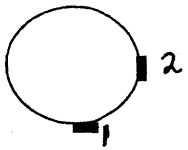
ECSI, INC. - VELOCITY TRAVERSE DATA

Client: Sterigenics
Location: Willowbrook - Plant 1
Source: AAT Safe Cell System Inlet

Run #: 1
Probe Type: Std.
Stack I.D.: 36 in.

Date: ~~9/8/2010~~ 9/21/18
Baro Press: ~~29.35~~ ~~29.00~~ 28.95
DSCFM:

Port Sketch:



	Port 1							Port 2						
Inches From Port	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle
0.7	1	0.25	0.25	#DIV/0!	#DIV/0!	101.2	1.5	1	0.21	0.21	#DIV/0!	#DIV/0!	103.3	5.0
2.4	2	0.15	0.15	#DIV/0!	#DIV/0!	101.2	5.6	2	0.22	0.22	#DIV/0!	#DIV/0!	103.3	4.6
4.2	3	0.18	0.18	#DIV/0!	#DIV/0!	102 ~~101.7~~	2.0	3	0.21	0.21	#DIV/0!	#DIV/0!	103.2	3.6
6.3	4	0.20	0.20	#DIV/0!	#DIV/0!	102.2	1.8	4	0.25	0.25	#DIV/0!	#DIV/0!	103.1	5.1
9.0	5	0.21	0.21	#DIV/0!	#DIV/0!	102.4	~~1.0~~	5	0.23	0.23	#DIV/0!	#DIV/0!	102.9	3.0
12.9	6	0.25	0.25	#DIV/0!	#DIV/0!	102.5	0.5	6	0.25	0.25	#DIV/0!	#DIV/0!	102.8	2.6
23.1	7	0.21	0.21	#DIV/0!	#DIV/0!	103.5	1.0	7	0.16	0.16	#DIV/0!	#DIV/0!	102.6	8.8
27.0	8	0.23	0.23	#DIV/0!	#DIV/0!	104	1.4	8	0.19	0.19	#DIV/0!	#DIV/0!	102.6	6.3
29.7	9	0.19	0.25	#DIV/0!	#DIV/0!	104.3	2.4	9	0.24	0.24	#DIV/0!	#DIV/0!	102.5	4.1
31.8	10	0.19	0.19	#DIV/0!	#DIV/0!	104.4	0.5	10	0.22	0.22	#DIV/0!	#DIV/0!	102.5	2.2
33.6	11	0.26	0.26	#DIV/0!	#DIV/0!	104.6	1.5	11	0.26	0.26	#DIV/0!	#DIV/0!	102.4	2.8
35.3	12	0.19	0.19	#DIV/0!	#DIV/0!	105	1.8	12	0.22	0.22	#DIV/0!	#DIV/0!	102.5	2.1
	13							13						
	14							14						
	15							15						
	16							16						
	17							17						
	18							18						
	19							19						
	20							20						
	21							21						
	22							22						
	23							23						
	24							24						
								Average Values:			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

* Stack static pressure measured at -0.25" H2O

* pitot tube P-41-2 was leak checked @ 2" H2O, max scale on the manometer

ECSI, INC. - VELOCITY TRAVERSE DATA

Client: Sterigenics
Location: Willowbrook - Plant 1
Source: AAT Safe Cell System Outlet

Run #: 1
Probe Type: Std.
Stack I.D.: 20x30 ≈ 4.17 ft²

Date: ~~11/7/2017~~ 9/21/18
Baro Press: ~~29.35~~ ~~29.00~~ 28.95
DSCFM:

Port Sketch: 0 0 0 0 / 1 2 3 4

Port 1 & 2								Port 3 & 4							
Inches From Port	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle	
2.5	1	0.55	0.55	#DIV/0!	#DIV/0!	97.8	3.8	1	0.~~45~~.38	0.~~45~~.38	#DIV/0!	#DIV/0!	~~107.5~~ 107.5	~~1.8~~	2.6
5.0	2	0.70	0.70	#DIV/0!	#DIV/0!	107.7	4.8	2	~~0.52~~ .31	~~0.52~~ .31	#DIV/0!	#DIV/0!	105/105	~~2.0~~	2.2
7.5	3	0.75	0.75	#DIV/0!	#DIV/0!	109.1	3.0	3	~~0.60~~ .42	~~0.60~~ .42	#DIV/0!	#DIV/0!	109/107.8	~~0.5~~	3.6
10.0	4	0.80	0.80	#DIV/0!	#DIV/0!	109.1 ~~109.0~~	~~2.6~~	4	0.42	0.42	#DIV/0!	#DIV/0!	108.1	2.8	
12.5	5	0.85	0.85	#DIV/0!	#DIV/0!	109.4	0.8	5	0.50	.50	#DIV/0!	#DIV/0!	107.1	2.8	
15.0	6	1.09	1.09	#DIV/0!	#DIV/0!	109.5	1.8	6	0.70	0.70	#DIV/0!	#DIV/0!	108.9	2.2	
17.5	7	1.3	1.3	#DIV/0!	#DIV/0!	109.6	0.5	7	0.91	0.91	#DIV/0!	#DIV/0!	109.1	2.6	
2.5	1	0.35	0.35	#DIV/0!	#DIV/0!	101.5	1.8	1	.45	.45	#DIV/0!	#DIV/0!	104.5	1.8	
5.0	2	0.38	0.38	#DIV/0!	#DIV/0!	104.8	3.0	2	.52	.52	#DIV/0!	#DIV/0!	105	2.0	
7.5	3	0.45	0.45	#DIV/0!	#DIV/0!	107.9	2.0	3	.60	.60	#DIV/0!	#DIV/0!	109	0.5	
10.0	4	0.38	0.38	#DIV/0!	#DIV/0!	108.6	1.2	4	.60	.60	#DIV/0!	#DIV/0!	109.1	3.6	
12.5	5	0.46	0.46	#DIV/0!	#DIV/0!	109.0	3.2	5	.40	.40	#DIV/0!	#DIV/0!	109.0	3.5	
15.0	6	0.60	0.60	#DIV/0!	#DIV/0!	109.1	4.5	6	.80	.80	#DIV/0!	#DIV/0!	108	5.2	
17.5	7	0.90	0.90	#DIV/0!	#DIV/0!	109.1	5.2	7	.85	.85	#DIV/0!	#DIV/0!	107.1	1.8	
											Average Values:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

*stack static pressure measured at 0.25" H_2O

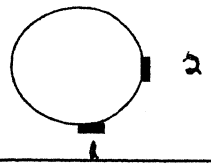
* Pitot tube P-42 was leak checked @ 2" H_2O, max scale on the manometer

ECSI, INC. - VELOCITY TRAVERSE DATA

Client: Sterigenics | Run #: 1 | Date: ~~9/8/2018~~ 9/20/18 | Port Sketch:

Location: Willowbrook - Plant 2 | Probe Type: Std. | Baro Press: ~~29.35~~ 29.15

Source: AAT Safe Cell System Inlet | Stack I.D.: 28 in. | DSCFM:



	Port 1							Port 2						
Inches From Port	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle
0.5	1	0.40	0.40	#DIV/0!	#DIV/0!	88.2	7.2	1	0.50	0.50	#DIV/0!	#DIV/0!	90.4	4.7
1.9	2	0.25	0.25	#DIV/0!	#DIV/0!	88.2	6.3	2	0.25	0.25	#DIV/0!	#DIV/0!	89.9	5.4
3.3	3	0.20	0.20	#DIV/0!	#DIV/0!	88.5	3.4	3	0.30	0.30	#DIV/0!	#DIV/0!	93.3	4.8
4.9	4	0.25	0.25	#DIV/0!	#DIV/0!	91.2	4.8	4	0.35	0.35	#DIV/0!	#DIV/0!	95.4	3.6
7.0	5	0.25	0.25	#DIV/0!	#DIV/0!	93.5	3.6	5	0.40	0.40	#DIV/0!	#DIV/0!	96.7	3.2
10.0	6	0.35	0.35	#DIV/0!	#DIV/0!	95.8	4.7	6	0.45	0.45	#DIV/0!	#DIV/0!	97.4	2.1
18.0	7	0.45	0.45	#DIV/0!	#DIV/0!	95.6	3.8	7	0.45	0.45	#DIV/0!	#DIV/0!	96.7	4.8
21.0	8	0.45	0.45	#DIV/0!	#DIV/0!	96.7	3.7	8	0.47	0.47	#DIV/0!	#DIV/0!	97.6	3.9
23.1	9	0.45	0.45	#DIV/0!	#DIV/0!	97.4	5.1	9	0.40	0.45	#DIV/0!	#DIV/0!	98.0	5.1
24.7	10	0.45	0.45	#DIV/0!	#DIV/0!	97.9	4.5	10	0.45	0.45	#DIV/0!	#DIV/0!	98.4	5.4
26.1	11	0.45	0.45	#DIV/0!	#DIV/0!	98.2	3.6	11	0.48	0.48	#DIV/0!	#DIV/0!	98.4	3.8
27.5	12	0.30	0.30	#DIV/0!	#DIV/0!	97.4	2.2	12	0.35	0.35	#DIV/0!	#DIV/0!	98.3	2.0
	13							13						
	14							14						
	15							15						
	16							16						
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	18							18						
	19							19						
	20							20						
	21							21						
	22							22						
	23							23						
	24							24						
								Average Values:		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

*Stack static pressure measured at -0.35" H_2O

*Pitot tube P-6-4 (S-type) was leak checked @ 2" H_2O, max scale on the manometer

ECSI, INC. - VELOCITY TRAVERSE DATA

1 2 3 4

Client: Sterigenics | Run #: 1 | Date: ~~9/8/2018~~ 9/20/18 | Port Sketch:

Location: Willowbrook - Plant 2 | Probe Type: Std. | Baro Press: ~~29.35~~ 29.15

Source: AAT Safe Cell System Outlet | Stack I.D.: 28x28 = 5.44 ft² | DSCFM:

Port 1 & 2								Port 3 & 4							
Inches From Port	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle	Point#	Delta P Low	Delta P High	Delta P Average	Delta P Sq Root	Stack Temp (F)	Cyclonic Angle
3.5	1	0.5	.5	#DIV/0!	#DIV/0!	100.5	3.9	1	0.3	0.3	#DIV/0!	#DIV/0!	99.9	4.4
7.0	2	0.55	0.55	#DIV/0!	#DIV/0!	102.2	3.9	2	0.25	0.25	#DIV/0!	#DIV/0!	101.5	5.4
10.5	3	0.6	0.6	#DIV/0!	#DIV/0!	102.2	2.6	3	0.25	0.25	#DIV/0!	#DIV/0!	102.2	5.6
14.0	4	~~0.8~~ 0.6	~~0.8~~ 0.6	#DIV/0!	#DIV/0!	102.2	2.6	4	0.20	0.20	#DIV/0!	#DIV/0!	102.4	3.1
17.5	5	0.55	0.55	#DIV/0!	#DIV/0!	102.1	2.5	5	0.15	0.15	#DIV/0!	#DIV/0!	102.3	1.8
21.0	6	0.6	0.6	#DIV/0!	#DIV/0!	102.1	2.1	6	0.20	0.20	#DIV/0!	#DIV/0!	102.4	2.5
24.5	7	0.6	0.6	#DIV/0!	#DIV/0!	102.1	3.8	7	0.20	0.20	#DIV/0!	#DIV/0!	102.3	2.0
3.5	1	0.4	0.4	#DIV/0!	#DIV/0!	99.4	1.1	1	0.15	0.15	#DIV/0!	#DIV/0!	101.0	4.2
7.0	2	0.4	0.4	#DIV/0!	#DIV/0!	101.4	6.2	2	0.15	0.15	#DIV/0!	#DIV/0!	101.8	5.0
10.5	3	0.4	0.4	#DIV/0!	#DIV/0!	102.2	2.0	3	0.10	0.10	#DIV/0!	#DIV/0!	101.7	1.2
14.0	4	0.3	0.3	#DIV/0!	#DIV/0!	102.3	4.4	4	0.10	0.10	#DIV/0!	#DIV/0!	102.3	4.7
17.5	5	0.3	0.3	#DIV/0!	#DIV/0!	102.2	4.7	5	0.10	0.10	#DIV/0!	#DIV/0!	102.4	1.8
21.0	6	0.4	0.4	#DIV/0!	#DIV/0!	102.3	5.1	6	0.10	0.10	#DIV/0!	#DIV/0!	102.4	0.8
24.5	7	0.4	0.4	#DIV/0!	#DIV/0!	102.3	4.6	7	0.10	0.10	#DIV/0!	#DIV/0!	102.0	2.5
								Average Values:			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

* Stack static pressure measured at 0.1" H2O
* Pitot tube P-4-2 (S-type) was leak checked @ 2" H2O, max scale on the manometer
* Pitot tube std-1 (std.) was leak checked @ 2" H2O, max scale on the manometer