APPENDIX F

DATA IN-LIEU OF TESTING

AND

PREVIOUS PCDD/PCDF DATA

TRC

Customer-Focused Solutions

Project Fact Sheet

Name of Owner:	**API Industries, Inc.**
Address of Owner:	**API Industries, Inc.** **Road #3, Km 143.0** **Guayama, Puerto Rico 00785**
Source Identification:	**Trane # 1 and Trane # 2** **Hazardous Waste Incinerators**
Location of Sources:	**Guayama, Puerto Rico**
Type of Operation:	**Hazardous Waste Incinerators at** **Pharmaceuticals Manufacturing Facility**
Tests Performed by TRC:	**EPA Method 1 - Sample Point Location** **EPA Method 2 - Velocity** **EPA Method 3A - Flue Gas Molecular Weight** **EPA Method 25A – Total Hydrocarbons** **EPA Method 4 – Moisture** **EPA Method 5 – Particulate Matter** **EPA Method 26A – Hydrogen Chloride & Chlorine** **EPA Method 29 – Metals (As, Cr, Pb)** **EPA Method 0010 – Semi-Volatile Organics & PCB** **EPA Method 0011 – Aldehydes & Ketones** **EPA Method 0023A – Dioxins & Furans** **EPA Method 0030 – Volatile Organics** **EPA Method 0010 – TCO & Gravimetric Organics** **EPA Method 0040 – Total Organic Compounds**
Test Dates:	**March 29, 2006 though April 2, 2006**

TABLE 2-4
SUMMARY OF CPT 1 RESULTS AND MACT EMISSION LIMITS

Destruction & Removal Efficiency	***At Least 99.99% for Principal Organic Hazardous Constituents***				
	Run # 1	Run # 2	Run # 3	Run # 4	Average
CPT 1 Results - 1,2-Dichlorobenzene	99.9996%	99.9996%	99.9996%	99.9996%	99.9996%
CPT 1 Results - Chlorobenzene	99.999996%	99.999996%	99.999996%	99.999996%	99.999996%
CPT 1 Results - Methylene Chloride	99.9999998%	99.9999992%	99.9999991%	99.9999992%	99.9999994%
Dioxins & Furans	***0.40 ng TEQ / dscm corrected to 7% oxygen***				
	Run # 1	Run # 2	Run # 3	Run # 4	Average
CPT 1 Results	0.00362	0.00290	0.02003	0.00505	0.00885
Total Hydrocarbons	***HRA less than 10 ppmv, dry basis corrected to 7% oxygen***				
(TRC Method 25A Data)	Run # 1	Run # 2	Run # 3	Run # 4	Max HRA
CPT 1 Results	0.0	0.0	0.0	0.0	0.0
Carbon Monoxide	***HRA less than 100 ppmv, dry basis corrected to 7% oxygen***				
(API CEMS Data)	Run # 1	Run # 2	Run # 3	Run # 4	Max HRA
CPT 1 Results (DRE tests)	2.53	2.30	2.88	0.79	2.88

NOTE: The average value was calculated with the values for Runs 1, 2 and 3. This results in the highest average emission rate.

TABLE 6-7
SUMMARY OF DRE TEST RESULTS
CPT 1 Test Program
Non-Detects Calculated with MDLs

SPIKED COMPOUND	SPIKED AMOUNT			
	Run # 1 (lb/hr)	Run # 2 (lb/hr)	Run # 3 (lb/hr)	Run # 4 (lb/hr)
Chlorobenzene (POHC)	3.71	3.77	3.77	3.77
1,2-Dichlorobenzene (POHC)	3.68	3.74	3.74	3.74
Methylene Chloride	79.85	79.97	79.99	79.98

COMPOUND	EMISSION RATE			
	Run # 1 (lb/hr)	Run # 2 (lb/hr	Run # 3 (lb/hr	Run # 4 (lb/hr)
Chlorobenzene (POHC)	< 1.68E-07	< 1.67E-07	< 1.64E-07	< 1.58E-07
1,2-Dichlorobenzene (POHC)	< 1.34E-05	< 1.36E-05	< 1.37E-05	< 1.37E-05
Methylene Chloride	1.25E-07	6.61E-07	6.80E-07	6.49E-07

COMPOUND	DESTRUCTION & REMOVAL EFFICIENCY			
	Run # 1 (%)	Run # 2 (%)	Run # 3 (%)	Run # 4 (%)
Chlorobenzene (POHC)	99.9999955%	99.9999956%	99.9999956%	99.9999958%
1,2-Dichlorobenzene (POHC)	99.9996359%	99.9996364%	99.9996337%	99.9996337%
Methylene Chloride	99.9999998%	99.9999992%	99.9999991%	99.9999992%

COMMENTS:
The HWC MACT DRE requirement is 99.99%.
The M0010 results were used to determine the DRE for 1,2-Dichlorobenzene.
The VOST results were used to determine the DRE of Chlorobenzene and Methylene Chloride.

TABLE 2-5
TRANE # 1 OPERATING DATA SUMMARY FOR CPT 2

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	nches H2O (1-MA	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 1 Max	21.37	12.03	17.41	5.54	1676.09	1115.51	26.90	9.63	41.25	2.93	62.16	273.42	40.26	6.73	6.79	3.68
Run 1 Min	19.36	11.67	17.41	4.55	1668.41	1055.62	25.39	3.02	38.60	2.12	57.84	253.53	39.74	6.55	4.02	0.05
Run 1 Avg	20.56	12.00	17.41	5.07	1671.44	1088.19	26.02	7.64	39.93	2.53	60.01	266.36	40.00	6.64	5.69	2.27

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	Inches H2O (1-MA)	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 2 Max	23.12	12.05	17.41	4.48	1671.69	1105.73	26.43	9.46	41.06	2.31	62.20	263.55	40.27	6.60	6.60	0.67
Run 2 Min	21.36	12.02	17.41	4.48	1666.23	1100.17	25.58	5.35	38.74	2.18	58.09	261.20	39.72	6.55	6.55	0.03
Run 2 Avg	22.13	12.03	17.41	4.48	1669.36	1103.19	25.98	7.44	39.91	2.24	59.97	262.39	40.00	6.58	6.58	0.25

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	Inches H2O (1-MA)	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 3 Max	23.24	12.04	17.41	4.48	1662.94	1123.76	26.42	8.59	41.19	2.39	62.20	262.58	40.26	6.60	6.77	1.88
Run 3 Min	21.66	11.99	17.41	4.48	1648.31	1091.34	25.66	6.05	38.48	2.30	58.04	255.51	39.75	6.57	3.96	0.08
Run 3 Avg	22.70	12.01	17.41	4.48	1653.06	1100.29	26.00	7.51	39.94	2.34	60.01	259.61	40.00	6.59	5.57	0.90

TABLE 2-6
TRANE # 2 OPERATING DATA SUMMARY FOR CPT 2

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	Inches H2O (1-MA)	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 1 Max	20.68	12.02	18.02	5.52	1505.10	1122.76	32.09	8.95	41.55	2.46	81.04	282.93	45.34	6.88	6.79	3.68
Run 1 Min	20.02	11.35	17.74	4.55	1282.89	1031.48	18.15	6.56	38.08	2.23	73.86	252.28	44.75	6.80	4.02	0.05
Run 1 Avg	20.45	11.97	17.95	5.07	1426.09	1092.35	26.04	7.70	39.93	2.39	77.32	257.77	45.05	6.82	5.69	2.27

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	Inches H2O (1-MA)	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 2 Max	20.55	12.02	18.04	4.68	1605.88	1110.88	32.43	8.78	41.16	2.59	66.42	267.81	45.59	6.81	6.87	0.67
Run 2 Min	20.05	12.02	18.00	4.52	1522.59	1096.19	20.81	6.45	38.64	2.46	60.33	251.05	40.36	6.69	3.60	0.03
Run 2 Avg	20.37	12.02	18.02	4.64	1588.72	1106.46	26.01	7.30	39.96	2.53	63.14	256.44	44.09	6.77	5.38	0.25

	Aqueous AT Prs	Aqueous Rate	Organic AT Prs	Organic Rate	Total Air Flow	Incinerator Temp	QT Blowdown Fl	QT Blowdown pH	QT Tank Level	VT Blowdown Fl	VT Pressure Drop	VT RC Water Flow	VT Sep Tank Level	VT Water pH	Sec Power	CO Corrected
	psi (1-HRA)	lpm (1-HRA)	psi (1-HRA)	lpm (1-HRA)	scfm (1-HRA)	°C (1-MA)	lpm (1-MA)	NTU (1-MA)	inches (1-MA)	gpm (1-MA)	Inches H2O (1-MA)	lpm (1-MA)	% (1-MA)	NTU	kW (1-MA)	ppm (1-HRA)
Run 3 Max	20.98	12.02	18.21	4.68	1621.23	1093.34	27.16	7.90	41.96	3.17	65.99	262.45	47.56	6.77	6.77	1.88
Run 3 Min	20.31	12.02	17.98	4.67	1599.44	924.33	26.45	6.59	38.33	2.68	53.68	259.40	30.25	6.71	3.96	0.08
Run 3 Avg	20.76	12.02	18.13	4.68	1612.46	968.24	27.01	7.29	40.02	3.03	56.88	262.15	40.29	6.75	5.57	0.90

TABLE 7-6A

API Industries, Inc.
SUMMARY - PCDD/PCDF RESULTS

Trane Incinerator Stack
Guayama, PR

Run Number		Run 1	Run 2	Run 3	Average
Test Date		3/31/2006	4/1/2006	4/1/2006	
Run Time		1240-1606	0930-1233	1537-2340	
Test Data					
Volume Gas Sampled, dscf[1]		106.088	99.465	95.525	100.359
Volume Gas Sampled, dscm[1]		3.004	2.816	2.705	
Temperature, Degrees F		185	184	185	
Moisture, %		54.1	54.4	54.4	
Volumetric Flow Rates					
Actual, acfm		8,120	7,580	7,330	7,680
Standard, dscfm		3,050	2,830	2,730	2,870
Percent Isokinetic, %		96.8	97.8	97.3	
PCDD/PCDF Results, TEQs, picograms/cubic meter					
2,3,7,8-TCDD	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	0.5	4.44E-01	0.00E+00	9.37E-01	4.61E-01
1,2,3,4,7,8-HxCDD	0.1	0.00E+00	0.00E+00	1.84E-01	6.15E-02
1,2,3,6,7,8-HxCDD	0.1	8.02E-02	0.00E+00	4.36E-01	1.72E-01
1,2,3,7,8,9-HxCDD	0.1	0.00E+00	9.80E-02	2.23E-01	1.07E-01
1,2,3,4,6,7,8-HpCDD	0.01	3.89E-02	3.05E-02	1.07E-01	5.88E-02
OCDD	0.001	1.06E-02	7.78E-03	8.76E-03	9.03E-03
2,3,7,8-TCDF	0.1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	0.05	9.10E-02	6.00E-02	3.84E-01	1.78E-01
2,3,4,7,8-PeCDF	0.5	1.47E+00	1.59E+00	8.64E+00	3.90E+00
1,2,3,4,7,8-HxCDF	0.1	3.80E-01	3.23E-01	2.20E+00	9.69E-01
1,2,3,6,7,8-HxCDF	0.1	3.22E-01	2.58E-01	2.57E+00	1.05E+00
2,3,4,6,7,8-HxCDF	0.1	4.65E-01	3.67E-01	4.12E+00	1.65E+00
1,2,3,7,8,9-HxCDF	0.1	1.02E-01	5.01E-02	4.63E-01	2.05E-01
1,2,3,4,6,7,8-HpCDF	0.01	2.08E-01	1.35E-01	6.41E-01	3.28E-01
1,2,3,4,7,8,9-HpCDF	0.01	4.94E-02	4.33E-02	1.75E-01	8.93E-02
OCDF	0.001	1.68E-02	1.31E-02	1.97E-02	1.65E-02
Total TEQ, pg/dscm		3.68E+00	2.97E+00	2.11E+01	9.25E+00

TABLE 7-6A

API Industries, Inc.
SUMMARY - PCDD/PCDF RESULTS

Trane Incinerator Stack
Guayama, PR

Run Number	Run 1	Run 2	Run 3	Average
Test Date	3/31/2006	4/1/2006	4/1/2006	
Run Time	1240-1606	0930-1233	1537-2340	
Test Data				
Volume Gas Sampled, dscf	106.088	99.465	95.525	100.359
Volume Gas Sampled, dscm	3.004	2.816	2.705	
Temperature, Degrees F	185	184	185	
Moisture, %	54.1	54.4	54.4	
Volumetric Flow Rates				
Actual, acfm	8,120	7,580	7,330	7,680
Standard, dscfm	3,050	2,830	2,730	2,870
Percent Isokinetic, %	96.8	97.8	97.3	
PCDD/PCDF Results, picograms/cubic meter @ 7% O_2				
2,3,7,8-TCDD	< 1.2782	< 1.4174	< 1.3685	< 1.3547
1,2,3,7,8-PeCDD	0.8751	< 0.6707	1.7791	< 1.1083
1,2,3,4,7,8-HxCDD	< 0.5539	< 0.5981	1.7510	< 0.9676
1,2,3,6,7,8-HxCDD	0.7899	< 0.5946	4.1372	< 1.8405
1,2,3,7,8,9-HxCDD	< 0.5047	0.9541	2.1159	< 1.1916
1,2,3,4,6,7,8-HpCDD	3.8346	2.9730	10.1376	5.6484
OCDD	10.3894	7.5708	8.3164	8.7588
Total TCDD	8.4885	4.1138	10.1411	7.5811
Total PeCDD	3.9001	4.8190	18.9032	9.2074
Total HxCDD	6.1615	5.4620	49.3967	20.3401
Total HpCDD	7.4397	5.2546	21.7174	11.4706
2,3,7,8-TCDF	< 0.4261	< 0.4840	< 0.4562	< 0.4554
1,2,3,7,8-PeCDF	1.7927	1.1685	7.2918	3.4177
2,3,4,7,8-PeCDF	2.8939	3.0905	16.4012	7.4619
1,2,3,4,7,8-HxCDF	3.7395	3.1493	20.9139	9.2676
1,2,3,6,7,8-HxCDF	3.1725	2.5167	24.3632	10.0175
2,3,4,6,7,8-HxCDF	4.5785	3.5780	39.1258	15.7607
1,2,3,7,8,9-HxCDF	1.0029	0.4874	4.3933	1.9612
1,2,3,4,6,7,8-HpCDF	20.4510	13.1330	60.8116	31.4652
1,2,3,4,7,8,9-HpCDF	4.8669	4.2175	16.6328	8.5724
OCDF	16.5181	12.7908	18.6681	15.9923
Total TCDF	66.1051	48.8816	102.2182	72.4017
Total PeCDF	33.3312	25.4641	168.7004	75.8319
Total HxCDF	33.0919	25.0803	250.0539	102.7421
Total HpCDF	36.5102	25.2705	121.4828	61.0878
Total PCDD/PCDF, pg/dscm	221.936	164.707	769.598	385.414

< - indicates the compound was not detected; the value presented is a "less than" value

TABLE 7-6B

API Industries, Inc.
SUMMARY - PCDD/PCDF RESULTS

Trane Incinerator Stack
Guayama, PR

Run Number		Run 1	Run 2	Run 4	Average
Test Date		3/31/2006	4/1/2006	4/2/2006	
Run Time		1240-1606	0930-1233	1341-1643	
Test Data					
Volume Gas Sampled, dscf[1]		106.088	99.465	99.794	101.782
Volume Gas Sampled, dscm[1]		3.004	2.816	2.826	
Temperature, Degrees F		185	184	182	
Moisture, %		54.1	54.4	52.1	
Volumetric Flow Rates					
Actual, acfm		8,120	7,580	7,080	7,600
Standard, dscfm		3,050	2,830	2,790	2,900
Percent Isokinetic, %		96.8	97.8	99.7	
PCDD/PCDF Results, TEQs, picograms/cubic meter					
2,3,7,8-TCDD	1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	0.5	4.44E-01	0.00E+00	0.00E+00	1.48E-01
1,2,3,4,7,8-HxCDD	0.1	0.00E+00	0.00E+00	6.97E-02	2.32E-02
1,2,3,6,7,8-HxCDD	0.1	8.02E-02	0.00E+00	1.26E-01	6.89E-02
1,2,3,7,8,9-HxCDD	0.1	0.00E+00	9.80E-02	1.03E-01	6.69E-02
1,2,3,4,6,7,8-HpCDD	0.01	3.89E-02	3.05E-02	6.05E-02	4.33E-02
OCDD	0.001	1.06E-02	7.78E-03	8.71E-03	9.01E-03
2,3,7,8-TCDF	0.1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	0.05	9.10E-02	6.00E-02	1.03E-01	8.46E-02
2,3,4,7,8-PeCDF	0.5	1.47E+00	1.59E+00	2.10E+00	1.72E+00
1,2,3,4,7,8-HxCDF	0.1	3.80E-01	3.23E-01	5.51E-01	4.18E-01
1,2,3,6,7,8-HxCDF	0.1	3.22E-01	2.58E-01	6.21E-01	4.00E-01
2,3,4,6,7,8-HxCDF	0.1	4.65E-01	3.67E-01	9.42E-01	5.91E-01
1,2,3,7,8,9-HxCDF	0.1	1.02E-01	5.01E-02	1.08E-01	8.66E-02
1,2,3,4,6,7,8-HpCDF	0.01	2.08E-01	1.35E-01	2.52E-01	1.98E-01
1,2,3,4,7,8,9-HpCDF	0.01	4.94E-02	4.33E-02	6.83E-02	5.37E-02
OCDF	0.001	1.68E-02	1.31E-02	9.94E-03	1.33E-02
Total TEQ, pg/dscm		3.68E+00	2.97E+00	5.12E+00	3.92E+00

TABLE 7-6B

API Industries, Inc.
SUMMARY - PCDD/PCDF RESULTS

Trane Incinerator Stack
Guayama, PR

Run Number	Run 1	Run 2	Run 4	Average
Test Date	3/31/2006	4/1/2006	4/2/2006	
Run Time	1240-1606	0930-1233	1341-1643	
Test Data				
Volume Gas Sampled, dscf	106.088	99.465	99.794	101.782
Volume Gas Sampled, dscm	3.004	2.816	2.826	
Temperature, Degrees F	185	184	182	
Moisture, %	54.1	54.4	52.1	
Volumetric Flow Rates				
Actual, acfm	8,120	7,580	7,080	7,600
Standard, dscfm	3,050	2,830	2,790	2,900
Percent Isokinetic, %	96.8	97.8	99.7	
PCDD/PCDF Results, picograms/cubic meter @ 7% O_2				
2,3,7,8-TCDD	< 1.2782	< 1.4174	< 1.5698	< 1.4218
1,2,3,7,8-PeCDD	0.8751	< 0.6707	< 0.7675	< 0.7711
1,2,3,4,7,8-HxCDD	< 0.5539	< 0.5981	0.6872	< 0.6131
1,2,3,6,7,8-HxCDD	0.7899	< 0.5946	1.2454	< 0.8766
1,2,3,7,8,9-HxCDD	< 0.5047	0.9541	1.0117	< 0.8235
1,2,3,4,6,7,8-HpCDD	3.8346	2.9730	5.9654	4.2577
OCDD	10.3894	7.5708	8.5818	8.8473
Total TCDD	8.4885	4.1138	20.3731	10.9918
Total PeCDD	3.9001	4.8190	14.3379	7.6857
Total HxCDD	6.1615	5.4620	10.5354	7.3863
Total HpCDD	7.4397	5.2546	10.1517	7.6153
2,3,7,8-TCDF	< 0.4261	< 0.4840	< 0.5931	< 0.5010
1,2,3,7,8-PeCDF	1.7927	1.1685	2.0234	1.6615
2,3,4,7,8-PeCDF	2.8939	3.0905	4.1339	3.3728
1,2,3,4,7,8-HxCDF	3.7395	3.1493	5.4352	4.1080
1,2,3,6,7,8-HxCDF	3.1725	2.5167	6.1189	3.9360
2,3,4,6,7,8-HxCDF	4.5785	3.5780	9.2830	5.8132
1,2,3,7,8,9-HxCDF	1.0029	0.4874	1.0640	0.8514
1,2,3,4,6,7,8-HpCDF	20.4510	13.1330	24.8036	19.4625
1,2,3,4,7,8,9-HpCDF	4.8669	4.2175	6.7329	5.2724
OCDF	16.5181	12.7908	9.8028	13.0372
Total TCDF	66.1051	48.8816	59.8983	58.2950
Total PeCDF	33.3312	25.4641	45.6546	34.8166
Total HxCDF	33.0919	25.0803	56.0225	38.0649
Total HpCDF	36.5102	25.2705	45.7697	35.8501
Total PCDD/PCDF, pg/dscm	221.936	164.707	281.128	222.590

< - indicates the compound was not detected; the value presented is a "less than" value