlet B
Date	7-29-11
Project No.	3648
Meter Reader	C.S



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-10.5
Ambient Temp. (°F)	103
Start Time	9:48
Stop Time	11:36

11

Rental

Sample Train A

Trap ID	95191	Meter ID	R-20078	Yd	1.0015
Pre Leak Check	.000	lpm @	16	(in. Hg)	
Post Leak Check	.000	lpm @	19	(in. Hg)	

Sample Train B

Trap ID	95137	Meter ID	R-20078	Yd	.9985
Pre Leak Check	.000	lpm @	15	(in. Hg)	
Post Leak Check	.000	lpm @	10	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Temp Notes
65	.4	26.42	281	124	7	236
70	.4	28.43	281	125	7	237
75	.4	30.44	281	126	7	237
80	.4	32.51	282	126	8	238
85	.4	34.52	280	127	8	238
90	.4	36.49	280	127	8	238
Total		36.49	1689	755		
Average			276.72	118.99		

3,992

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Temp Notes
65	.4	26.64	281	124	3	236
70	.4	28.72	281	125	3	237
75	.4	30.84	281	126	3	237
80	.4	32.89	282	126	3	238
85	.4	35.00	282	127	3	238
90	.4	36.98	280	127	3	235
Total		36.98	1689	755		
Average			276.72	118.99		

1386

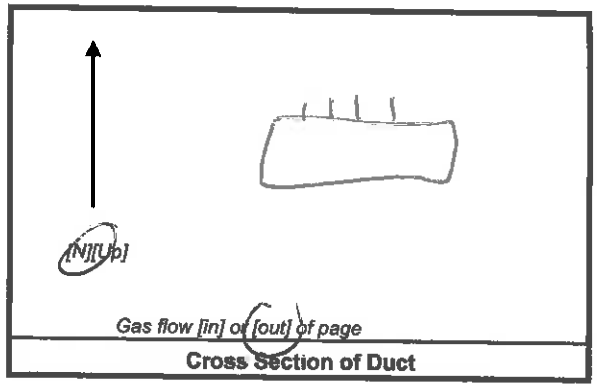
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. 3 Green unit 2 InletB

Page	1	of	2

Client	Big Rivers
Plant	Robbs Ky
Location	Green unit 2 InletB
Date	7-29-11
Project No.	3648
Meter Reader	C-S



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-10.5
Ambient Temp. (°F)	103
Start Time	12:35
Stop Time	13:57

Rerun

Sample Train A

Trap ID	95157	Meter ID	R-20028	Yd	.9917
Pre Leak Check	.000		lpm @	16	(in. Hg)
Post Leak Check	.000		lpm @	15	(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Tan Notes
5	.4	2.01	274	102	5	230
10	.4	4.06	274	103	6	230
15	.4	6.11	274	105	6	233
20	.4	8.17	274	106	6	233
25	.4	10.32	276	108	6	233
30	.4	12.43	276	110	6	233
35	.4	14.46	276	112	7	233
40	.4	16.50	276	114	7	233
45	.4	18.43	276	115	7	236
50	.4	20.39	276	116	7	236
55	.4	22.44	275	118	7	237
60	.4	24.50	275	119	7	237
Total		36.76	3302	1326		
Average			275.11	114.38		

Sample Train B

Trap ID	95139	Meter ID	R-20028	Yd	.9983
Pre Leak Check	.000		lpm @	16	(in. Hg)
Post Leak Check	.000		lpm @	15	(in. Hg)

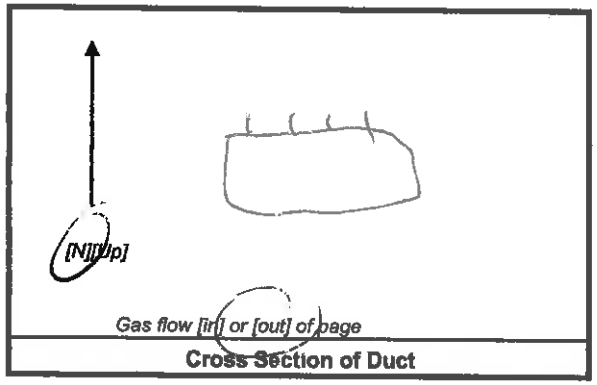
Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Tan Notes
5	.4	1.86	274	102	2	230
10	.4	4.03	274	103	3	230
15	.4	5.98	274	105	3	233
20	.4	7.94	274	106	3	233
25	.4	10.00	276	108	3	233 wi 10.00
30	.4	12.02	276	110	3	233
35	.4	14.10	276	112	3	233
40	.4	16.19	276	114	3	233
45	.4	18.17	276	115	3	236
50	.4	20.22	276	116	3	236
55	.4	22.17	275	118	3	237
60	.4	24.12	275	119	3	237
Total		36.17	3302	1326		
Average			275.1	114.38		

AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. ~~2~~ 3 Green unit 2 Inlet B

Client	Big Rivers
Plant	Robbins Ky
Location	Green unit 2 Inlet B
Date	7-29-11
Project No.	36.48
Meter Reader	C.S



Cross Section of Duct

Barometric (In. Hg)	29.56
Static (inH_2O)	-10.5
Ambient Temp. (°F)	103
Start Time	12:35
Stop Time	13:57

Rental

Sample Train A

Trap ID	95152	Meter ID	R-20078	Yd	1.0090
Pre Leak Check	.000		lpm @	10	(In. Hg)
Post Leak Check	.000		lpm @	15	(In. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (In Hg)	Notes (Final)
65	.14	26.54	275	119	3	238
70	.14	28.62	275	120	3	238
75	.14	30.70	275	122	3	239
80	.14	32.71	275	123	3	239
85	.14	34.74	275	123	3	240
90	.14	36.70	275	124	3	240
		~~36.70~~				
Total		(36.70)	1650	~~731~~		
Average			275.1	114.38		

3300

Sample Train B

Trap ID	95139	Meter ID	R-20078	Yd	.9985
Pre Leak Check	.000		lpm @	10	(In. Hg)
Post Leak Check	.000		lpm @	8	(In. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0.00	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (In Hg)	Notes (Final)
65	.14	26.10	275	119	3	238
70	.14	28.19	275	120	3	236
75	.14	30.28	275	122	3	239
80	.14	32.34	275	123	3	239
85	.14	34.01	275	123	3	240
90	.14	36.17	275	124	3	240
Total		(36.17)	1650	~~731~~		
Average			275.1	114.38		

1380

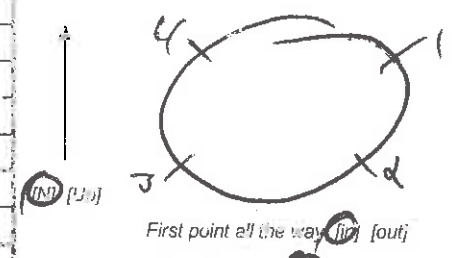
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: Particulate

RUN NO. 1 METHOD NO. SB/202 Page 1 of 1

Client	Big Rivers							Barometric (inHg)	29.56	Water [ml] [g]	
Plant	Green							Ambient Temp (°F)	90	Silica gel (g)	
Location	Unit 2 Outlet							Static ($in H_2O$)	-.1	Total Vlc	
Date	7/29/11	Project No.	3648					Probe ID	AES-6-11	Liner Type	Glass
Meter Operator	EA							Nozzle ID	.19	Nozzle Dia (in)	.184
Probe Operator	JL/BrK	1.0034 AS						Filter ID	12170		
Meter ID	M-27	Yd	~~.9976~~	Pitot Cp	.84			Train ID	IB4	Train Type	IMP
ΔH@ 9109 10	~~1.9995~~	Kf	.90	Leak check	~			Duct Dim. (in)	180	Port Length (in)	60
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)							
Post Leak Check	.000	[cfm] [lpm] @	15	(inHg)				Start Time	715	Stop Time	925



Traverse Point	Min/Point 7.5 Elapsed Time	Velocity Pressure ΔP ($in H_2O$)	Orifice Setting ΔH ($in H_2O$)	Gas Sample Volume Initial (ft³) (m³) 307.90	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1	7.5	2.0	1.8	313.27	127	319	314	68	88	88	9	84		
2	15	2.0	1.8	318.59	127	329	321	64	90	86	9	80		
3	22.5	1.8	1.6	323.68	128	316	320	62	92	88	9	75		
1	30	2.0	1.8	329.02	127	320	315	63	94	88	10	75		
2	37.5	2.1	1.9	334.86	128	320	322	63	95	90	12	75		
3	45	2.0	1.8	340.12	128	322	319	64	96	91	12	80		
1	52.5	2.0	1.8	345.72	128	328	317	64	96	92	12	78		
2	60	1.9	1.7	350.87	127	317	317	64	96	92	11	75		
3	67.5	1.7	1.5	355.70	127	324	321	64	95	93	11	78		
1	75	2.0	1.8	361.09	128	318	318	64	94	92	13	75		
2	82.5	1.9	1.7	366.05	128	317	319	63	93	92	13	74		
3	90	1.8	1.6	370.93	128	317	319	62	93	92	13	74		
Total		16.6784	20.80	63.03	1531				1122	1084				
Average		1.3899	1.7333		127.6				91.9					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: Particulate

RUN NO. 2

METHOD NO. 5B/202

Page | 1 | of | 1

Client	Big Rivers				
Plant	Green				
Location	Outlet Unit 2				
Date	7/29/11	Project No.	3648		
Meter Operator	EA				
Probe Operator	JL/DCK				
Meter ID	M-27	Yd	~~1.0076~~ 1.0034	Pitot Cp	.84
ΔH@	~~1.8295~~ 9109	Kf	.90	Leak check	-
Pre Leak Check	.000	[cfm] [lpm] @	13	[inHg]	
Post Leak Check	.000	[cfm] [lpm] @	15	[inHg]	

First point at the wall [in] [out]

Gas flow [in] [out] of page

Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vic	
Probe ID	NES-6-11	Liner Type	Glass
Nozzle ID	.19	Nozzle Dia (in)	.187
Filter ID	1217		
Train ID	IB23	Train Type	IM
Duct Dim. (in)	190	Port Length (in)	10
Start Time	948	Stop Time	1158

Traverse Point	Min/Point 7.5 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				371.20		320	320							
1	7.5	2.1	1.9	376.73	128	324	324	64	88	88	9	75		
2	15	2.0	1.8	382.10	129	320	323	64	88	86	9	76		
3	22.5	1.7	1.5	387.05	129	306	320	63	90	87	10	75		
1	30	2.0	1.8	392.85	129	317	315	62	91	88	9	75		
2	37.5	2.0	1.8	397.45	128	329	323	62	92	88	11	75		
3	45	1.8	1.6	402.30	129	317	316	62	92	89	11	79		
1	52.5	2.0	1.8	407.54	128	324	316	62	92	90	12	82		
2	60	2.0	1.8	413.12	129	317	315	62	93	91	12	78		
3	67.5	1.8	1.6	418.30	129	325	315	62	94	90	11	75		
1	75	2.1	1.9	423.50	129	323	314	63	95	91	13	75		
2	82.5	1.8	1.6	428.38	128	325	320	64	93	90	11	76		
3	90	1.8	1.6	433.13	128	320	320	65	93	90	11	76		
Total		16.630	28.20	61.93	1543				110	1070				
Average		1.3868	1.7280		128.6				90.5					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc. 6 3 9

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: Particulate

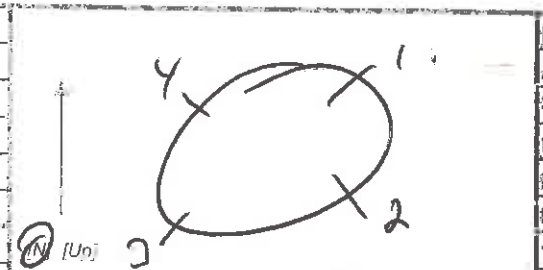
RUN NO. 3

METHOD NO. SB/202

Page 1 of 1

Client	Big Rivers						
Plant	Green						
Location	Unit 2 Outlet						
Date	7/29/11	Project No.	3648				
Meter Operator	FA						
Probe Operator	JL/BK 1.0037 Δ6						
Meter ID	M-27	Yd	~~.9976~~	Pitot Cp	.84		
ΔH@	~~1.8295~~	Kf	.90	Leak check	—		
Pre Leak Check	.000	cfm/ [lpm] @	15	(inHg)			
Post Leak Check	.000	cfm/ [lpm] @	18	(inHg)			

2109 JB



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH2O)	-.1	Total Vlc	
Probe ID	AES-6-11	Liner Type	Glass
Nozzle ID	.19	Nozzle Dia (in)	.184
Filter ID	12172	—	—
Train ID	FB4	Train Type	IMP
Duct Dim. (in)	180	Port Lngth (in)	10
Start Time	1225	Stop Time	1435

Traverse Point	Min/Point 7.5 Elapsed Time	Velocity Pressure ΔP (inH2O)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial (ft³) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				433.70		320	320							
1	7.5	2.0	1.8	439.09	129	319	317	64	92	92	9	83		
2	15	2.1	1.9	444.56	130	317	323	64	94	92	10	83		
3	22.5	1.9	1.7	449.85	128	319	322	65	94	92	11	80		
1	30	2.1	1.9	455.39	129	325	322	63	96	93	12	80		
2	37.5	2.0	1.8	460.81	128	320	317	63	96	92	12	80		
3	45	2.0	1.8	466.21	129	327	318	63	96	93	12	78		
1	52.5	2.0	1.8	471.69	128	320	320	63	97	93	12	78		
2	60	2.0	1.8	476.95	128	328	319	63	97	93	12	78		
3	67.5	1.8	1.6	482.20	128	322	320	64	97	94	11	82		
1	75	2.0	1.8	487.27	128	326	322	64	96	94	13	84		
2	82.5	1.9	1.7	492.30	128	320	320	64	97	94	13	79		
3	90	1.8	1.6	497.00	128	320	320	64	97	94	12	77		
Total		16.3	21.20	63.30	1541				1144	1116				
Average		1.9020	1.7667		128.4					94.4				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.
Impinger Weights Data Sheet

PROJECT NO. 3644

Client	Big Rivers - Green Station
Plant	Robards, KY
Location	Common Stack
Date	7-26-11 Unit 2
Operator	AL

Run No.	1				
Method No.	SB/202	Train ID		Filter No.	12171
	Contents	Tare Wt. Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	615.1	816.1		
Impinger No. 2	DI	734.5	704.1		
Impinger No. 3	Empty	628.0	633.2		
Impinger No. 4	Silica	937.0	948.0		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	2				
Method No.	SB/202	Train ID		Filter No.	12170
	Contents	Tare Wt. Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	551.9	742.2		
Impinger No. 2	DI	736.2	731.5		
Impinger No. 3	Empty	568.5	568.6		
Impinger No. 4	Silica	877.6	894.4		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	3				
Method No.	SB/202	Train ID		Filter No.	12172
	Contents	Tare Wt. Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	615.6	708.7		
Impinger No. 2	DI	735.4	889.2		
Impinger No. 3	Empty	627.9	629.1		
Impinger No. 4	Silica	947.8	955.7		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

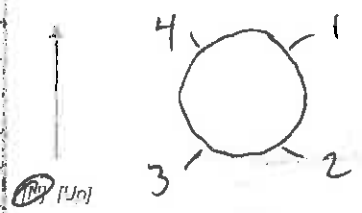
TESTING TYPE: HCL

RUN NO. 1

METHOD NO. 26

Page 1 of 1

Client	Big Rivers						
Plant	Henderson						
Location	Outlet #2						
Date	7/28/11	Project No.	36448				
Meter Operator	SL						
Probe Operator	SL						
Meter ID	M-28	Yd	.9976	Pitot Cp	.84		
ΔH@	1.8295	Kf	1.20	Leak check	✓		
Pre Leak Check	0.00	[cfm] [lpm] @	15	(inHg)			
Post Leak Check	0.00	[cfm] [lpm] @	15	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vic	
Probe ID	AE-5-16-4	Liner Type	Glass
Nozzle ID	.19	Nozzle Dia (in)	.194
Filter ID	N/A		
Train ID	EB25	Tram Type	imp
Duct Dim (in)	180	Port Lngth (in)	10.1
Start Time	2:00 SL 7:15	Stop Time	9:35

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft^3] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				953.31		260	260							
1	10	2.2	2.6	962.38	130	265	265	50	90	88	9	N/A		
2	20	2.0	2.4	971.21	130	261	261	50	95	89	9			
3	30	1.3	1.6	978.41	129	259	261	51	100	92	7			
1	40	2.2	2.6	987.54	129	263	264	52	103	92	9			
2	50	2.0	2.4	997.36	130	259	263	54	106	95	9			
3	60	1.4	1.7	1004.43	130	263	264	55	106	96	7			
1	70	2.2	2.6	1012.84	129	259	261	56	107	96	9			
2	80	2.0	2.4	1021.65	130	260	263	57	108	97	9			
3	90	1.4	1.7	1029.14	130	263	264	58	108	98	7			
1	100	2.1	2.5	1038.14	129	263	265	59	108	98	9			
2	110	2.0	2.4	1046.94	130	260	264	60	109	99	9			
3	120	1.5	1.8	1054.62	129	260	264	61	109	100				
Total		10.287	12.07	101.31	1555				1249	1140				
Average		1.3573	2.225		129.583				99.54167					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

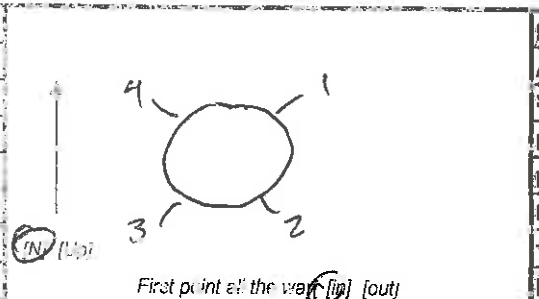
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCL

RUN NO. 2 METHOD NO. 26 Page 1 of 1

Client	Big Rivers				
Plant	Henderson				
Location	Outlet #2				
Date	7/28/11	Project No.	36648		
Meter Operator	JL				
Probe Operator	JL				
Meter ID	M-28	Yd	.9926	Pitot Cp	.84
ΔH@	1.8295	Kf	1.20	Leak check	
Pre Leak Check	0.00	[cfm] [lpm] @	12	(inHg)	
Post Leak Check	0.00	[cfm] [lpm] @	17	(inHg)	



Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vic	
Probe ID	AE-5-6-4	Liner Type	Glass
Nozzle ID	.19	Nozzle Dia (in)	.194
Filter ID	N/A		
Train ID	I3	Train Type	imp
Duct Dim. (in)	180	Port Lngth (in)	10.1
Start Time	9:48	Stop Time	12:48

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume initial [ft^3] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				1058.82		260	260							
1	10	2.1	2.5	1063.73	129	265	260	50	97	97	9	N/A		
2	20	2.0	2.4	1072.47	129	259	260	51	101	97	9			
3	30	1.5	1.8	1080.28	130	259	263	52	105	97	6			
1	40	2.0	2.4	89.96	130	263	262	53	106	98	9			
2	50	2.0	2.4	97.606	130	261	261	54	107	98	9			
3	60	1.10	1.9	104.11	130	259	259	55	108	99	6			
1	70	2.0	2.4	113.75	130	263	262	57	109	99	9			
2	80	2.0	2.4	123.24	130	262	261	58	109	99	9			
3	90	1.3	1.60	130.47	130	259	263	59	108	100	6			
1	100	2.2	2.6	139.58	129	262	263	60	109	100	9			
2	110	2.0	2.4	148.30	130	261	259	62	109	101	9			
3	120	1.5	1.8	155.91	130	259	259	63	109	101	6			
Total		16.2722	20.00	97.09	1557				1277	1186				
Average		(1.356)	(2.416)		(129.75)				(102.625)					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

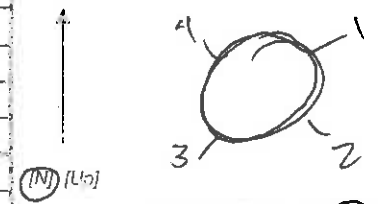
AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: HCl

RUN NO. 3 METHOD NO. 26 Page 1 of 1

Client	Big Rivers				
Plant	Henderson				
Location	Outlet #2				
Date	7/28/11	Project No.	36048		
Meter Operator	SL				
Probe Operator	SL				
Meter ID	M-28	Yd	.9976	Pitot Cp	.84
ΔH@	1.8295	Kf	1.020	Leak check	
Pre Leak Check	0.00	[cfm] [lpm] @	15	(inHg)	
Post Leak Check	0.000	[cfm] [lpm] @	11	(inHg)	



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vlc	
Probe ID	AES-6-4	Liner Type	Glass
Nozzle ID	.19	Nozzle Dia (in)	.194
Filter ID	N/A		
Train ID	IB 25	Train Type	imp
Duct Dim. (in)	180	Port Length (in)	10.1
Start Time	12:25	Stop Time	14:45

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft^3] [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				156.19		200	200							
1	10	2.3	2.8	165.60	130	265	266	55	99	98	9	N/A		
2	20	2.0	2.4	174.45	130	261	261	58	105	99	9			
3	30	1.6	1.9	181.69	130	260	261	60	106	99	6			
1	40	2.1	2.5	190.81	130	263	262	60	106	99	9			
2	50	2.0	2.4	199.31	129	263	262	59	109	100	6			
3	60	1.5	1.8	207.08	130	260	258	59	109	101	5			
1	70	2.1	2.5	216.02	129	263	262	59	110	101	9			
2	80	2.0	2.4	224.74	130	263	261	58	111	102	8			
3	90	1.6	1.9	233.53	130	261	259	58	112	102	6			
1	100	2.2	2.6	241.71	130	266	264	59	112	102	9			
2	110	2.0	2.4	250.54	130	262	261	60	113	103	8			
3	120	1.5	1.8	258.30	130	261	260	61	113	103	7			
Total		10.534	27.40	102.11	1558				1305	1209				
Average		(1.3779)	(2.2833)		(129.833)				(104.75)					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.
Impinger Weights Data Sheet

PROJECT NO. 3643

Page 1 of 1

Client	Big Rivers - Green Station
Plant	Robards, KY
Location	Stack
Date	7-28-11 Unit 2
Operator	AL

Run No.	1				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	687.2	808.8		
Impinger No. 2	H_2SO_4	695.4	731.8		
Impinger No. 3	Empty	464.8	636.3		
Impinger No. 4	Silica	901.2	915.2		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	2				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	663.8	887.1		
Impinger No. 2	H_2SO_4	635.5	776.3		
Impinger No. 3	Empty	602.7	489.1		
Impinger No. 4	Silica	885.0	941.9		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	3				
Method No.	26A	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	H_2SO_4	663.9	843.0		
Impinger No. 2	H_2SO_4	637.0	713.0		
Impinger No. 3	Empty	603.5	628.0		
Impinger No. 4	Silica	914.7	936.3		
Impinger No. 5					
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: 29 Metals

RUN NO. 1 METHOD NO. 29 Page 1 of 1

Client	Big Rivers				
Plant	Henderson - green				
Location	unit #2 outlet				
Date	7/29/11	Project No.	3648		
Meter Operator	BK				
Probe Operator	EG				
Meter ID	M-20	Yd	.9952	Pitot Cp	.84
ΔH@	1.785	Kf	.54	Leak check	✓
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)	
Post Leak Check	o.k.	[cfm] [lpm] @		(inHg)	

[In] [Out]

First point all the way [in] [out]

Gas flow [in] [out] of page

Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vlc	
Probe ID	AE-5-6-2	Liner Type	glass
Nozzle ID	.160	Nozzle Dia (in)	.160
Filter ID	N/A		
Train ID	TB 14	Train Type	Imp
Duct Dim. (in)	180	Port Length (in)	10.2
Start Time	07:15	Stop Time	09:35

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l] 114.50	Stack Temp (°F)	Probe Temp (°F) 250	Filter Temp (°F) 250	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1	10	2.1	1.1	120.43	127	254	242	58	89	87	5	N/A		
2	20	2.0	1.1	126.31	128	253	257	57	97	89	5			
3	30	1.7	.91	131.30	129	254	248	55	99	90	5			
1	40	2.2	1.1	137.84	128	253	251	55	101	91	5			
2	50	2.2	1.1	143.92	128	253	249	55	103	93	5			
3	60	1.8	.97	149.94	128	253	250	56	103	93	5			
1	70	2.1	1.1	155.96	129	256	249	56	104	94	5			
2	80	2.1	1.1	161.94	129	253	251	56	105	95	5			
3	90	1.8	.97	167.66	128	253	249	58	104	95	5			
1	100	2.3	1.2	173.99	128	253	250	58	105	95	5			
2	110	2.0	1.1	179.65	128	253	249	60	105	96	5			
3	120	1.7	.91	185.20	127	253	251	62	105	96	5	↓		
Total		16.94	12.66	70.7	1533				1220	1115				
Average		(1.4125)	(1.05)		(128.16)				(97.29)					

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

General Testing Data Sheet

TESTING TYPE: Metals

RUN NO. 2 METHOD NO. 29

Page 1 of 1

Client	Big Rivers				
Plant	Henderson-green				
Location	unit #2 Outlet				
Date	7/29/11	Project No.	3548		
Meter Operator	BK				
Probe Operator	EG				
Meter ID	M-20	Yd	.9852	Pitot Cp	.84
ΔH@	1.785	Kf	.54	Leak check	
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)	
Post Leak Check	.000	[cfm] [lpm] @	9	(inHg)	

(N) [Up]

First point all the way (in) [out]

Gas flow: [in] (out) of page

Cross Section of Duct

Barometric (inHg)	29.52	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH2O)	-.1	Total Vlc	
Probe ID	AE-S-5-2	Liner Type	glass
Nozzle ID	.1.50	Nozzle Dia (in)	.160
Filter ID	N/A		
Train ID	IB New	Train Type	Imp
Duct Dim. (in)	180	Port Lngth (in)	10.2
Start Time	09:48	Stop Time	12:08

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH2C)	Orifice Setting ΔH (inH2O)	Gas Sample Volume Initial (ft³) [l]	Stack Temp (°F)	Probe Temp (°F)	Filter Temp (°F)	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
				185.50		250	250							
1	10	2.0	1.1	191.46	128	257	252	62	96	95	5	N/A		
2	20	1.9	1.0	197.20	128	251	256	58	98	95	5			
3	30	1.7	.91	202.71	129	253	250	58	101	95	4			
1	40	2.1	1.1	208.60	129	253	247	57	103	95	4			
2	50	2.1	1.1	214.44	129	253	256	56	104	96	5			
3	60	1.6	.86	219.85	129	253	247	58	105	97	5			
1	70	2.0	1.1	226.75	129	253	244	57	106	97	5			
2	80	2.0	1.1	232.19	129	254	255	56	107	98	5			
3	90	1.7	.91	237.55	129	253	251	56	107	98	5			
1	100	2.1	1.1	243.53	129	253	244	56	107	98	5			
2	110	2.0	1.1	249.46	129	252	251	59	108	99	5			
3	120	1.7	.91	254.95	129	253	254	61	108	99	5			
Total		16.56	12.29	(69.45)	1546				1250	1162				
Average		1.3749	1.02		128.8					100.5				

Circle correct bracketed [ ] units

Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.

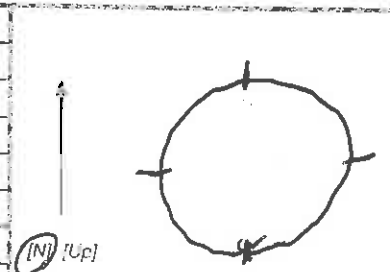
General Testing Data Sheet

TESTING TYPE: Metals

RUN NO. 3 METHOD NO. 29

Page 1 of 1

Client	Big Rivers						
Plant	Henderson-green						
Location	Unit #2 Outlet						
Date	7/29/11	Project No.	3698				
Meter Operator	BK						
Probe Operator	EG						
Meter ID	M-2C	Yd	.9952	Pitot Cp	.84		
ΔH@	1.785	Kf	.54	Leak check	✓		
Pre Leak Check	.000	[cfm] [lpm] @	15	(inHg)			
Post Leak Check	.000	[cfm] [lpm] @	11	(inHg)			



Cross Section of Duct

Barometric (inHg)	29.56	Water [ml] [g]	
Ambient Temp (°F)	90	Silica gel (g)	
Static (inH_2O)	-.1	Total Vlc	
Probe ID	AE-5-62	Liner Type	glass
Nozzle ID	.160	Nozzle Dia (in)	.160
Filter ID	N/A		
Train ID	IB 14	Train Type	I-1
Duct Dim. (in)	180	Port Length (in)	10.2
Start Time	12:25	Stop Time	14:45

Traverse Point	Min/Point 10 Elapsed Time	Velocity Pressure ΔP (inH_2O)	Orifice Setting ΔH (inH_2O)	Gas Sample Volume Initial [ft³] [l] 255.20	Stack Temp (°F)	Probe Temp (°F) 250	Filter Temp (°F) 250	Impinger Outlet Temp (°F)	DGM Inlet Temp (°F)	DGM Outlet Temp (°F)	Pump Vacuum (inHg)	Auxiliary Temp (°F)		Notes
1	10	2.1	1.1	261.22	128	255	257	57	99	98	5	NA		
2	20	2.1	1.1	267.25	129	250	250	56	102	98	5			
3	30	1.6	.86	272.63	129	254	251	56	105	98	5			
1	40	2.2	1.2	278.80	129	252	245	55	106	99	5			
2	50	2.0	1.1	286.84	129	253	253	55	106	99	5			
3	60	1.9	1.0	290.84	129	254	250	55	108	100	5			
1	70	2.3	1.2	295.90	129	254	245	56	109	101	5			
2	80	2.0	1.1	302.79	129	253	253	56	110	102	5			
3	90	1.7	.91	308.25	129	253	250	59	109	101	5			
1	100	2.2	1.2	314.56	129	252	247	59	110	102	5			
2	110	2.0	1.1	320.58	129	253	254	61	111	102	5	✓		
3	120	1.8	.97	326.31	129	255	251	63	111	102	5			
Total		16.91	12.84	71.10	1547				1286	1202				
Average		1.0494	1.07		128.9				107.167					

Circle correct bracketed [ ] units
Train Type denotes impingers, knockouts, etc.

AIRTECH ENVIRONMENTAL SERVICES INC.
Impinger Weights Data Sheet

PROJECT NO. 3648

Client	Big Rivers Energy - Green Station
Plant	Robards, KY
Location	Common Stack
Date	7-27-11 Run: 2
Operator	ML

Run No.	2				
Method No.	29	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	657.4	775.6		
Impinger No. 2	5%/10%	694.1	762.0		
Impinger No. 3	5%/10%	644.1	675.5		
Impinger No. 4	Empty	635.7	637.6		
Impinger No. 5	Silica	919.4	~~930.5~~		930.5
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	1				
Method No.	29	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	624.0	709.1		
Impinger No. 2	5%/10%	736.6	784.0		
Impinger No. 3	5%/10%	749.7	758.5		
Impinger No. 4	Empty	593.5	597.9		
Impinger No. 5	Silica	946.2	960.5		
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

Run No.	3				
Method No.	29	Train ID		Filter No.	NA
	Contents	Tare with Contents (g)	Final (g)	Total (g)	Notes
Impinger No. 1	Empty	623.5	773.4		
Impinger No. 2	5%/10%	735.1	790.1		
Impinger No. 3	5%/10%	753.3	745.0		
Impinger No. 4	Empty	574.6	599.1		
Impinger No. 5	Silica	960.6	973.2		
Impinger No. 6					
Impinger No. 7					
Additional Rinse					
			Net Weight (g)		

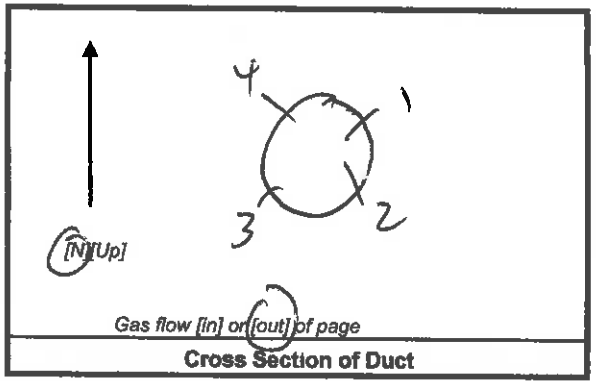
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. Rn1 Peteoke

Page	1	of	2

Client	Big Rivers
Plant	Green
Location	Unit 2 Stack
Date	7/29/11
Project No.	3648
Meter Reader	RL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	07:15
Stop Time	9 Y 2 S

Sample Train A

Trap ID	94488	Meter ID	M-25	Yd	.9994
Pre Leak Check	.000	lpm @	25	(in. Hg)	
Post Leak Check	.000	lpm @	15	(in. Hg)	

Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.869	132	86	5	
10	↓	5.108	131	86	5	
15		7.701	132	88	5	
20		10.332	130	91	6	
25		12.931	132	94	5	
30		16.328	131	97	5	
35		19.384	131	99	5	
40		21.370	132	102	5	
45		23.389	132	104	5	
50		25.671	132	106	5	
55		28.639	131	108	5	
60	↓	31.359	132	109	5	
Total			1578	1170		
Average		42.156	131.5	102.6		

Sample Train B

Trap ID	88256	Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000	lpm @	24	(in. Hg)	
Post Leak Check	.000	lpm @	12	(in. Hg)	

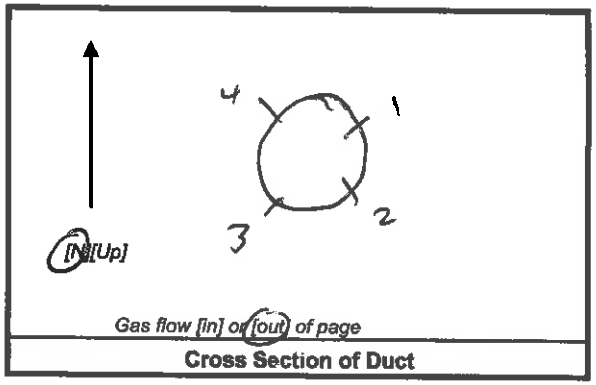
Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.501	132	86	2	
10	↓	4.516	131	86	2	
15		7.337	132	90	2	
20		9.931	130	92	2	
25		12.967	132	95	2	
30		15.612	131	98	2	
35		18.401	131	102	2	
40		21.453	132	104	2	
45		23.556	132	105	2	
50		25.847	132	109	2	
55		27.809	131	110	2	
60	↓	29.914	132	110	2	
Total			1578	1187		
Average		42.242	131.5	104.2		

AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. R-1 Petcoke

Client	Big River
Plant	Green
Location	Unit 2 Stack
Date	7/27/11
Project No.	3648
Meter Reader	RG



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	0715
Stop Time	915

Sample Train A

Trap ID	94488	Meter ID	M-25	Yd	.9994
Pre Leak Check	.000		lpm @	25	(in. Hg)
Post Leak Check	.000		lpm @	15	(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
65	.75LPM	33.079	131	110	5	
70	↓	33.821	132	112	5	
75		34.778	131	113	5	
80		36.032	132	113	5	
85		38.152	131	114	5	
90	↓	42.156	132	114	5	
Total			789	676		
Average						

Sample Train B

Trap ID	88256	Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000		lpm @	24	(in. Hg)
Post Leak Check	.000		lpm @	12	(in. Hg)

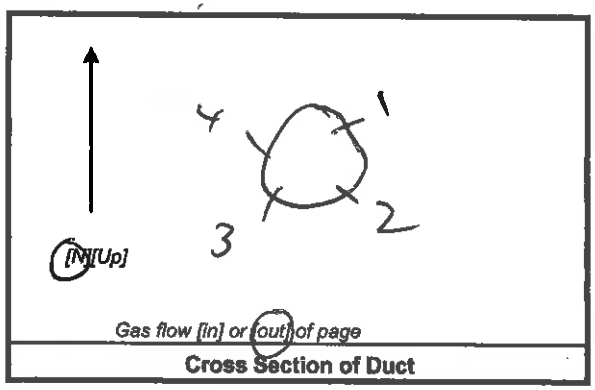
Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
65	.75LPM	31.983	131	113	2	31.983
70	↓	32.465	132	114	2	
75		34.058	131	115	2	
80		35.973	132	115	2	
85		37.678	131	116	2	
90	↓	42.242	132	116	2	
Total			789	689		
Average						

AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. R-2 - Petcoke

Client	Big Rivers
Plant	Green
Location	Unit 2 Stack
Date	7/25/11
Project No.	3648
Meter Reader	RL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	9:48
Stop Time	11:58

Sample Train A

Trap ID	94489	Meter ID	M-25	Yd	.9994
Pre Leak Check	.000	lpm @	22	(in. Hg)	
Post Leak Check	.000	lpm @	17	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.345	129	98	3	
10	↓	4.136	132	96	3	
15		5.873	131	97	3	
20		7.636	131	99	3	
25		9.256	131	101	3	
30		10.742	131	104	3	
35		12.739	131	104	3	
40		14.813	131	108	3	
45		17.481	131	110	3	
50		19.723	131	111	3	
55		22.464	131	113	5	
60	↓	24.499	130	114	5	
Total			1570	1255		
Average		42.702	130.8	104.6		

Sample Train B

Trap ID	72084	Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000	lpm @	22	(in. Hg)	
Post Leak Check	.000	lpm @	16	(in. Hg)	

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.354	129	98	2	
10	↓	3.976	132	97	2	
15		5.614	131	98	2	
20		7.067	131	100	2	
25		8.961	131	103	2	
30		11.147	131	105	2	
35		12.896	131	107	2	
40		14.625	131	109	2	
45		17.360	131	113	2	
50		19.921	131	113	2	
55		22.631	131	114	2	
60	↓	24.736	130	115	2	
Total			1570	1272		
Average		43.359	130.8	109.9		

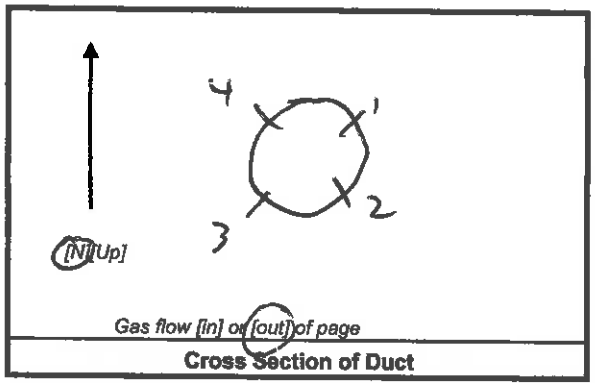
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. R-2 Petcoke

Page	2	of	2

Client	Big Rivers
Plant	Green
Location	Unit 2 stack
Date	7/29/21
Project No.	3648
Meter Reader	RL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	9:48
Stop Time	11:58

Sample Train A

Trap ID	944489	Meter ID	M-25	Yd	.9994
Pre Leak Check	.000		lpm @	22	(in. Hg)
Post Leak Check	.000		lpm @	17	(in. Hg)

Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg) RL	Notes
65	.75 LPM	27.469	131	115	5	
70	↓	29.981	131	115	5	
75	↓	32.973	131	116	5	
80	↓	35.785	130	117	5	
85	↓	38.667	131	118	5	
90	↓	42.702	131	118	5	
Total			785	699		
Average						

Sample Train B

Trap ID		Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000		lpm @	22	(in. Hg)
Post Leak Check	.000		lpm @	16	(in. Hg)

Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
65	.75 LPM	27.691	131	116	2	
70	↓	29.894	131	117	2	
75	↓	32.861	131	118	2	
80	↓	35.953	130	118	2	
85	↓	38.904	131	119	2	
90	↓	43.359	731	119	2	
Total			785	707		
Average						

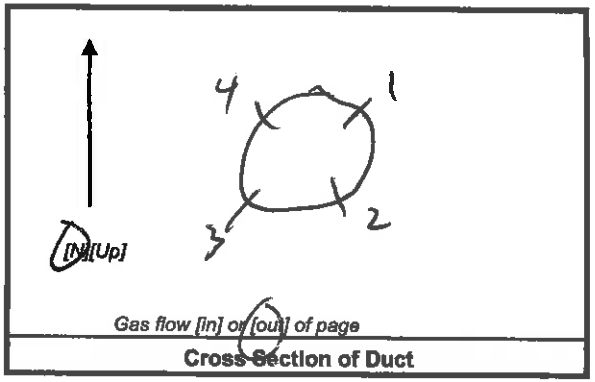
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. R-3 Petcoke

Page	1	of	2

Client	Big Rivers
Plant	Green
Location	Unit 2 Stack
Date	7/29/11
Project No.	3648
Meter Reader	RL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	12:25
Stop Time	18:55

Sample Train A

Trap ID	94495	Meter ID	M-25	Yd	1.9994
Pre Leak Check	.000		lpm @	21	(in. Hg)
Post Leak Check	.000		lpm @	11	(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.378	133	99	3	
10	↓	4.098	131	99	3	
15		5.897	132	99	3	
20		8.733	131	101	3	
25		11.454	132	103	5	
30		14.263	131	106	5	
35		17.075	132	108	5	
40		19.665	131	110	5	
45		22.670	132	112	5	
50		25.463	131	113	5	
55		28.309	131	115	5	
60	↓	31.165	132	116	5	
Total			1579	1281		
Average	RL	31.4	131.5	106.8		

42.698

Sample Train B

Trap ID	88259	Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000		lpm @	21	(in. Hg)
Post Leak Check	.000		lpm @	10	(in. Hg)

Min/Point 5 Elapsed Time	Flow Meter Setting	Gas Sample Initial [l] 0	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
5	.75LPM	2.411	133	100	2	
10	↓	3.875	131	100	2	
15		6.388	132	100	2	
20		8.697	131	102	2	
25		11.180	132	104	2	
30		13.568	131	107	2	
35		16.818	132	109	2	
40		19.667	131	112	2	
45		22.481	132	114	2	
50		25.196	131	115	2	
55		28.002	131	117	2	
60	↓	30.745	132	117	2	
Total			1579	1297		
Average		42.762	131.5	112.1		

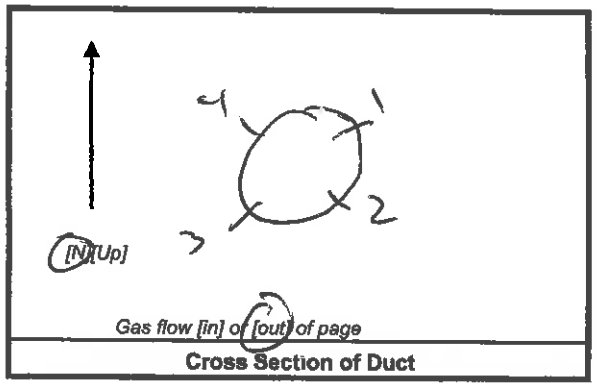
AIRTECH ENVIRONMENTAL SERVICES INC.

Method 30B Data Sheet

Run No. R-3 Petcoke

Page	2	of	2

Client	Big Rivers
Plant	Greens
Location	Unit 2 Stack
Date	7/29/11
Project No.	3648
Meter Reader	RL



Cross Section of Duct

Barometric (in. Hg)	29.56
Static (inH_2O)	-.1
Ambient Temp. (°F)	90
Start Time	12:25
Stop Time	14:35

Sample Train A

Trap ID	94495	Meter ID	M-25	Yd	.9994
Pre Leak Check	.000		lpm @	21	(in. Hg)
Post Leak Check	.000		lpm @	21	(in. Hg)

Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
65	.75LPM	33.997	131	117	5	
70	↓	36.763	131	118	5	
75		39.212	131	119	5	
80		40.998	132	119	5	
85		41.881	131	120	5	
90	↓	42.698	132	120	5	
Total			788	713		
Average						

Sample Train B

Trap ID	88259	Meter ID	M-25	Yd	1.0017
Pre Leak Check	.000		lpm @	21	(in. Hg)
Post Leak Check	.000		lpm @	10	(in. Hg)

Min/Point 5 / Elapsed Time	Flow Meter Setting	Gas Sample Initial [I] Ø	Stack Temp (°F)	DGM Temp (°F)	Pump Vaccum (in Hg)	Notes
65	.75LPM	33.478	131	119	2	
70	↓	36.216	131	119	2	
75		38.443	131	120	2	
80		40.249	132	121	2	
85		41.867	131	121	2	
90	↓	42.762	132	121	2	
Total			788	721		
Average						

AIRTECH ENVIRONMENTAL SERVICES INC.
Oxygen and Carbon Dioxide Data Sheet

PROJECT NO. 3648

Client	Big Rivers		
Plant	Green Unit 2		
Location	Stack	Train	5B/202
Analyzer Type	Plant CEMS Data	Leak Check	

Run No	Trial No	$\%CO_{2w}$	$\%CO_{2d}$	$\%O_2$	F_O	Date	Start Time	Stop Time
1	1				1.14	7/29/2011	7:15	9:35
	2							
	3							
	Average	10.1	11.6	7.72				
2	1				1.14	7/29/2011	9:48	12:08
	2							
	3							
	Average	10.0	11.6	7.61				
3	1				1.15	7/29/2011	12:25	14:45
	2							
	3							
	Average	9.9	11.9	7.27				
	1							
	2							
	3							
	Average							
	1							
	2							
	3							
	Average							
	1							
	2							
	3							
	Average							
	1							
	2							
	3							
	Average							
	1							
	2							
	3							
	Average							
	1							
	2							
	3							
	Average							