

ATTACHMENT 1: PROUCL INPUT AND OUTPUT

	A	B	C	D	E
1	SAMPLE SITE ID	DATE	ETO (ug/m ³)	D_ETO (ug/m3)	resoning for blank
2					
3	SMYRNA, GA				
4	S1	9/24/2019			X (not collected properly)
5	S1	9/26/2019			X (not collected properly)
6	S1	9/30/2019	0.28	1	
7	S2	9/24/2019	0.0452	0	
8	S2	9/26/2019	0.29	1	
9	S2	9/30/2019	0.0452	0	
10	S3	9/24/2019	0.68	1	
11	S3	9/26/2019	0.0452	0	
12	S3	9/30/2019	0.0452	0	
13	S4	9/24/2019	0.47	1	
14	S4	9/26/2019			CE (co-eluted)
15	S4	9/30/2019			CE (co-eluted)
16	S5	9/24/2019	1.75	1	
17					
18	LAKWOOD, CO				
19	Pre-1	8/24/2019 - 8/25/2019	1.820	1	
20	Pre-1	8/25/2019 - 8/26/2019	0.710	1	
21	Pre-1	8/26/2019 - 8/27/2019	1.004	1	
22	Pre-1	8/27/2019 - 8/28/2019	0.306	1	
23	Pre-1	8/28/2019 - 8/29/2019	0.504	1	
24	Pre-1	8/29/2019 - 8/30/2019	1.121	1	
25	Pre-1	8/30/2019 - 8/31/2019	0.474	1	
26	Pre-2	8/24/2019 - 8/25/2019	6.432	1	
27	Pre-2	8/25/2019 - 8/26/2019	1.540	1	
28	Pre-2	8/26/2019 - 8/27/2019	3.279	1	
29	Pre-2	8/27/2019 - 8/28/2019	0.485	1	
30	Pre-2	8/28/2019 - 8/29/2019	1.598	1	
31	Pre-2	8/29/2019 - 8/30/2019	5.567	1	
32	Pre-2	8/30/2019 - 8/31/2019	2.072	1	
33	Pre-3	8/24/2019 - 8/25/2019	4.306	1	
34	Pre-3	8/25/2019 - 8/26/2019	2.684	1	
35	Pre-3	8/26/2019 - 8/27/2019	3.369	1	
36	Pre-3	8/27/2019 - 8/28/2019	4.522	1	
37	Pre-3	8/28/2019 - 8/29/2019	2.288	1	
38	Pre-3	8/29/2019 - 8/30/2019	1.739	1	
39	Pre-3	8/30/2019 - 8/31/2019	2.739	1	

	A	B	C	D	E
40	Pre-4	8/24/2019 - 8/25/2019	1.220	1	
41	Pre-4	8/25/2019 - 8/26/2019	1.016	1	
42	Pre-4	8/26/2019 - 8/27/2019	0.895	1	
43	Pre-4	8/27/2019 - 8/28/2019	1.910	1	
44	Pre-4	8/28/2019 - 8/29/2019	1.366	1	
45	Pre-4	8/29/2019 - 8/30/2019	1.207	1	
46	Pre-4	8/30/2019 - 8/31/2019	1.412	1	
47					
48	LAKEWOOD, CO				
49	Post-1	10/17/2019 - 10/18/2019	0.0816	0	
50	Post-1	10/18/2019 - 10/19/2019	0.225	1	
51	Post-1	10/19/2019 - 10/20/2019	0.432	1	
52	Post-1	10/20/2019 - 10/21/2019	0.814	1	
53	Post-1	10/21/2019 - 10/22/2019	0.425	1	
54	Post-1	10/22/2019 - 10/23/2019	0.416	1	
55	Post-1	10/23/2019 - 10/24/2019	0.587	1	
56	Post-2	10/17/2019 - 10/18/2019	0.436	1	
57	Post-2	10/18/2019 - 10/19/2019	0.339	1	
58	Post-2	10/19/2019 - 10/20/2019	1.229	1	
59	Post-2	10/20/2019 - 10/21/2019	1.277	1	
60	Post-2	10/21/2019 - 10/22/2019	0.976	1	
61	Post-2	10/22/2019 - 10/23/2019	0.335	1	
62	Post-2	10/23/2019 - 10/24/2019	0.800	1	
63	Post-3	10/17/2019 - 10/18/2019	0.357	1	
64	Post-3	10/18/2019 - 10/19/2019	2.018	1	
65	Post-3	10/19/2019 - 10/20/2019	1.236	1	
66	Post-3	10/20/2019 - 10/21/2019	1.194	1	
67	Post-3	10/21/2019 - 10/22/2019	0.593	1	
68	Post-3	10/22/2019 - 10/23/2019	0.751	1	
69	Post-3	10/23/2019 - 10/24/2019	0.804	1	
70	Post-4	10/17/2019 - 10/18/2019	0.355	1	
71	Post-4	10/18/2019 - 10/19/2019	0.924	1	
72	Post-4	10/19/2019 - 10/20/2019	0.0816	0	
73	Post-4	10/20/2019 - 10/21/2019	0.517	1	
74	Post-4	10/21/2019 - 10/22/2019	0.357	1	
75	Post-4	10/22/2019 - 10/23/2019	0.411	1	
76	Post-4	10/23/2019 - 10/24/2019	0.946	1	

	A	B	C	D	E
77	Post-5	10/17/2019 - 10/18/2019	0.405	1	
78	Post-5	10/18/2019 - 10/19/2019	0.0816	0	
79	Post-5	10/19/2019 - 10/20/2019	0.0816	0	
80	Post-5	10/20/2019 - 10/21/2019	0.432	1	
81	Post-5	10/21/2019 - 10/22/2019	0.441	1	
82	Post-5	10/22/2019 - 10/23/2019	0.0816	0	
83	Post-5	10/23/2019 - 10/24/2019	0.359	1	
84	Post-6	10/17/2019 - 10/18/2019	0.0816	0	
85	Post-6	10/18/2019 - 10/19/2019	0.368	1	
86	Post-6	10/19/2019 - 10/20/2019	0.315	1	
87	Post-6	10/20/2019 - 10/21/2019	0.467	1	
88	Post-6	10/21/2019 - 10/22/2019	0.375	1	
89	Post-6	10/22/2019 - 10/23/2019	0.550	1	
90	Post-6	10/23/2019 - 10/24/2019	0.915	1	
91	Post-7	10/17/2019 - 10/18/2019	0.0816	0	
92	Post-7	10/18/2019 - 10/19/2019	0.267	1	
93	Post-7	10/19/2019 - 10/20/2019	0.362	1	
94	Post-7	10/20/2019 - 10/21/2019	0.485	1	
95	Post-7	10/21/2019 - 10/22/2019	0.465	1	
96	Post-7	10/22/2019 - 10/23/2019	0.0816	0	
97	Post-7	10/23/2019 - 10/24/2019	0.688	1	
98	Post-8	10/17/2019 - 10/18/2019	0.0816	0	
99	Post-8	10/18/2019 - 10/19/2019	0.159	1	
100	Post-8	10/19/2019 - 10/20/2019	0.595	1	
101	Post-8	10/20/2019 - 10/21/2019	0.573	1	
102	Post-8	10/21/2019 - 10/22/2019	0.0816	0	
103	Post-8	10/22/2019 - 10/23/2019	0.0816	0	
104	Post-8	10/23/2019 - 10/24/2019	0.858	1	
105					
106	COVINGTON, GA				
107	C1	10/3/2019	1.08	1	
108	C1	10/6/2019	0.14	1	
109	C1	10/12/2019	1.6	1	
110	C1	10/18/2019			X (not collected properly)
111	C1	10/24/2019			X (not collected properly)
112	C1	10/27/2019	2.56	1	
113	C1	10/30/2019	0.35	1	

	A	B	C	D	E
114	C2	10/3/2019	0.6	1	LK (potentially biased high)
115	C2	10/6/2019	0.16	1	
116	C2	10/12/2019			X (not collected properly)
117	C2	10/18/2019	0.47	1	2 (collection deviated from standard practices but the integrity was not compromised)
118	C2	10/24/2019			X (not collected properly)
119	C2	10/27/2019	0.32	1	
120	C2	10/30/2019	0.32	1	
121	C3	10/3/2019	0.49	1	
122	C3	10/6/2019	0.17	1	
123	C3	10/12/2019	0.59	1	
124	C3	10/18/2019	0.57	1	
125	C3	10/24/2019	0.06	1	
126	C3	10/27/2019	0.36	1	
127	C3	10/30/2019	0.35	1	
128	C4	10/3/2019	1.88	1	
129	C4	10/6/2019	1.65	1	
130	C4	10/12/2019	0.0452	0	
131	C4	10/18/2019	0.76	1	
132	C4	10/24/2019	2.18	1	
133	C4	10/27/2019	0.19	1	
134	C4	10/30/2019	0.33	1	
135	C4	10/30/2019	0.17	1	Duplicate
136	C5	10/30/2019	0.36	1	2 (collection deviated from standard practices but the integrity was not
137	C7	10/30/2019	0.16	1	
138	C8	10/30/2019	0.22	1	
139	C9	10/30/2019	0.24	1	
140					
141	LAKE COUNTY, IL				
142	R1	6/6/2019 - 6/7/2019	0.12	1	
143	R2	6/6/2019 - 6/7/2019	0.15	1	
144	V1	6/6/2019 - 6/7/2019	0.21	1	
145	V2	6/6/2019 - 6/7/2019	0.14	1	
146	V3	6/6/2019 - 6/7/2019	0.27	1	
147	V4	6/6/2019 - 6/7/2019	0.19	1	
148	M1	6/6/2019 - 6/7/2019	0.21	1	
149	M2	6/6/2019 - 6/7/2019	0.12	1	
150	M3	6/6/2019 - 6/7/2019	6.8	1	
151	M4	6/6/2019 - 6/7/2019	0.15	1	

	A	B	C	D	E
152	V1	6/7/2019 - 6/8/2019	0.11	1	
153	V3	6/7/2019 - 6/8/2019	0.61	1	
154	M1	6/7/2019 - 6/8/2019	0.18	1	
155	M3	6/7/2019 - 6/8/2019	10	1	
156	R1	6/9/2019 - 6/10/2019	0.13	1	
157	R2	6/9/2019 - 6/10/2019	0.11	1	
158	V1	6/9/2019 - 6/10/2019	0.17	1	
159	V2	6/9/2019 - 6/10/2019	0.14	1	
160	V3	6/9/2019 - 6/10/2019	0.12	1	
161	V4	6/9/2019 - 6/10/2019	0.13	1	
162	M1	6/9/2019 - 6/10/2019	0.21	1	
163	M2	6/9/2019 - 6/10/2019	0.15	1	
164	M3	6/9/2019 - 6/10/2019	2.4	1	
165	M4	6/9/2019 - 6/10/2019	0.28	1	
166	R1	6/12/2019 - 6/13/2019	0.095	1	
167	R2	6/12/2019 - 6/13/2019	0.12	1	
168	V1	6/12/2019 - 6/13/2019	0.19	1	
169	V2	6/12/2019 - 6/13/2019	0.19	1	
170	V3	6/12/2019 - 6/13/2019	0.24	1	
171	V4	6/12/2019 - 6/13/2019	0.32	1	
172	M1	6/12/2019 - 6/13/2019	0.60	1	
173	M2	6/12/2019 - 6/13/2019	0.31	1	
174	M3	6/12/2019 - 6/13/2019	0.43	1	
175	M4	6/12/2019 - 6/13/2019	0.41	1	
176	V1	6/14/2019 - 6/15/2019	0.0452	0	
177	V3	6/14/2019 - 6/15/2019	0.0452	0	
178	M1	6/14/2019 - 6/15/2019	4.31	1	
179	M3	6/14/2019 - 6/15/2019	0.0452	0	
180	R1	6/15/2019 - 6/16/2019	0.0452	0	
181	R2	6/15/2019 - 6/16/2019	0.16	1	
182	V1	6/15/2019 - 6/16/2019	0.0452	0	
183	V2	6/15/2019 - 6/16/2019	0.0452	0	
184	V3	6/15/2019 - 6/16/2019	1.10	1	
185	V4	6/15/2019 - 6/16/2019	0.0452	0	
186	M1	6/15/2019 - 6/16/2019	2.06	1	
187	M1	6/15/2019 - 6/16/2019	0.14	1	
188	M2	6/15/2019 - 6/16/2019	0.0452	0	
189	M3	6/15/2019 - 6/16/2019	1.24	1	
190	M4	6/15/2019 - 6/16/2019			invalid' in data set

	A	B	C	D	E
191	V1	6/17/2019 - 6/18/2019	0.0452	0	
192	V3	6/17/2019 - 6/18/2019	0.0452	0	
193	M1	6/17/2019 - 6/18/2019	0.0452	0	
194	M3	6/17/2019 - 6/18/2019	5.38	1	
195	M3	6/17/2019 - 6/18/2019	5.8	1	
196	R1	6/18/2019 - 6/19/2019	0.0452	0	
197	R2	6/18/2019 - 6/19/2019	1.28	1	
198	V1	6/18/2019 - 6/19/2019	0.0452	0	
199	V1	6/18/2019 - 6/19/2019	0.23	1	
200	V2	6/18/2019 - 6/19/2019	0.0452	0	
201	V3	6/18/2019 - 6/19/2019	0.0452	0	
202	V4	6/18/2019 - 6/19/2019	0.0452	0	
203	M1	6/18/2019 - 6/19/2019	0.0452	0	
204	M2	6/18/2019 - 6/19/2019	0.24	1	
205	M3	6/18/2019 - 6/19/2019	3.16	1	
206	M4	6/18/2019 - 6/19/2019	0.0452	0	
207	R1	6/21/2019 - 6/22/2019	0.5	1	
208	R2	6/21/2019 - 6/22/2019	0.0452	0	
209	V1	6/21/2019 - 6/22/2019	0.89	1	
210	V2	6/21/2019 - 6/22/2019	0.0452	0	
211	V3	6/21/2019 - 6/22/2019	0.0452	0	
212	V4	6/21/2019 - 6/22/2019	0.0452	0	
213	M1	6/21/2019 - 6/22/2019	0.0452	0	
214	M2	6/21/2019 - 6/22/2019	0.0452	0	
215	M3	6/21/2019 - 6/22/2019	5.56	1	
216	M4	6/21/2019 - 6/22/2019	0.0452	0	
217	M4	6/21/2019 - 6/22/2019	0.072	0	**< THIS VALUE WAS '<0.072'
218	R1	6/24/2019 - 6/25/2019	0.0452	0	
219	R2	6/24/2019 - 6/25/2019	0.0452	0	
220	V1	6/24/2019 - 6/25/2019	0.0452	0	
221	V1	6/24/2019 - 6/25/2019	0.13	1	
222	V2	6/24/2019 - 6/25/2019	0.0452	0	
223	V3	6/24/2019 - 6/25/2019	0.28	1	
224	V4	6/24/2019 - 6/25/2019	0.0452	0	
225	M1	6/24/2019 - 6/25/2019	0.87	1	
226	M2	6/24/2019 - 6/25/2019	0.0452	0	
227	M2	6/24/2019 - 6/25/2019	0.29	1	
228	M3	6/24/2019 - 6/25/2019	0.77	1	
229	M4	6/24/2019 - 6/25/2019	0.0452	0	

	A	B	C	D	E
230	V1	6/26/2019 - 6/27/2019	0.18	1	
231	V3	6/26/2019 - 6/27/2019	0.27	1	
232	V3	6/26/2019 - 6/27/2019	0.20	1	
233	M1	6/26/2019 - 6/27/2019	0.73	1	
234	M3	6/26/2019 - 6/27/2019	1.27	1	
235	R1	6/27/2019 - 6/28/2019	0.0452	0	
236	R2	6/27/2019 - 6/28/2019	0.0452	0	
237	V1	6/27/2019 - 6/28/2019	0.23	1	
238	V2	6/27/2019 - 6/28/2019	0.0452	0	
239	V3	6/27/2019 - 6/28/2019	0.0452	0	
240	V4	6/27/2019 - 6/28/2019			invalid' on data set
241	M1	6/27/2019 - 6/28/2019	0.0452	0	
242	M2	6/27/2019 - 6/28/2019	0.0452	0	
243	M3	6/27/2019 - 6/28/2019	1.23	1	
244	M4	6/27/2019 - 6/28/2019	0.0452	0	
245	R1	6/30/2019 - 7/1/2019	0.0452	0	
246	R2	6/30/2019 - 7/1/2019	0.0452	0	
247	V1	6/30/2019 - 7/1/2019	0.15	1	
248	V2	6/30/2019 - 7/1/2019	0.58	1	
249	V3	6/30/2019 - 7/1/2019	0.38	1	
250	V4	6/30/2019 - 7/1/2019	0.22	1	
251	V4	6/30/2019 - 7/1/2019	3.6	1	
252	M1	6/30/2019 - 7/1/2019	0.0452	0	
253	M2	6/30/2019 - 7/1/2019	0.0452	0	
254	M3	6/30/2019 - 7/1/2019	1.27	1	
255	M4	6/30/2019 - 7/1/2019	0.62	1	
256	R1	7/3/2019 - 7/4/2019	0.58	1	
257	R2	7/3/2019 - 7/4/2019	0.0452	0	
258	V1	7/3/2019 - 7/4/2019	0.0452	0	
259	V2	7/3/2019 - 7/4/2019	0.28	1	
260	V3	7/3/2019 - 7/4/2019	0.35	1	
261	V4	7/3/2019 - 7/4/2019	0.0452	0	
262	M1	7/3/2019 - 7/4/2019	0.36	1	
263	M2	7/3/2019 - 7/4/2019	0.0452	0	
264	M3	7/3/2019 - 7/4/2019	4.22	1	
265	M4	7/3/2019 - 7/4/2019	0.0452	0	
266	M5	7/3/2019 - 7/4/2019	0.79	1	
267	M5	7/3/2019 - 7/4/2019	0.44	1	

	A	B	C	D	E
268	R1	10/27/2019 - 10/28/2019	0.18	1	
269	R2	10/27/2019 - 10/28/2019	0.19	1	
270	V1	10/27/2019 - 10/28/2019	0.26	1	
271	V2	10/27/2019 - 10/28/2019			"invalid"
272	V3	10/27/2019 - 10/28/2019	0.12	1	
273	V4	10/27/2019 - 10/28/2019	0.045	0	
274	V5	10/27/2019 - 10/28/2019			"invalid"
275	M1	10/27/2019 - 10/28/2019			"no sample"
276	M2	10/27/2019 - 10/28/2019	0.06	1	
277	M3	10/27/2019 - 10/28/2019	1.61	1	
278	M4	10/27/2019 - 10/28/2019	0.38	1	
279	M5	10/27/2019 - 10/28/2019	0.16	1	
280	R1	10/29/2019 - 10/30/2019	0.18	1	
281	R2	10/29/2019 - 10/30/2019	0.06	1	
282	V1	10/29/2019 - 10/30/2019	0.3	1	
283	V2	10/29/2019 - 10/30/2019	0.25	1	
284	V3	10/29/2019 - 10/30/2019	0.33	1	
285	V4	10/29/2019 - 10/30/2019	0.17	1	
286	V5	10/29/2019 - 10/30/2019	0.14	1	
287	M1	10/29/2019 - 10/30/2019			"no sample"
288	M2	10/29/2019 - 10/30/2019	0.06	1	
289	M3	10/29/2019 - 10/30/2019	0.22	1	
290	M4	10/29/2019 - 10/30/2019	0.11	1	
291	M5	10/29/2019 - 10/30/2019	0.21	1	
292	R1	11/01/2019 - 11/02/2019	0.21	1	
293	R2	11/01/2019 - 11/02/2019	0.045	0	
294	V1	11/01/2019 - 11/02/2019	0.4	1	
295	V2	11/01/2019 - 11/02/2019	3.66	1	
296	V3	11/01/2019 - 11/02/2019	0.12	1	
297	V4	11/01/2019 - 11/02/2019	0.22	1	
298	V5	11/01/2019 - 11/02/2019	0.22	1	
299	M1	11/01/2019 - 11/02/2019	0.33	1	
300	M2	11/01/2019 - 11/02/2019	0.29	1	
301	M3	11/01/2019 - 11/02/2019	0.11	1	
302	M4	11/01/2019 - 11/02/2019	0.56	1	
303	M5	11/01/2019 - 11/02/2019	0.07	1	
304	R1	11/04/2019 - 11/05/2019	0.16	1	
305	R2	11/04/2019 - 11/05/2019	0.11	1	
306	V1	11/04/2019 - 11/05/2019	0.11	1	
307	V2	11/04/2019 - 11/05/2019	1.34	1	

	A	B	C	D	E
308	V3	11/04/2019 - 11/05/2019	0.22	1	
309	V4	11/04/2019 - 11/05/2019	0.06	1	
310	V5	11/04/2019 - 11/05/2019	0.2	1	
311	M1	11/04/2019 - 11/05/2019	0.16	1	
312	M2	11/04/2019 - 11/05/2019	0.045	0	
313	M3	11/04/2019 - 11/05/2019	0.09	1	
314	M4	11/04/2019 - 11/05/2019	0.7	1	
315	M5	11/04/2019 - 11/05/2019	0.045	0	
316	R1	11/07/2019 - 11/08/2019	0.12	1	
317	R2	11/07/2019 - 11/08/2019	0.03	1	
318	V1	11/07/2019 - 11/08/2019	0.08	1	
319	V2	11/07/2019 - 11/08/2019	0.15	1	
320	V3	11/07/2019 - 11/08/2019	0.05	1	
321	V4	11/07/2019 - 11/08/2019	0.12	1	
322	V5	11/07/2019 - 11/08/2019	0.19	1	
323	M1	11/07/2019 - 11/08/2019	0.045	0	
324	M2	11/07/2019 - 11/08/2019	0.15	1	
325	M3	11/07/2019 - 11/08/2019	0.26	1	
326	M4	11/07/2019 - 11/08/2019	0.17	1	
327	M5	11/07/2019 - 11/08/2019	0.045	0	
328	R1	11/10/2019 - 11/11/2019	0.07	1	
329	R2	11/10/2019 - 11/11/2019	0.12	1	
330	V1	11/10/2019 - 11/11/2019	0.05	1	
331	V2	11/10/2019 - 11/11/2019	0.03	1	
332	V3	11/10/2019 - 11/11/2019	2.02	1	
333	V4	11/10/2019 - 11/11/2019	0.15	1	
334	V5	11/10/2019 - 11/11/2019	0.09	1	
335	M1	11/10/2019 - 11/11/2019	0.08	1	
336	M2	11/10/2019 - 11/11/2019	0.045	0	
337	M3	11/10/2019 - 11/11/2019	0.07	1	
338	M4	11/10/2019 - 11/11/2019	0.1	1	
339	M5	11/10/2019 - 11/11/2019	0.06	1	
340	R1	11/13/2019 - 11/14/2019	0.18	1	
341	R2	11/13/2019 - 11/14/2019	0.07	1	
342	V1	11/13/2019 - 11/14/2019	5.29	1	
343	V2	11/13/2019 - 11/14/2019	8.86	1	
344	V3	11/13/2019 - 11/14/2019	0.05	1	
345	V4	11/13/2019 - 11/14/2019	0.05	1	
346	V5	11/13/2019 - 11/14/2019	0.07	1	
347	M1	11/13/2019 - 11/14/2019	0.39	1	

	A	B	C	D	E
348	M2	11/13/2019 - 11/14/2019	0.11	1	
349	M3	11/13/2019 - 11/14/2019	0.06	1	
350	M4	11/13/2019 - 11/14/2019	0.15	1	
351	M5	11/13/2019 - 11/14/2019	0.05	1	
352	R1	11/16/2019 - 11/17/2019	0.32	1	
353	R2	11/16/2019 - 11/17/2019	0.14	1	
354	V1	11/16/2019 - 11/17/2019	0.23	1	
355	V2	11/16/2019 - 11/17/2019	0.05	1	
356	V3	11/16/2019 - 11/17/2019	0.16	1	
357	V4	11/16/2019 - 11/17/2019	0.14	1	
358	V5	11/16/2019 - 11/17/2019	0.27	1	
359	M1	11/16/2019 - 11/17/2019	0.12	1	
360	M2	11/16/2019 - 11/17/2019	0.12	1	
361	M3	11/16/2019 - 11/17/2019	0.12	1	
362	M4	11/16/2019 - 11/17/2019	0.14	1	
363	M5	11/16/2019 - 11/17/2019	0.81	1	
364	R1	11/19/2019 - 11/20/2019	0.2	1	
365	R2	11/19/2019 - 11/20/2019	0.28	1	
366	V1	11/19/2019 - 11/20/2019	0.21	1	
367	V2	11/19/2019 - 11/20/2019			"invalid"
368	V3	11/19/2019 - 11/20/2019	0.19	1	
369	V4	11/19/2019 - 11/20/2019	0.16	1	
370	V5	11/19/2019 - 11/20/2019	0.11	1	
371	M1	11/19/2019 - 11/20/2019	0.13	1	
372	M2	11/19/2019 - 11/20/2019	0.2	1	
373	M3	11/19/2019 - 11/20/2019	0.07	1	
374	M4	11/19/2019 - 11/20/2019	0.53	1	
375	M5	11/19/2019 - 11/20/2019	0.1	1	
376	R1	11/22/2019 - 11/23/2019	0.17	1	
377	R2	11/22/2019 - 11/23/2019	0.18	1	
378	V1	11/22/2019 - 11/23/2019	0.4	1	
379	V2	11/22/2019 - 11/23/2019	0.23	1	
380	V3	11/22/2019 - 11/23/2019	0.05	1	
381	V4	11/22/2019 - 11/23/2019	0.36	1	
382	V5	11/22/2019 - 11/23/2019	0.2	1	
383	M1	11/22/2019 - 11/23/2019	0.29	1	
384	M2	11/22/2019 - 11/23/2019	0.62	1	
385	M3	11/22/2019 - 11/23/2019	0.16	1	
386	M4	11/22/2019 - 11/23/2019	0.32	1	
387	M5	11/22/2019 - 11/23/2019	0.16	1	

	A	B	C	D	E
388	R1	11/25/2019 - 11/26/2019	0.17	1	
389	R2	11/25/2019 - 11/26/2019	0.24	1	
390	V1	11/25/2019 - 11/26/2019	0.15	1	
391	V2	11/25/2019 - 11/26/2019	0.36	1	
392	V3	11/25/2019 - 11/26/2019	0.29	1	
393	V4	11/25/2019 - 11/26/2019	0.13	1	
394	V5	11/25/2019 - 11/26/2019	0.14	1	
395	M1	11/25/2019 - 11/26/2019	0.32	1	
396	M2	11/25/2019 - 11/26/2019	0.24	1	
397	M3	11/25/2019 - 11/26/2019	0.2	1	
398	M4	11/25/2019 - 11/26/2019	0.61	1	
399	M5	11/25/2019 - 11/26/2019	0.27	1	
400	R1	11/28/2019 - 11/29/2019	0.24	1	
401	R2	11/28/2019 - 11/29/2019	0.24	1	
402	V1	11/28/2019 - 11/29/2019	0.08	1	
403	V2	11/28/2019 - 11/29/2019	0.09	1	
404	V3	11/28/2019 - 11/29/2019	1.28	1	
405	V4	11/28/2019 - 11/29/2019	0.29	1	
406	V5	11/28/2019 - 11/29/2019	0.24	1	
407	M1	11/28/2019 - 11/29/2019	0.08	1	
408	M2	11/28/2019 - 11/29/2019	0.09	1	
409	M3	11/28/2019 - 11/29/2019	0.07	1	
410	M4	11/28/2019 - 11/29/2019	0.08	1	
411	M5	11/28/2019 - 11/29/2019	0.21	1	
412	R1	12/01/2019 - 12/02/2019	0.13	1	
413	R2	12/01/2019 - 12/02/2019	0.12	1	
414	V1	12/01/2019 - 12/02/2019	0.08	1	
415	V2	12/01/2019 - 12/02/2019	0.14	1	
416	V3	12/01/2019 - 12/02/2019	0.23	1	
417	V4	12/01/2019 - 12/02/2019	0.13	1	
418	V5	12/01/2019 - 12/02/2019	0.13	1	
419	M1	12/01/2019 - 12/02/2019	0.08	1	
420	M2	12/01/2019 - 12/02/2019	0.09	1	
421	M3	12/01/2019 - 12/02/2019	0.19	1	
422	M4	12/01/2019 - 12/02/2019	0.24	1	
423	M5	12/01/2019 - 12/02/2019	0.2	1	
424	R1	12/04/2019 - 12/05/2019	0.21	1	
425	R2	12/04/2019 - 12/05/2019	0.06	1	
426	V1	12/04/2019 - 12/05/2019	0.23	1	
427	V2	12/04/2019 - 12/05/2019	0.84	1	

	A	B	C	D	E
428	V3	12/04/2019 - 12/05/2019	0.18	1	
429	V4	12/04/2019 - 12/05/2019	0.08	1	
430	V5	12/04/2019 - 12/05/2019	0.12	1	
431	M1	12/04/2019 - 12/05/2019	1.03	1	
432	M2	12/04/2019 - 12/05/2019	0.21	1	
433	M3	12/04/2019 - 12/05/2019	0.1	1	
434	M4	12/04/2019 - 12/05/2019	0.52	1	
435	M5	12/04/2019 - 12/05/2019	0.14	1	
436	R1	12/07/2019 - 12/08/2019	0.13	1	
437	R2	12/07/2019 - 12/08/2019	0.07	1	
438	V1	12/07/2019 - 12/08/2019	0.11	1	
439	V2	12/07/2019 - 12/08/2019	0.16	1	
440	V3	12/07/2019 - 12/08/2019	0.17	1	
441	V4	12/07/2019 - 12/08/2019	0.16	1	
442	V5	12/07/2019 - 12/08/2019	0.07	1	
443	M1	12/07/2019 - 12/08/2019	0.12	1	
444	M2	12/07/2019 - 12/08/2019	0.14	1	
445	M3	12/07/2019 - 12/08/2019	0.09	1	
446	M4	12/07/2019 - 12/08/2019	0.08	1	
447	M5	12/07/2019 - 12/08/2019	0.15	1	
448	R1	12/10/2019 - 12/11/2019	0.07	1	
449	R2	12/10/2019 - 12/11/2019	0.04	1	
450	V1	12/10/2019 - 12/11/2019	0.06	1	
451	V2	12/10/2019 - 12/11/2019	0.56	1	
452	V3	12/10/2019 - 12/11/2019	0.15	1	
453	V4	12/10/2019 - 12/11/2019	0.09	1	
454	V5	12/10/2019 - 12/11/2019	0.13	1	
455	M1	12/10/2019 - 12/11/2019	0.06	1	
456	M2	12/10/2019 - 12/11/2019	0.09	1	
457	M3	12/10/2019 - 12/11/2019	0.12	1	
458	M4	12/10/2019 - 12/11/2019	0.75	1	
459	M5	12/10/2019 - 12/11/2019	0.03	1	
460	R1	12/13/2019 - 12/14/2019	0.09	1	
461	R2	12/13/2019 - 12/14/2019	0.12	1	
462	V1	12/13/2019 - 12/14/2019	0.09	1	
463	V2	12/13/2019 - 12/14/2019	0.08	1	
464	V3	12/13/2019 - 12/14/2019			"invalid"
465	V4	12/13/2019 - 12/14/2019	0.1	1	
466	V5	12/13/2019 - 12/14/2019	0.08	1	
467	M1	12/13/2019 - 12/14/2019	0.13	1	

	A	B	C	D	E
468	M2	12/13/2019 - 12/14/2019	0.07	1	
469	M3	12/13/2019 - 12/14/2019	0.21	1	
470	M4	12/13/2019 - 12/14/2019	0.17	1	
471	M5	12/13/2019 - 12/14/2019	0.14	1	
472	R1	12/16/2019 - 12/17/2019	0.15	1	
473	R2	12/16/2019 - 12/17/2019	0.17	1	
474	V1	12/16/2019 - 12/17/2019	0.06	1	
475	V2	12/16/2019 - 12/17/2019	0.19	1	
476	V3	12/16/2019 - 12/17/2019	0.21	1	
477	V4	12/16/2019 - 12/17/2019	0.06	1	
478	V5	12/16/2019 - 12/17/2019	0.13	1	
479	M1	12/16/2019 - 12/17/2019	0.06	1	
480	M2	12/16/2019 - 12/17/2019	0.15	1	
481	M3	12/16/2019 - 12/17/2019	0.12	1	
482	M4	12/16/2019 - 12/17/2019	0.05	1	
483	M5	12/16/2019 - 12/17/2019	0.24	1	
484	R1	12/19/2019 - 12/20/2019	0.21	1	
485	R2	12/19/2019 - 12/20/2019	0.07	1	
486	V1	12/19/2019 - 12/20/2019	0.2	1	
487	V2	12/19/2019 - 12/20/2019	0.13	1	
488	V3	12/19/2019 - 12/20/2019	0.11	1	
489	V4	12/19/2019 - 12/20/2019	0.15	1	
490	V5	12/19/2019 - 12/20/2019	0.09	1	
491	M1	12/19/2019 - 12/20/2019	0.24	1	
492	M2	12/19/2019 - 12/20/2019	0.14	1	
493	M3	12/19/2019 - 12/20/2019	0.27	1	
494	M4	12/19/2019 - 12/20/2019	0.24	1	
495	M5	12/19/2019 - 12/20/2019	0.13	1	
496	R1	12/22/2019 - 12/23/2019	0.16	1	
497	R2	12/22/2019 - 12/23/2019	0.06	1	
498	V1	12/22/2019 - 12/23/2019	0.23	1	
499	V2	12/22/2019 - 12/23/2019	0.06	1	
500	V3	12/22/2019 - 12/23/2019	0.08	1	
501	V4	12/22/2019 - 12/23/2019	0.08	1	
502	V5	12/22/2019 - 12/23/2019	0.04	1	
503	M1	12/22/2019 - 12/23/2019	0.19	1	
504	M2	12/22/2019 - 12/23/2019	0.11	1	
505	M3	12/22/2019 - 12/23/2019	0.13	1	
506	M4	12/22/2019 - 12/23/2019	0.17	1	
507	M5	12/22/2019 - 12/23/2019	0.2	1	

	A	B	C	D	E
508	R1	12/25/2019 - 12/26/2019	0.23	1	
509	R2	12/25/2019 - 12/26/2019	0.18	1	
510	V1	12/25/2019 - 12/26/2019	0.2	1	
511	V2	12/25/2019 - 12/26/2019	0.17	1	
512	V3	12/25/2019 - 12/26/2019	0.22	1	
513	V4	12/25/2019 - 12/26/2019	0.06	1	
514	V5	12/25/2019 - 12/26/2019	0.42	1	
515	M1	12/25/2019 - 12/26/2019	0.08	1	
516	M2	12/25/2019 - 12/26/2019	0.16	1	
517	M3	12/25/2019 - 12/26/2019	0.09	1	
518	M4	12/25/2019 - 12/26/2019	0.2	1	
519	M5	12/25/2019 - 12/26/2019	0.24	1	
520	WILLOWBROOK, IL				VH = Willowbrook Village Hall
521	VH	11/13/2018			invalid on data sheet
522	VH	11/16/2018	0.824	1	
523	VH	11/19/2018	6.11	1	
524	VH	11/23/2018	0.284	1	
525	VH	11/25/2018	4.10	1	
526	VH	11/28/2018	1.83	1	
527	VH	12/1/2018	1.68	1	
528	VH	12/6/2018	5.39	1	
529	VH	12/7/2018	0.737	1	
530	VH	12/10/2018	0.300	1	
531	VH	12/13/2018	2.04	1	
532	VH	12/16/2018	0.871	1	
533	VH	12/19/2018	0.521	1	
534	VH	12/22/2018	0.981	1	
535	VH	12/26/2018	10.8	1	
536	VH	12/28/2018	0.672	1	
537	VH	1/2/2019	0.251	1	
538	VH	1/3/2019	0.372	1	
539	VH	1/6/2019	7.59	1	
540	VH	1/9/2019	3.81	1	
541	VH	1/12/2019	1.57	1	
542	VH	1/15/2019	0.672	1	
543	VH	1/17/2019	0.517	1	"Trans -2- butene detected although [] is too low to quantify"
544	VH	1/22/2019	1.51	1	
545	VH	1/24/2019	0.262	1	
546	VH	1/27/2019	19.3	1	
547	VH	2/1/2019	0.954	1	"Trans -2- butene detected although [] is too low to quantify"

	A	B	C	D	E
548	VH	2/2/2019	0.383	1	
549	VH	2/5/2019	17.3	1	
550	VH	2/8/2019	0.725	1	
551	VH	2/11/2019	3.98	1	
552	VH	2/14/2019	0.178	1	
553	VH - 2	11/13/2018			VH - 2 = Willowbrook Village Hall 2
554	VH - 2	11/16/2018			'spaces left blank were '-' from the data set' **ATTN**
555	VH - 2	11/19/2018	6.31	1	
556	VH - 2	11/23/2018			
557	VH - 2	11/25/2018			
558	VH - 2	11/28/2018			
559	VH - 2	12/1/2018	1.90	1	
560	VH - 2	12/6/2018			
561	VH - 2	12/7/2018	0.822	1	
562	VH - 2	12/10/2018			
563	VH - 2	12/13/2018	2.13	1	
564	VH - 2	12/16/2018			
565	VH - 2	12/19/2018	0.338	1	
566	VH - 2	12/22/2018			
567	VH - 2	12/26/2018	10.5	1	
568	VH - 2	12/28/2018			
569	VH - 2	1/2/2019			
570	VH - 2	1/3/2019	0.257	1	
571	VH - 2	1/6/2019	6.62	1	
572	VH - 2	1/9/2019			
573	VH - 2	1/12/2019	1.65	1	
574	VH - 2	1/15/2019			
575	VH - 2	1/17/2019	0.591	1	"Trans -2- butene detected although [] is too low to quantify"
576	VH - 2	1/22/2019			
577	VH - 2	1/24/2019	0.158	1	
578	VH - 2	1/27/2019			
579	VH - 2	2/1/2019	0.882	1	"Trans -2- butene detected although [] is too low to quantify"
580	VH - 2	2/2/2019			
581	VH - 2	2/5/2019	15.6	1	
582	VH - 2	2/8/2019			
583	VH - 2	2/11/2019	4.72	1	
584	VH - 2	2/14/2019			
585	EPA	11/13/2018	2.37	1	EPA = EPA Willowbrook Warehouse
586	EPA	11/16/2018	1.81	1	
587	EPA	11/19/2018	6.62	1	

	A	B	C	D	E
588	EPA	11/23/2018	0.180	1	
589	EPA	11/25/2018			invalid on data sheet
590	EPA	11/28/2018	0.248	1	
591	EPA	12/1/2018	0.456	1	
592	EPA	12/6/2018	11.7	1	
593	EPA	12/7/2018	2.26	1	
594	EPA	12/10/2018	0.269	1	
595	EPA	12/13/2018	0.436	1	
596	EPA	12/16/2018	2.11	1	
597	EPA	12/19/2018	0.345	1	
598	EPA	12/22/2018	3.09	1	
599	EPA	12/26/2018			invalid on data sheet
600	EPA	12/28/2018	1.42	1	
601	EPA	1/2/2019	0.237	1	
602	EPA	1/3/2019	0.082	0	
603	EPA	1/6/2019	0.082	0	
604	EPA	1/9/2019			
605	EPA	1/12/2019	0.082	0	
606	EPA	1/15/2019	14.2	1	
607	EPA	1/17/2019	13.1	1	
608	EPA	1/22/2019	4.10	1	
609	EPA	1/24/2019	0.280	1	
610	EPA	1/27/2019	1.11	1	
611	EPA	2/1/2019	0.133	1	
612	EPA	2/2/2019	0.228	1	
613	EPA	2/5/2019	26.4	1	
614	EPA	2/8/2019	5.04	1	
615	EPA	2/11/2019	0.082	0	
616	EPA	2/14/2019	0.745	1	"Trans -2- butene detected although [] is too low to quantify"
617	EPA - 2	11/13/2018			EPA - 2 = EPA Willowbrook Warehouse 2
618	EPA - 2	11/16/2018	1.81	1	
619	EPA - 2	11/19/2018			
620	EPA - 2	11/23/2018			invalid on data sheet
621	EPA - 2	11/25/2018			invalid on data sheet
622	EPA - 2	11/28/2018	1.14	1	
623	EPA - 2	12/1/2018			
624	EPA - 2	12/6/2018	10.5	1	
625	EPA - 2	12/7/2018			
626	EPA - 2	12/10/2018	0.403	1	
627	EPA - 2	12/13/2018			

	A	B	C	D	E
628	EPA - 2	12/16/2018	2.19	1	
629	EPA - 2	12/19/2018			
630	EPA - 2	12/22/2018	2.57	1	
631	EPA - 2	12/26/2018			
632	EPA - 2	12/28/2018	1.19	1	
633	EPA - 2	1/2/2019	0.396	1	
634	EPA - 2	1/3/2019			
635	EPA - 2	1/6/2019			
636	EPA - 2	1/9/2019	0.685	1	
637	EPA - 2	1/12/2019			
638	EPA - 2	1/15/2019	14.3	1	
639	EPA - 2	1/17/2019			
640	EPA - 2	1/22/2019	4.05	1	
641	EPA - 2	1/24/2019			
642	EPA - 2	1/27/2019	1.26	1	
643	EPA - 2	2/1/2019			
644	EPA - 2	2/2/2019	0.251	1	
645	EPA - 2	2/5/2019			
646	EPA - 2	2/8/2019	4.3	1	
647	EPA - 2	2/11/2019			
648	EPA - 2	2/14/2019	0.609	1	"Trans -2- butene detected although [] is too low to quantify"
649	GMS	11/13/2018			GMS = Gower Middle School
650	GMS	11/16/2018			
651	GMS	11/19/2018	0.155	1	
652	GMS	11/23/2018	0.197	1	
653	GMS	11/25/2018	0.360	1	
654	GMS	11/28/2018	0.656	1	
655	GMS	12/1/2018	0.140	1	
656	GMS	12/6/2018	0.605	1	
657	GMS	12/7/2018	0.112	1	
658	GMS	12/10/2018	0.082	0	
659	GMS	12/13/2018	0.255	1	
660	GMS	12/16/2018	0.593	1	
661	GMS	12/19/2018	0.360	1	
662	GMS	12/22/2018	0.522	1	
663	GMS	12/26/2018	0.082	0	
664	GMS	12/28/2018	0.175	1	
665	GMS	1/2/2019	0.082	0	
666	GMS	1/3/2019	0.082	0	
667	GMS	1/6/2019	0.082	0	

	A	B	C	D	E
668	GMS	1/9/2019	0.354	1	
669	GMS	1/12/2019	0.082	0	
670	GMS	1/15/2019	0.918	1	
671	GMS	1/17/2019	1.66	1	
672	GMS	1/22/2019	0.349	1	
673	GMS	1/24/2019	0.077	1	
674	GMS	1/27/2019	0.155	1	
675	GMS	2/1/2019	0.101	1	
676	GMS	2/2/2019	0.371	1	
677	GMS	2/5/2019	3.29	1	
678	GMS	2/8/2019	0.439	1	
679	GMS	2/11/2019	0.114	1	
680	GMS	2/14/2019	0.286	1	
681	WN	11/13/2018			WN = West Neighborhood
682	WN	11/16/2018			
683	WN	11/19/2018	0.125	1	
684	WN	11/23/2018	0.205	1	
685	WN	11/25/2018	0.261	1	
686	WN	11/28/2018	0.082	0	
687	WN	12/1/2018	0.084	1	"Trans -2- butene detected although [] is too low to quantify"
688	WN	12/6/2018	0.254	1	
689	WN	12/7/2018	0.082	0	
690	WN	12/10/2018	0.213	1	
691	WN	12/13/2018	1.06	1	
692	WN	12/16/2018	0.604	1	
693	WN	12/19/2018	0.197	1	
694	WN	12/22/2018	0.235	1	
695	WN	12/26/2018	1.17	1	
696	WN	12/28/2018	0.082	0	
697	WN	1/2/2019	0.082	0	
698	WN	1/3/2019	0.082	0	
699	WN	1/6/2019	1.56	1	
700	WN	1/9/2019	0.115	1	
701	WN	1/12/2019	0.727	1	
702	WN	1/15/2019	0.119	1	
703	WN	1/17/2019	0.151	1	
704	WN	1/22/2019	1.07	1	"Trans -2- butene detected although [] is too low to quantify"
705	WN	1/24/2019	0.060	1	
706	WN	1/27/2019	1.65	1	
707	WN	2/1/2019	0.129	1	

	A	B	C	D	E
708	WN	2/2/2019	0.160	1	
709	WN	2/5/2019	5.35	1	
710	WN	2/8/2019	0.275	1	
711	WN	2/11/2019	1.32	1	"Trans -2- butene detected although [] is too low to quantify"
712	WN	2/14/2019	0.082	0	
713	WT	11/13/2018			WT = Water Tower
714	WT	11/16/2018			
715	WT	11/19/2018	0.246	1	
716	WT	11/23/2018	0.893	1	
717	WT	11/25/2018			
718	WT	11/28/2018	0.699	1	
719	WT	12/1/2018	0.082	0	
720	WT	12/6/2018	0.389	1	
721	WT	12/7/2018	0.273	1	
722	WT	12/10/2018	0.248	1	
723	WT	12/13/2018	0.211	1	
724	WT	12/16/2018	0.535	1	
725	WT	12/19/2018	1.67	1	
726	WT	12/22/2018	0.441	1	
727	WT	12/26/2018	0.151	1	
728	WT	12/28/2018			
729	WT	1/2/2019	0.082	0	
730	WT	1/3/2019	0.082	0	
731	WT	1/6/2019	0.082	0	
732	WT	1/9/2019	0.082	0	
733	WT	1/12/2019	0.307	1	
734	WT	1/15/2019	0.082	0	
735	WT	1/17/2019	0.317	1	
736	WT	1/22/2019	10.8	1	
737	WT	1/24/2019	0.082	1	**this value was from data set-
738	WT	1/27/2019	1.75	1	
739	WT	2/1/2019	9.49	1	
740	WT	2/2/2019	7.48	1	
741	WT	2/5/2019	0.208	1	
742	WT	2/8/2019	0.233	1	
743	WT	2/11/2019	0.082	0	
744	WT	2/14/2019	0.495	1	
745	WPP	11/13/2018			WPP = Willow Pond Park
746	WPP	11/16/2018			
747	WPP	11/19/2018	0.105	1	

	A	B	C	D	E
748	WPP	11/23/2018	0.286	1	
749	WPP	11/25/2018	0.345	1	
750	WPP	11/28/2018	0.455	1	
751	WPP	12/1/2018	0.211	1	
752	WPP	12/6/2018	0.082	0	
753	WPP	12/7/2018	0.403	1	
754	WPP	12/10/2018	0.082	0	
755	WPP	12/13/2018	0.365	1	
756	WPP	12/16/2018	0.334	1	
757	WPP	12/19/2018	0.546	1	
758	WPP	12/22/2018	0.116	1	
759	WPP	12/26/2018	0.166	1	
760	WPP	12/28/2018	0.082	0	
761	WPP	1/2/2019	0.217	1	
762	WPP	1/3/2019	0.082	0	
763	WPP	1/6/2019	0.082	0	
764	WPP	1/9/2019	0.219	1	
765	WPP	1/12/2019	0.082	0	
766	WPP	1/15/2019	0.107	1	
767	WPP	1/17/2019	0.144	1	
768	WPP	1/22/2019	2.21	1	
769	WPP	1/24/2019	0.114	1	
770	WPP	1/27/2019	0.813	1	
771	WPP	2/1/2019	3.71	1	
772	WPP	2/2/2019	1.40	1	
773	WPP	2/5/2019	0.174	1	
774	WPP	2/8/2019	0.213	1	
775	WPP	2/11/2019	0.089	1	
776	WPP	2/14/2019	0.244	1	
777	HSHS	11/13/2018			HSHS = Hinsdale South High School
778	HSHS	11/16/2018			
779	HSHS	11/19/2018	0.253	1	
780	HSHS	11/23/2018			
781	HSHS	11/25/2018	0.665	1	
782	HSHS	11/28/2018	0.376	1	
783	HSHS	12/1/2018	0.629	1	"Trans -2- butene detected although [] is too low to quantify"
784	HSHS	12/6/2018	0.486	1	
785	HSHS	12/7/2018	0.082	0	
786	HSHS	12/10/2018	0.213	1	
787	HSHS	12/13/2018	0.244	1	

	A	B	C	D	E
788	HSHS	12/16/2018	0.511	1	
789	HSHS	12/19/2018	0.267	1	
790	HSHS	12/22/2018	0.376	1	
791	HSHS	12/26/2018	0.566	1	
792	HSHS	12/28/2018	0.264	1	
793	HSHS	1/2/2019	0.082	0	
794	HSHS	1/3/2019	0.428	1	
795	HSHS	1/6/2019	0.249	1	
796	HSHS	1/9/2019	0.295	1	
797	HSHS	1/12/2019	0.264	1	
798	HSHS	1/15/2019	0.239	1	
799	HSHS	1/17/2019	0.134	1	
800	HSHS	1/22/2019	0.349	1	
801	HSHS	1/24/2019	0.082	0	
802	HSHS	1/27/2019	3.29	1	
803	HSHS	2/1/2019	0.322	1	
804	HSHS	2/2/2019	0.131	1	
805	HSHS	2/5/2019	0.237	1	
806	HSHS	2/8/2019	0.347	1	
807	HSHS	2/11/2019	0.309	1	
808	HSHS	2/14/2019	0.258	1	
809	GES	11/13/2018			GES = Gower Elementary Scho
810	GES	11/16/2018			
811	GES	11/19/2018	0.164	1	
812	GES	11/23/2018	0.202	1	
813	GES	11/25/2018	0.411	1	
814	GES	11/28/2018	0.474	1	
815	GES	12/1/2018	0.464	1	
816	GES	12/6/2018	0.082	0	
817	GES	12/7/2018	0.164	1	
818	GES	12/10/2018	0.138	1	
819	GES	12/13/2018	0.401	1	
820	GES	12/16/2018	0.732	1	
821	GES	12/19/2018	0.311	1	
822	GES	12/22/2018	0.360	1	
823	GES	12/26/2018	0.497	1	
824	GES	12/28/2018	0.133	1	
825	GES	1/2/2019	0.210	1	
826	GES	1/3/2019	0.633	1	
827	GES	1/6/2019	0.249	1	

	A	B	C	D	E
828	GES	1/9/2019			
829	GES	1/12/2019	0.237	1	
830	GES	1/15/2019	0.082	0	
831	GES	1/17/2019	0.082	0	
832	GES	1/22/2019	0.598	1	
833	GES	1/24/2019	0.095	1	
834	GES	1/27/2019	0.293	1	
835	GES	2/1/2019	0.157	1	
836	GES	2/2/2019	0.215	1	
837	GES	2/5/2019	1.38	1	"Trans -2- butene detected although [] is too low to quantify"
838	GES	2/8/2019	0.202	1	
839	GES	2/11/2019	0.398	1	"Trans -2- butene detected although [] is too low to quantify"
840	GES	2/14/2019	0.082	0	
841					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	UCL Statistics for Data Sets with Non-Detects													
2														
3	User Selected Options													
4	Date/Time of Computation	ProUCL 5.12/2/2020 11:09:32 AM												
5	From File	ProUCL Input File_QAQC NO PCLOSURE.xls												
6	Full Precision	OFF												
7	Confidence Coefficient	95%												
8	Number of Bootstrap Operations	2000												
9														
10	ETO (ug/m3)													
11														
12	General Statistics													
13	Total Number of Observations	757					Number of Distinct Observations	347						
14							Number of Missing Observations	82						
15	Number of Detects	649					Number of Non-Detects	108						
16	Number of Distinct Detects	343					Number of Distinct Non-Detects	5						
17	Minimum Detect	0.03					Minimum Non-Detect	0.045						
18	Maximum Detect	26.4					Maximum Non-Detect	0.082						
19	Variance Detects	5.53					Percent Non-Detects	14.27%						
20	Mean Detects	0.993					SD Detects	2.352						
21	Median Detects	0.269					CV Detects	2.367						
22	Skewness Detects	5.435					Kurtosis Detects	38.04						
23	Mean of Logged Detects	-1.033					SD of Logged Detects	1.247						
24														
25	Normal GOF Test on Detects Only													
26	Shapiro Wilk Test Statistic	0.416					Normal GOF Test on Detected Observations Only							
27	5% Shapiro Wilk P Value	0					Detected Data Not Normal at 5% Significance Level							
28	Lilliefors Test Statistic	0.341					Lilliefors GOF Test							
29	5% Lilliefors Critical Value	0.0351					Detected Data Not Normal at 5% Significance Level							
30	Detected Data Not Normal at 5% Significance Level													
31														
32	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs													
33	KM Mean	0.857					KM Standard Error of Mean	0.0801						
34	KM SD	2.201					95% KM (BCA) UCL	1.003						
35	95% KM (t) UCL	0.989					95% KM (Percentile Bootstrap) UCL	0.996						
36	95% KM (z) UCL	0.989					95% KM Bootstrap t UCL	1.009						
37	90% KM Chebyshev UCL	1.098					95% KM Chebyshev UCL	1.206						
38	97.5% KM Chebyshev UCL	1.357					99% KM Chebyshev UCL	1.654						
39														
40	Gamma GOF Tests on Detected Observations Only													
41	A-D Test Statistic	47.8					Anderson-Darling GOF Test							
42	5% A-D Critical Value	0.812					Detected Data Not Gamma Distributed at 5% Significance Level							
43	K-S Test Statistic	0.204					Kolmogorov-Smirnov GOF							
44	5% K-S Critical Value	0.0388					Detected Data Not Gamma Distributed at 5% Significance Level							
45	Detected Data Not Gamma Distributed at 5% Significance Level													
46														
47	Gamma Statistics on Detected Data Only													
48	k hat (MLE)	0.602					k star (bias corrected MLE)	0.6						
49	Theta hat (MLE)	1.651					Theta star (bias corrected MLE)	1.656						
50	nu hat (MLE)	781					nu star (bias corrected)	778.7						
51	Mean (detects)	0.993												
52														

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
53	Gamma ROS Statistics using Imputed Non-Detects													
54	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs													
55	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)													
56	For such situations, GROS method may yield incorrect values of UCLs and BTVs													
57	This is especially true when the sample size is small.													
58	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates													
59	Minimum				0.01				Mean				0.853	
60	Maximum				26.4				Median				0.22	
61	SD				2.204				CV				2.584	
62	k hat (MLE)				0.464				k star (bias corrected MLE)				0.463	
63	Theta hat (MLE)				1.837				Theta star (bias corrected MLE)				1.841	
64	nu hat (MLE)				703				nu star (bias corrected)				701.5	
65	Adjusted Level of Significance (β)				0.0497									
66	Approximate Chi Square Value (701.53, α)				641.1				Adjusted Chi Square Value (701.53, β)				641	
67	95% Gamma Approximate UCL (use when $n \geq 50$)				0.934				95% Gamma Adjusted UCL (use when $n < 50$)				0.934	
68														
69	Estimates of Gamma Parameters using KM Estimates													
70	Mean (KM)				0.857				SD (KM)				2.201	
71	Variance (KM)				4.845				SE of Mean (KM)				0.0801	
72	k hat (KM)				0.152				k star (KM)				0.152	
73	nu hat (KM)				229.7				nu star (KM)				230.1	
74	theta hat (KM)				5.651				theta star (KM)				5.64	
75	80% gamma percentile (KM)				0.944				90% gamma percentile (KM)				2.547	
76	95% gamma percentile (KM)				4.707				99% gamma percentile (KM)				10.96	
77														
78	Gamma Kaplan-Meier (KM) Statistics													
79	Approximate Chi Square Value (230.15, α)				196				Adjusted Chi Square Value (230.15, β)				196	
80	95% Gamma Approximate KM-UCL (use when $n \geq 50$)				1.007				95% Gamma Adjusted KM-UCL (use when $n < 50$)				1.007	
81														
82	Lognormal GOF Test on Detected Observations Only													
83	Shapiro Wilk Approximate Test Statistic				0.93				Shapiro Wilk GOF Test					
84	5% Shapiro Wilk P Value				0				Detected Data Not Lognormal at 5% Significance Level					
85	Lilliefors Test Statistic				0.102				Lilliefors GOF Test					
86	5% Lilliefors Critical Value				0.0351				Detected Data Not Lognormal at 5% Significance Level					
87	Detected Data Not Lognormal at 5% Significance Level													
88														
89	Lognormal ROS Statistics Using Imputed Non-Detects													
90	Mean in Original Scale				0.856				Mean in Log Scale				-1.412	
91	SD in Original Scale				2.203				SD in Log Scale				1.501	
92	95% t UCL (assumes normality of ROS data)				0.988				95% Percentile Bootstrap UCL				0.99	
93	95% BCA Bootstrap UCL				1.014				95% Bootstrap t UCL				1.014	
94	95% H-UCL (Log ROS)				0.863									
95														
96	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution													
97	KM Mean (logged)				-1.351				KM Geo Mean				0.259	
98	KM SD (logged)				1.397				95% Critical H Value (KM-Log)				2.428	
99	KM Standard Error of Mean (logged)				0.0515				95% H-UCL (KM -Log)				0.777	
100	KM SD (logged)				1.397				95% Critical H Value (KM-Log)				2.428	
101	KM Standard Error of Mean (logged)				0.0515									
102														
103	DL/2 Statistics													
104	DL/2 Normal						DL/2 Log-Transformed							
105	Mean in Original Scale				0.856				Mean in Log Scale				-1.389	
106	SD in Original Scale				2.203				SD in Log Scale				1.451	
107	95% t UCL (Assumes normality)				0.988				95% H-Stat UCL				0.815	
108	DL/2 is not a recommended method, provided for comparisons and historical reasons													
109														

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
110	Nonparametric Distribution Free UCL Statistics													
111	Data do not follow a Discernible Distribution at 5% Significance Level													
112														
113	Suggested UCL to Use													
114	95% KM (Chebyshev) UCL		1.206										TCEQ IURF	EPA IURF
115													1.723E-06	6.03E-03
116	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.													
117	Recommendations are based upon data size, data distribution, and skewness.													
118	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).													
119	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.													
120														

ATTACHMENT 2: RISK ASSESSMENT INPUTS AND CALCULATIONS