Table 3. Qualitative TO-15 Results from SUMMA® Canisters

	Inst Blank	Inst Blank	Trip Blank	Field Blank	Ambient	System Blank	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Target Compounds	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	Ppb
TFE	ND	ND	0.04	0.01	0.03	0.05	0.13	0.05	0.03	0.05	0.03
Propylene	0.00	0.00	0.00	0.69	19.59	0.47	17.06	196.93	56.18	50.19	42.46
Propane	0.00	0.00	0.00	1.81	74.93	1.44	59.41	699.78	206.52	186.79	153.76
Dichlorodifluoromethane	0.00	0.00	0.00	0.00	0.40	0.00	0.40	0.48	0.54	0.46	0.45
Butane	0.00	0.00	0.00	0.04	0.30	0.09	0.74	1.39	0.66	3.01	3.19
Ethanol	0.00	0.00	0.00	137	666	76.4	1490	2660	2120	2710	2800
Acetone	0.00	0.00	0.00	0.00	5.15	0.00	7.08	7.22	7.30	14.1	27.5
iso-Pentane	0.00	0.00	0.00	0.03	0.77	0.00	0.84	0.68	0.99	1.70	2.24
Trichlorofluoromethane	0.00	0.00	0.00	0.00	0.24	0.00	0.25	0.26	0.28	0.30	0.34
Isopropyl Alcohol	0.00	0.00	0.00	0.44	1.94	0.46	3.38	12.84	13.89	4.37	9.25
1-Pentene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	1.27	0.24	0.28
n-Pentane	0.00	0.00	0.00	0.06	0.84	0.08	0.98	0.60	1.23	1.78	1.56
Isoprene	0.00	0.00	0.00	0.00	0.15	0.00	0.06	0.08	0.15	0.17	0.15
trans-2-pentene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methylene Chloride	0.00	0.00	0.00	0.00	0.08	0.00	0.07	0.21	0.18	0.26	0.33
2-Chloroprene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
1-Hexene	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.07	0.00	1.65	0.38
Diisopropyl ether	0.00	0.00	0.00	0.05	0.26	0.00	2.44	4.21	2.44	5.79	6.69
Ethyl Acetate	0.00	0.00	0.00	0.00	0.00	0.00	13.0	24.0	13.0	32.7	37.0
n-Hexane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.64	1.38	1.61
Methylcyclopentane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.28
2,4-Dimethylpentane	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.32	0.18	0.67	0.87
Benzene	0.00	0.00	0.00	0.00	0.16	0.00	0.12	0.19	0.14	0.19	0.21
Carbon Tetrachloride	0.00	0.00	0.00	0.00	0.05	0.00	0.07	0.07	0.09	0.10	0.10
2-Methylhexane	0.00	0.00	0.00	0.12	0.12	0.10	2.39	4.55	2.47	9.73	12.42
3-methylhexane	0.00	0.00	0.00	0.11	0.10	0.13	2.39	4.83	2.57	10.4	12.9
Trichloroethene	0.00	0.00	0.00	0.00	0.11	0.00	0.07	0.07	0.13	0.17	0.19
Heptane	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.55	0.34	1.22	1.42
Methylcyclohexane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
Toluene	0.00	0.00	0.00	0.00	62.7	0.00	42.2	6.87	2.07	1.56	1.08
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m-Xylene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
o-Xylene	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	0.26	0.27	0.30
Chlorotoluenes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n-Propylbenzene	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00
n-Decane	0.00	0.00	0.00	0.00	0.00	0.00	0.88	20.79	37.71	44.70	75.63
1,2,3-Trimethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.07	0.00
Undecane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.11	0.00
Naphthalene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.29	0.11	0.00
Dodecane	0.00	0.00	0.00	0.69	19.6	0.00	0.11	0.32	0.49	0.15	0.21

Table 3. Qualitative TO-15 Results from SUMMA® Canisters – Compounds Identified with Associated Area Counts (cont.)

	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16
Target Compounds	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**Ppb**
TFE	0.05	0.05	0.08	0.05	0.10	0.13	0.57	0.52	0.51	0.32	0.54
Propylene	47.2	35.0	50.5	48.0	47.0	32.6	21.8	24.9	39.5	25.7	40.4
Propane	170	115	163	163	163	121	74.8	83.8	133	86.8	140
Dichlorodifluoromethane	0.45	0.40	0.47	0.50	0.48	0.00	0.48	0.41	0.44	0.44	0.44
Butane	2.49	2.10	1.47	1.43	0.78	0.00	0.74	1.63	2.31	0.86	0.73
Ethanol	2440	3040	2790	2510	2480	2110	2390	1870	2360	1200	1367
Acetone	21.7	32.0	56	30.1	22.1	15.2	6.92	11.3	15.5	6.12	7.96
iso-Pentane	2.49	3.04	4.12	2.85	2.40	1.52	0.96	1.81	2.91	1.14	1.53
Trichlorofluoromethane	0.37	0.33	0.30	0.27	0.27	0.24	0.25	0.28	0.25	0.25	0.23
Isopropyl Alcohol	8.29	19.4	14.4	31.4	14.3	22.0	2.57	9.07	19.8	6.05	19.3
1-Pentene	0.23	0.42	0.58	0.43	0.42	0.28	0.24	0.21	0.33	0.60	0.00
n-Pentane	2.10	2.19	2.40	2.06	2.45	1.21	0.75	1.84	2.69	1.54	1.86
Isoprene	0.18	0.17	0.23	0.33	0.27	0.17	0.08	0.07	0.35	0.07	0.26
trans-2-pentene	0.00	0.06	0.10	0.13	0.06	0.00	0.00	0.00	0.09	0.00	0.00
Methylene Chloride	0.21	0.33	0.23	0.13	0.19	0.13	1.26	0.16	0.15	0.12	0.14
2-Chloroprene	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-Hexene	0.12	0.56	0.22	0.19	0.13	0.08	0.06	0.07	0.11	0.09	0.12
Diisopropyl ether	4.04	8.06	4.61	2.34	2.22	1.22	1.40	1.63	2.08	0.50	0.53
Ethyl Acetate	21.6	44.2	25.9	12.4	11.6	6.37	7.47	8.26	11.3	3.78	4.10
n-Hexane	1.49	1.11	0.63	0.38	0.93	0.00	0.00	0.00	0.32	0.00	0.00
Methylcyclopentane	0.21	0.34	0.24	0.19	0.10	0.09	0.00	0.13	0.16	0.00	0.09
2,4-Dimethylpentane	0.51	1.08	0.37	0.14	0.09	0.05	0.00	0.20	0.16	0.00	0.06
Benzene	0.43	0.95	1.45	1.04	0.93	0.33	0.39	0.38	0.73	0.35	0.34
Carbon Tetrachloride	0.11	0.10	0.09	0.07	0.08	0.06	0.08	0.07	0.06	0.07	0.06
2-Methylhexane	7.18	15.8	6.43	3.50	2.49	1.39	0.47	2.32	1.77	0.10	0.22
3-methylhexane	7.39	16.0	5.88	1.86	1.48	0.73	0.56	2.41	1.95	0.12	0.24
Trichloroethene	0.27	0.23	0.20	0.31	0.21	0.13	0.08	0.09	0.46	0.13	0.22
Heptane	0.84	1.77	0.72	0.28	0.23	0.12	0.00	0.26	0.30	0.00	0.13
Methylcyclohexane	0.16	0.35	0.18	0.10	0.00	0.00	0.00	0.00	0.18	0.00	0.00
Toluene	1.76	2.07	1.35	6.31	13.7	1.81	21.0	3.26	29.3	8.89	101
Ethylbenzene	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.17
m-Xylene	0.00	0.00	0.11	0.31	0.00	0.00	0.00	0.00	0.14	0.00	0.34
o-Xylene	0.33	0.31	0.17	0.18	0.07	0.00	0.00	0.00	0.07	0.00	0.17
Chlorotoluenes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n-Propylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.34
n-Decane	93.7	120	137	58.8	11.7	2.48	0.34	0.31	0.17	0.08	0.12
1,2,3-Trimethylbenzene	0.21	0.21	0.26	0.17	0.07	0.04	0.00	0.00	0.04	0.00	0.07
Undecane	0.31	0.29	0.62	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Naphthalene	0.20	0.00	0.11	0.41	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Dodecane	1.08	1.58	2.02	1.35	1.93	0.35	0.11	0.16	0.14	0.15	0.14

NYSDEC PTFE Sintering Study December 2, 2019

Name	CAS	MW	Ambient	System blank	Trip Blank	Field Blank	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
			ug/m³	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
TFE	116-14-3	100.0	0.12	0.22	0.15	0.03	0.52	0.22	0.11	0.21	0.11
Propylene	115-07-1	58.1	46.52	1.11	0.00	1.63	40.5	468	133	119	101
Propane	74-98-6	44.1	135	2.59	0.00	3.27	107.1	1262	372	337	277
Dichlorodifluoromethane	75-71-8	120.9	1.98	0.00	0.00	0.00	1.96	2.36	2.69	2.29	2.21
Butane	106-99-0	54.1	0.66	0.20	0.00	0.09	1.64	3.06	1.46	6.66	7.06
Ethanol	64-17-5	46.1	1255	144	0.00	257	2806	5002	3986	5104	5276
Acetone	67-64-1	58.1	12.23	0.00	0.00	0.00	16.81	17.15	17.33	33.45	65.21
iso-Pentane	78-78-4	72.2	2.26	0.00	0.00	0.10	2.46	2.01	2.93	5.00	6.62
Trichlorofluoromethane	75-69-4	137.4	1.32	0.00	0.00	0.00	1.39	1.46	1.57	1.70	1.91
Isopropyl Alcohol	67-30-0	60.1	4.76	1.14	0.00	1.07	8.30	31.54	34.12	10.75	22.73
1-Pentene	109-67-1	70.1	0.00	0.00	0.00	0.00	0.00	0.59	3.65	0.68	0.79
n-Pentane	109-66-0	72.2	2.48	0.24	0.00	0.17	2.89	1.77	3.63	5.24	4.59
Isoprene	1173018-86-4	69.1	0.41	0.00	0.00	0.00	0.17	0.22	0.43	0.49	0.44
trans-2-pentene	646-04-8	70.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methylene Chloride	75-09-2	84.9	0.29	0.00	0.00	0.00	0.26	0.74	0.63	0.89	1.14
2-Chloroprene	126-99-8	88.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00
1-Hexene	592-41-6	84.2	0.17	0.00	0.00	0.00	0.00	0.24	0.00	5.68	1.30
Diisopropyl ether	108-20-3	102.2	1.09	0.00	0.00	0.19	10.21	17.58	10.20	24.18	27.94
Ethyl Acetate	141-78-6	88.1	0.00	0.00	0.00	0.00	46.91	86.37	46.94	117.71	133.39
n-Hexane	110-54-3	86.2	0.00	0.00	0.00	0.00	0.00	1.57	2.25	4.87	5.68
Methylcyclopentane	102014-58-4	136.6	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	1.56
2,4-Dimethylpentane	108-08-7	100.2	0.00	0.00	0.00	0.00	0.74	1.32	0.75	2.75	3.55
Benzene	71-43-2	78.1	0.52	0.00	0.00	0.00	0.39	0.62	0.43	0.59	0.68
Carbon Tetrachloride	56-23-5	153.8	0.33	0.00	0.00	0.00	0.42	0.46	0.55	0.61	0.64
2-Methylhexane	591-76-4	100.2	0.50	0.43	0.00	0.51	9.78	18.65	10.12	39.86	50.90
3-methylhexane	589-34-4	100.2	0.39	0.52	0.00	0.46	9.81	19.79	10.54	42.39	53.01
Trichloroethene	79-01-6	131.4	0.58	0.00	0.00	0.00	0.39	0.37	0.70	0.89	1.05
Heptane	142-82-5	100.2	0.00	0.00	0.00	0.00	1.01	2.24	1.38	5.01	5.81
Methylcyclohexane	10061-02-6	111.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00
Toluene	2037-26-5	100.2	257	0.00	0.00	0.00	173	28.2	8.50	6.38	4.44
Ethylbenzene	100-41-4	106.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m-Xylene	1330-20-7	106.2	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00
p-Xylene	75-25-2	252.8	0.00	0.00	0.00	0.00	0.80	0.67	1.30	1.34	1.34
Chlorotoluenes	25168-05-2	126.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n-Propylbenzene	103-65-1	120.2	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n-Decane	124-18-5	142.3	0.00	0.00	0.00	0.00	5.14	121	219	260	440
1,2,3-Trimethylbenzene	87-61-6	181.5	0.00	0.00	0.00	0.00	0.00	0.28	0.45	0.54	0.00
Undecane	1120-21-4	156.3	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.67	0.00
Naphthalene	91-20-3	128.2	0.00	0.00	0.00	0.00	0.00	0.41	1.52	0.56	0.00
Dodecane	112-40-3	170.3	0.56	0.00	0.00	0.00	0.75	2.20	3.39	1.04	1.46

NYSDEC PTFE Sintering Study

December 2, 2019

Name	CAS	MW	Sample 6 ug/m³	Sample 7 ug/m³	Sample 8 ug/m³	Sample 9 ug/m³	Sample 10 ug/m³	Sample 11 ug/m³	Sample 12 ug/m³	Sample 13 ug/m³	Sample 14 ug/m³	Sample 15 ug/m³	Sample 16 ug/m³
TFE	116-14-3	100.0	0.21	0.22	0.32	0.22	0.42	0.52	2.31	2.14	2.10	1.32	2.23
Propylene	115-07-1	58.1	112	83.2	120	114	111.6	77.5	51.8	59.2	93.8	61.0	95.9
Propane	74-98-6	44.1	306	208	293	294	293	219	135	151	239	157	252
Dichlorodifluoromethane	75-71-8	120.9	2.24	1.98	2.34	2.47	2.38	0.00	2.35	2.01	2.19	2.16	2.17
Butane	106-99-0	54.1	5.50	4.65	3.25	3.16	1.73	0.00	1.65	3.61	5.11	1.90	1.62
Ethanol	64-17-5	46.1	4591	5734	5254	4733	4664	3978	4504	3527	4445	2265	2575
Acetone	67-64-1	58.1	51.54	75.89	132.89	71.50	52.52	36.15	16.44	26.86	36.77	14.53	18.89
iso-Pentane	78-78-4	72.2	7.35	8.98	12.15	8.41	7.08	4.47	2.84	5.33	8.59	3.38	4.50
Trichlorofluoromethane	75-69-4	137.4	2.05	1.84	1.67	1.53	1.50	1.37	1.42	1.55	1.39	1.40	1.28
Isopropyl Alcohol	67-30-0	60.1	20.37	47.70	35.42	77.02	35.05	54.01	6.30	22.28	48.53	14.86	47.44
1-Pentene	109-67-1	70.1	0.66	1.22	1.67	1.22	1.20	0.81	0.68	0.61	0.94	1.73	0.00
n-Pentane	109-66-0	72.2	6.20	6.46	7.07	6.08	7.21	3.56	2.21	5.42	7.92	4.54	5.48
Isoprene	1173018-86-4	69.1	0.51	0.49	0.65	0.92	0.76	0.48	0.22	0.19	0.98	0.19	0.72
trans-2-pentene	646-04-8	70.1	0.00	0.16	0.29	0.36	0.17	0.00	0.00	0.00	0.25	0.00	0.00
Methylene Chloride	75-09-2	84.9	0.73	1.16	0.78	0.46	0.65	0.44	4.36	0.55	0.53	0.43	0.49
2-Chloroprene	126-99-8	88.5	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-Hexene	592-41-6	84.2	0.40	1.92	0.75	0.65	0.44	0.26	0.21	0.23	0.37	0.32	0.41
Diisopropyl ether	108-20-3	102.2	16.87	33.66	19.25	9.80	9.28	5.08	5.87	6.81	8.71	2.10	2.21
Ethyl Acetate	141-78-6	88.1	77.75	159.13	93.40	44.68	41.62	22.93	26.90	29.74	40.76	13.62	14.76
n-Hexane	110-54-3	86.2	5.25	3.90	2.23	1.34	3.28	0.00	0.00	0.00	1.12	0.00	0.00
Methylcyclopentane	102014-58-4	136.6	1.16	1.91	1.34	1.08	0.54	0.49	0.00	0.72	0.90	0.00	0.52
2,4-Dimethylpentane	108-08-7	100.2	2.09	4.41	1.53	0.56	0.36	0.22	0.00	0.84	0.65	0.00	0.26
Benzene	71-43-2	78.1	1.37	3.03	4.63	3.32	2.96	1.05	1.25	1.20	2.32	1.12	1.07
Carbon Tetrachloride	56-23-5	153.8	0.72	0.65	0.54	0.41	0.47	0.40	0.49	0.44	0.39	0.42	0.39
2-Methylhexane	591-76-4	100.2	29.41	64.61	26.34	14.33	10.20	5.70	1.91	9.49	7.26	0.43	0.89
3-methylhexane	589-34-4	100.2	30.29	65.45	24.08	7.64	6.06	2.99	2.30	9.87	8.00	0.49	1.00
Trichloroethene	79-01-6	131.4	1.47	1.24	1.08	1.64	1.13	0.72	0.41	0.49	2.47	0.68	1.16
Heptane	142-82-5	100.2	3.46	7.27	2.95	1.15	0.94	0.48	0.00	1.07	1.23	0.00	0.51
Methylcyclohexane	10061-02-6	111.0	0.73	1.60	0.82	0.44	0.00	0.00	0.00	0.00	0.83	0.00	0.00
Toluene	2037-26-5	100.2	7.23	8.49	5.51	25.86	55.94	7.42	85.80	13.37	120	36.4	415
Ethylbenzene	100-41-4	106.2	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.75
m-Xylene	1330-20-7	106.2	0.00	0.00	0.48	1.34	0.00	0.00	0.00	0.00	0.59	0.00	1.49
p-Xylene	75-25-2	252.8	1.79	1.86	1.49	1.72	0.99	0.00	0.00	0.00	0.84	0.00	1.94
Chlorotoluenes	25168-05-2	126.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n-Propylbenzene	103-65-1	120.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	1.69
n-Decane	124-18-5	142.3	545	697	797	342	68.1	14.5	1.95	1.80	1.01	0.46	0.69
1,2,3-Trimethylbenzene	87-61-6	181.5	1.55	1.52	1.91	1.25	0.54	0.32	0.00	0.00	0.33	0.00	0.54
Undecane	1120-21-4	156.3	1.98	1.86	3.98	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Naphthalene	91-20-3	128.2	1.03	0.00	0.57	2.15	1.16	0.00	0.00	0.00	0.00	0.00	0.00
Dodecane	112-40-3	170.3	7.52	11.03	14.09	9.40	13.41	2.45	0.79	1.12	1.00	1.06	1.01