

5. *APPENDIX*

Appendix A: Sample Calculations

Appendix B: Field Data and Parameters

Appendix C: QA/QC Data

Appendix D: Laboratory Data

Appendix E: Meteorological Data

APPENDIX A: SAMPLE CALCS

TO-13A

Sampling Flow Rate - High Volume Sampler (TE-1000)

$$Q = \frac{\sqrt{G\left(\frac{P}{760}\right)\left(\frac{298}{T}\right)} - b}{m}$$

Where:

m	=	Slope	=	
G	=	Average Magnehelic Gauge Reading	=	inches
T	=	Average Sample Temperature	=	°C
P	=	Average Sample Barometric Pressure	=	mmHG
b	=	Intercept	=	
Q	=	Flow Rate	=	scm/min

TO-15

Compound Concentration

$$C_x = \frac{A_x C_{is} DF}{A_{is} RRF}$$

Where:

A _x	=	Area of the characteristic ion for the compound to be measured	=	counts
A _{is}	=	Area of the characteristic ion for the specific internal standard	=	counts
C _{is}	=	Concentration of the internal standard spiking mixture	=	ppbv
RRF	=	Mean relative response factor from the initial calibration	=	
DF	=	Dilution factor calculated, if no dilution is performed DF=1	=	
C _x	=	Compound Concentration	=	ppbv

M325B

Relative Percent Difference

$$RPD = \frac{R_1 - R_2}{\left[\frac{(R_1 + R_2)}{2}\right]} * 100$$

Where:

R ₁ , R ₂	=	Values that are being compared	=	
RPD	=	Relative percent difference	=	%

Equivalent Concentrations of Compounds in Atmospheres

$$C_c = \frac{(m_{meas}) * 10^6}{U_{NTP} * \left[\frac{t_{ss}}{298.15}\right]^{\frac{1}{2}} * t}$$

Where:

m _{meas}	=	Mass of the compound as measured in the sorbent tube	=	µg
t	=	Exposure time	=	minutes
t _{ss}	=	Average temperature during the collection period at sampling site	=	K
U _{NTP}	=	Method defined diffusive uptake rate (sampling rate)	=	mL/min
C _c	=	Equivalent Concentrations of Compounds in Atmospheres	=	

Background corrected fenceline concentration

$$\Delta C_i = MFC_i - UB$$

Where:

MFC _i	=	Measured fenceline concentration at measurement location i	=	µg/m ³
UB	=	The uniform background concentration	=	µg/m ³
ΔC _i	=	The fenceline concentration, corrected for background, at measurement location i	=	µg/m ³

APPENDIX B: FIELD DATA AND PARAMETERS

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Carbopack X Tube ID	Notes
1	R01_24	10/19/2022	9:19	11/7/2022	11:59	S24	1188598	
2	R01_23	10/19/2022	9:32	11/7/2022	11:53	S23	1188581	
3	R01_22	10/19/2022	9:38	11/7/2022	11:48	S22	1188578	
4	R01_21	10/19/2022	10:01	11/7/2022	11:41	S21	1188577	
5	R01_01	10/19/2022	10:11	11/7/2022	9:16	S01	1188436	
6	R01_01_D	10/19/2022	10:11	11/7/2022	9:16	S01	1188437	
7	R01_02	10/19/2022	10:22	11/7/2022	9:33	S02	1188448	
8	R01_02_B	10/19/2022	10:22	11/7/2022	9:33	S02	1188447	
9	R01_03	10/19/2022	10:27	11/7/2022	9:40	S03	1188450	
10	R01_04	10/19/2022	10:30	11/7/2022	9:45	S04	1188451	
11	R01_05	10/19/2022	10:35	11/7/2022	9:53	S05	1188452	
12	R01_06	10/19/2022	11:18	11/7/2022	10:03	S06	1188454	
13	R01_07	10/19/2022	11:30	11/7/2022	10:12	S07	1188457	
14	R01_12	10/19/2022	12:10	11/7/2022	10:25	S12	1188494	
15	R01_12_B	10/19/2022	12:10	11/7/2022	10:25	S12	1188532	
16	R01_11	10/19/2022	12:20	11/7/2022	10:36	S11	1188488	
17	R01_10	10/19/2022	12:24	11/7/2022	10:41	S10	1188484	
18	R01_13_D	10/19/2022	12:31	11/7/2022	10:53	S13	1188514	
19	R01_13	10/19/2022	12:31	11/7/2022	10:53	S13	1188513	
20	R01_14	10/19/2022	12:37	11/7/2022	11:10	S14	1188535	
21	R01_15	10/19/2022	12:43	11/7/2022	11:15	S15	1188547	
22	R01_16	10/19/2022	12:46	11/7/2022	11:18	S16	1188549	
23	R01_18	10/19/2022	12:50	11/7/2022	11:24	S18	1188562	
24	R01_19	10/19/2022	12:54	11/7/2022	11:29	S19	1188567	
25	R01_20	10/19/2022	12:57	11/7/2022	11:34	S20	1188574	
26	R01_17	10/19/2022	13:28	11/7/2022	12:11	S17	1188559	
27	R01_08	10/19/2022	13:39	11/7/2022	12:22	S08	1188463	
28	R01_09	10/21/2022	11:29	11/7/2022	12:27	S09	1188482	
29	R02_01	11/7/2022	9:21	11/21/2022	11:07	S01	1185837	
30	R02_01_D	11/7/2022	9:21	11/21/2022	11:07	S01	1185859	
31	R02_02	11/7/2022	9:35	11/21/2022	11:19	S02	1185891	
32	R02_02_B	11/7/2022	9:35	11/21/2022	11:19	S02	1185891	
33	R02_03	11/7/2022	9:41	11/21/2022	11:25	S03	1185900	
34	R02_04	11/7/2022	9:46	11/21/2022	11:28	S04	1185907	
35	R02_05	11/7/2022	9:53	11/21/2022	11:41	S05	1185944	
36	R02_06	11/7/2022	10:03	11/21/2022	11:52	S06	1185971	
37	R02_07	11/7/2022	10:12	11/21/2022	11:59	S07	1186148	
38	R02_12	11/7/2022	10:27	11/21/2022	12:09	S12	1186340	
39	R02_12_B	11/7/2022	10:27	11/21/2022	12:09	S12	1186441	
40	R02_11	11/7/2022	10:37	11/21/2022	12:17	S11	1186341	
41	R02_10	11/7/2022	10:43	11/21/2022	12:22	S10	1186332	
42	R02_13	11/7/2022	10:55	11/21/2022	12:33	S13	1186394	
43	R02_13_D	11/7/2022	10:55	11/21/2022	12:33	S13	1186429	
44	R02_14	11/7/2022	11:11	11/21/2022	12:44	S14	1186459	
45	R02_15	11/7/2022	11:15	11/21/2022	12:48	S15	1186470	
46	R02_16	11/7/2022	11:19	11/21/2022	12:51	S16	1186474	

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Carbopack X Tube ID	Notes
47	R02_18	11/7/2022	11:25	11/21/2022	12:57	S18	1186510	
48	R02_19	11/7/2022	11:30	11/21/2022	13:01	S19	1186539	
49	R02_20	11/7/2022	11:35	11/21/2022	13:06	S20	1186558	
50	R02_21	11/7/2022	11:42	11/21/2022	13:12	S21	1188094	
51	R02_22	11/7/2022	11:48	11/21/2022	13:17	S22	1188140	
52	R02_23	11/7/2022	11:53	11/21/2022	13:21	S23	1188161	
53	R02_24	11/7/2022	12:00	11/21/2022	13:27	S24	1188210	
54	R02_17	11/7/2022	12:12	11/21/2022	13:43	S17	1188492	
55	R02_08	11/7/2022	12:23	11/21/2022	13:54	S08	1186229	
56	R02_09	11/7/2022	12:28	11/21/2022	13:59	S09	1186287	
57	R03_01	11/21/2022	11:08	12/6/2022	9:26	S01	1188072	
58	R03_01_D	11/21/2022	11:08	12/6/2022	9:26	S01	1188107	
59	R03_02	11/21/2022	11:21	12/6/2022	9:14	S02	1188122	
60	R03_02_B	11/21/2022	11:21	12/6/2022	9:14	S02	1188113	
61	R03_03	11/21/2022	11:26	12/6/2022	9:09	S03	1188127	
62	R03_04	11/21/2022	11:29	12/6/2022	9:05	S04	1188131	
63	R03_05	11/21/2022	11:43	12/6/2022	8:59	S05	1188132	
64	R03_06	11/21/2022	11:52	12/6/2022	8:45	S06	1188138	
65	R03_07	11/21/2022	12:00	12/6/2022	8:34	S07	1188139	
66	R03_12	11/21/2022	12:11	12/6/2022	10:44	S12	1188174	
67	R03_12_B	11/21/2022	12:11	12/6/2022	10:44	S12	1188189	
68	R03_11	11/21/2022	12:18	12/6/2022	10:53	S11	1188165	
69	R03_10	11/21/2022	12:24	12/6/2022	10:56	S10	1188164	
70	R03_13	11/21/2022	12:34	12/6/2022	10:37	S13	1188182	
71	R03_13_D	11/21/2022	12:36	12/6/2022	10:37	S13	1188187	
72	R03_14	11/21/2022	12:46	12/6/2022	10:32	S14	1188195	
73	R03_15	11/21/2022	12:50	12/6/2022	10:26	S15	1188199	
74	R03_16	11/21/2022	12:53	12/6/2022	10:20	S16	1188216	
75	R03_18	11/21/2022	12:58	12/6/2022	10:15	S18	1188222	
76	R03_19	11/21/2022	13:02	12/6/2022	10:11	S19	1188225	
77	R03_20	11/21/2022	13:07	12/6/2022	10:06	S20	1188232	
78	R03_21	11/21/2022	13:12	12/6/2022	10:02	S21	1188234	
79	R03_22	11/21/2022	13:17	12/6/2022	9:57	S22	1188238	
80	R03_23	11/21/2022	13:22	12/6/2022	9:51	S23	1188244	
81	R03_24	11/21/2022	13:28	12/6/2022	9:40	S24	1188246	
82	R03_17	11/21/2022	13:45	12/6/2022	11:24	S17	1188219	
83	R03_08	11/21/2022	13:55	12/6/2022	11:06	S08	1188146	
84	R03_09	11/21/2022	14:00	12/6/2022	11:12	S09	1188152	
85	R04_18	12/6/2022	10:15	12/19/2022	14:37	S18	1188562	
86	R04_06	12/6/2022	8:45	12/19/2022	13:27	S06	1188454	
87	R04_05	12/6/2022	8:59	12/19/2022	13:17	S05	1188452	
88	R04_04	12/6/2022	9:05	12/19/2022	13:10	S04	1188451	
89	R04_03	12/6/2022	9:09	12/19/2022	13:05	S03	1188450	
90	R04_02	12/6/2022	9:14	12/19/2022	12:57	S02	1188448	
91	R04_01	12/6/2022	9:26	12/19/2022	12:42	S01	1188436	
92	R04_24	12/6/2022	9:40	12/19/2022	15:11	S24	1188546	

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Carbopack X Tube ID	Notes
93	R04_23	12/6/2022	9:51	12/19/2022	15:06	S23	1188581	
94	R04_22	12/6/2022	9:57	12/19/2022	15:02	S22	1188578	
95	R04_21	12/6/2022	10:02	12/19/2022	14:55	S21	1188577	
96	R04_20	12/6/2022	10:06	12/19/2022	14:50	S20	1188574	
97	R04_16	12/6/2022	10:20	12/19/2022	14:31	S16	1188549	
98	R04_15	12/6/2022	10:26	12/19/2022	14:26	S15	1188547	
99	R04_14	12/6/2022	10:32	12/19/2022	14:22	S14	1188535	
100	R04_13	12/6/2022	10:37	12/19/2022	14:11	S13	1188514	
101	R04_12	12/6/2022	10:44	12/19/2022	13:47	S12	1188494	
102	R04_11	12/6/2022	10:53	12/19/2022	13:58	S11	1188488	
103	R04_10	12/6/2022	10:56	12/19/2022	14:03	S10	1188484	
104	R04_17	12/6/2022	11:24	12/19/2022	15:26	S17	1188559	
105	R04_08	12/6/2022	11:08	12/19/2022	13:31	S08	1188463	
106	R04_09	12/6/2022	11:12	12/19/2022	13:38	S09	1188482	
107	R04_07	12/6/2022	8:34	12/19/2022	13:36	S07	1188457	
108	R04_19	12/6/2022	10:11	12/19/2022	14:43	S19	1188567	
109	R04_01_B	12/6/2022	9:26	12/19/2022	12:42	S01	1188431	
110	R04_02_B	12/6/2022	9:14	12/19/2022	12:57	S02	1188447	
111	R04_12_B	12/6/2022	10:44	12/19/2022	13:47	S12	1188513	
112	R04_13_D	12/6/2022	10:37	12/19/2022	14:11	S13	1188532	
113	R05_01	12/19/2022	12:46	1/3/2023	12:04	S01	1185837	
114	R05_01_D	12/19/2022	12:46	1/3/2023	12:04	S01	1185859	
115	R05_02	12/19/2022	13:02	1/3/2023	12:17	S02	1185851	
116	R05_02_B	12/19/2022	13:02	1/3/2023	12:17	S02	1185891	
117	R05_03	12/19/2022	13:09	1/3/2023	12:22	S03	1185900	
118	R05_04	12/19/2022	13:11	1/3/2023	12:26	S04	1185907	
119	R05_05	12/19/2022	13:17	1/3/2023	12:32	S05	1185944	
120	R05_06	12/19/2022	13:27	1/3/2023	12:44	S06	1185971	
121	R05_07	12/19/2022	13:36	1/3/2023	13:01	S07	1185148	
122	R05_12	12/19/2022	13:50	1/3/2023	13:12	S12	1186341	
123	R05_12_B	12/19/2022	13:50	1/3/2023	13:12	S12	1186394	
124	R05_11	12/19/2022	13:59	1/3/2023	13:20	S11	1186340	
125	R05_10	12/19/2022	14:04	1/3/2023	13:34	S10	1186332	
126	R05_13	12/19/2022	14:15	1/3/2023	13:44	S13	1186422	
127	R05_13_D	12/19/2022	14:15	1/3/2023	13:44	S13	1186441	
128	R05_14	12/19/2022	14:23	1/3/2023	13:52	S14	1186459	
129	R05_15	12/19/2022	14:28	1/3/2023	13:57	S15	1186470	
130	R05_16	12/19/2022	14:32	1/3/2023	14:01	S16	1186474	
131	R05_18	12/19/2022	14:38	1/3/2023	14:07	S18	1186510	
132	R05_19	12/19/2022	14:44	1/3/2023	14:12	S19	1186539	
133	R05_20	12/19/2022	14:51	1/3/2023	14:45	S20	1186558	
134	R05_21	12/19/2022	14:56	1/3/2023	14:18	S21	1188099	
135	R05_22	12/19/2022	15:07	1/3/2023	14:24	S22	1188140	
136	R05_23	12/19/2022	15:06	1/3/2023	14:29	S23	1188161	
137	R05_24	12/19/2022	15:12	1/3/2023	14:36	S24	1188210	
138	R05_17	12/19/2022	15:27	1/3/2023	14:54	S17	1186492	

Cleveland-Cliffs Burns Harbor LLC
Burns Harbor, IN

EPA Method 325B Field Data
CleanAir Project No.: 14777
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ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Carbopack X Tube ID	Notes
139	R05_08	12/19/2022	13:32	1/3/2023	13:28	S08	1186229	
140	R05_09	12/19/2022	13:40	1/3/2023	13:21	S09	1186287	
141	R06_01	1/3/2023	12:06	1/17/2023	11:50	S01	1188072	
142	R06_01_D	1/3/2023	12:06	1/17/2023	11:50	S01	1188107	
143	R06_02	1/3/2023	12:18	1/17/2023	12:03	S02	1188113	
144	R06_02_B	1/3/2023	12:18	1/17/2023	12:03	S02	1188122	
145	R06_03	1/3/2023	12:23	1/17/2023	12:09	S03	1188127	
146	R06_04	1/3/2023	12:27	1/17/2023	12:15	S04	1188131	
147	R06_05	1/3/2023	12:33	1/17/2023	12:20	S05	1188132	
148	R06_06	1/3/2023	12:45	1/17/2023	12:31	S06	1188138	
149	R06_07	1/3/2023	13:02	1/17/2023	12:43	S07	1188139	
150	R06_12	1/3/2023	13:13	1/17/2023	12:55	S12	1188174	
151	R06_12_B	1/3/2023	13:13	1/17/2023	12:55	S12	1188182	
152	R06_11	1/3/2023	13:21	1/17/2023	13:04	S11	1188165	
153	R06_10	1/3/2023	13:35	1/17/2023	13:08	S10	1188164	
154	R06_13	1/3/2023	13:46	1/17/2023	13:19	S13	1188187	
155	R06_13_D	1/3/2023	13:46	1/17/2023	13:19	S13	1188189	
156	R06_14	1/3/2023	13:53	1/17/2023	13:26	S14	1188195	
157	R06_15	1/3/2023	13:58	1/17/2023	13:31	S15	1188199	
158	R06_16	1/3/2023	14:02	1/17/2023	13:34	S16	1188216	
159	R06_18	1/3/2023	14:08	1/17/2023	13:40	S18	1188222	
160	R06_19	1/3/2023	14:13	1/17/2023	13:44	S19	1188225	
161	R06_20	1/3/2023	14:47	1/17/2023	13:49	S20	1188232	
162	R06_21	1/3/2023	14:19	1/17/2023	13:54	S21	1188234	
163	R06_22	1/3/2023	14:25	1/17/2023	13:59	S22	1188238	
164	R06_23	1/3/2023	14:30	1/17/2023	14:04	S23	1188244	
165	R06_24	1/3/2023	14:37	1/17/2023	14:10	S24	1188246	
166	R06_17	1/3/2023	14:56	1/17/2023	14:22	S17	1188219	
167	R06_08	1/3/2023	13:30	1/17/2023	14:43	S08	1188146	
168	R06_09	1/3/2023	13:22	1/17/2023	14:38	S09	1188152	
169	R07_01	1/17/2023	11:52	2/1/2023	9:48	S01	1188436	
170	R07_01_D	1/17/2023	11:52	2/1/2023	9:48	S01	1188439	
171	R07_02	1/17/2023	12:05	2/1/2023	10:03	S02	1188447	
172	R07_02_B	1/17/2023	12:05	2/1/2023	10:03	S02	1188448	
173	R07_03	1/17/2023	12:10	2/1/2023	10:08	S03	1188450	
174	R07_04	1/17/2023	12:16	2/1/2023	10:13	S04	1188451	
175	R07_05	1/17/2023	12:21	2/1/2023	10:19	S05	1188452	
176	R07_06	1/17/2023	12:33	2/1/2023	10:31	S06	1188454	
177	R07_07	1/17/2023	12:44	2/1/2023	10:42	S07	1188457	
178	R07_12	1/17/2023	12:56	2/1/2023	10:53	S12	1188494	
179	R07_12_B	1/17/2023	12:56	2/1/2023	10:53	S12	1188513	
180	R07_11	1/17/2023	13:05	2/1/2023	11:02	S11	1188488	
181	R07_10	1/17/2023	13:10	2/1/2023	11:06	S10	1188484	
182	R07_13	1/17/2023	13:20	2/1/2023	11:15	S13	1188514	
183	R07_13_D	1/17/2023	13:20	2/1/2023	11:15	S13	1188532	
184	R07_14	1/17/2023	13:27	2/1/2023	11:25	S14	1188535	

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Carbopack X Tube ID	Notes
185	R07_15	1/17/2023	13:32	2/1/2023	11:30	S15	1188547	
186	R07_16	1/17/2023	13:35	2/1/2023	11:34	S16	1188549	
187	R07_18	1/17/2023	13:41	2/1/2023	11:39	S18	1188562	
188	R07_19	1/17/2023	13:45	2/1/2023	11:44	S19	1188567	
189	R07_20	1/17/2023	13:50	2/1/2023	11:49	S20	1188574	
190	R07_21	1/17/2023	13:55	2/1/2023	11:54	S21	1188577	
191	R07_22	1/17/2023	14:00	2/1/2023	11:59	S22	1188578	
192	R07_23	1/17/2023	14:05	2/1/2023	12:03	S23	1188581	
193	R07_24	1/17/2023	14:11	2/1/2023	12:09	S24	1188598	
194	R07_17	1/17/2023	14:23	2/1/2023	12:21	S17	1188559	
195	R07_09	1/17/2023	14:39	2/1/2023	12:32	S09	1188482	
196	R07_08	1/17/2023	14:44	2/1/2023	12:37	S08	1188463	

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[illegible]

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30A	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	1631
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30B	ATL	AIR	EPA 325	CCV	00:00	11/09/2022	2152
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211197-30C	ATL	AIR	EPA 325	CCV	00:00	11/10/2022	0315
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-01A	ATL	AIR	EPA 325	R02_01	11/21/2022 11:07	11/29/2022	1134
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-02A	ATL	AIR	EPA 325	R02_01_D	11/21/2022 11:07	11/29/2022	1203
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-03A	ATL	AIR	EPA 325	R02_02	11/21/2022 11:19	11/29/2022	1233
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-04A	ATL	AIR	EPA 325	R02_02_B	11/21/2022 11:19	11/29/2022	1105
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-05A	ATL	AIR	EPA 325	R02_03	11/21/2022 11:25	11/29/2022	1302
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-06A	ATL	AIR	EPA 325	R02_04	11/21/2022 11:28	11/29/2022	1331
2211631-07A	ATL	AIR	EPA 325	R02_05	11/21/2022 11:41	11/29/2022	1400
2211631-07A	ATL	AIR	EPA 325	R02_05	11/21/2022 11:41	11/29/2022	1400
2211631-07A	ATL	AIR	EPA 325	R02_05	11/21/2022 11:41	11/29/2022	1400
2211631-07A	ATL	AIR	EPA 325	R02_05	11/21/2022 11:41	11/29/2022	1400

[illegible]

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-27A	ATL	AIR	EPA 325	R02_08	11/21/2022 13:54	11/30/2022	0014
2211631-28A	ATL	AIR	EPA 325	R02_09	11/21/2022 13:59	11/30/2022	0044
2211631-28A	ATL	AIR	EPA 325	R02_09	11/21/2022 13:59	11/30/2022	0044
2211631-28A	ATL	AIR	EPA 325	R02_09	11/21/2022 13:59	11/30/2022	0044
2211631-28A	ATL	AIR	EPA 325	R02_09	11/21/2022 13:59	11/30/2022	0044
2211631-28A	ATL	AIR	EPA 325	R02_09	11/21/2022 13:59	11/30/2022	0044
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-29A	ATL	AIR	EPA 325	Lab Blank	00:00	11/29/2022	0942
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30A	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	1558
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30B	ATL	AIR	EPA 325	CCV	00:00	11/29/2022	2119
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2211631-30C	ATL	AIR	EPA 325	CCV	00:00	11/30/2022	0241
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-01A	ATL	AIR	EPA 325	R03_01	12/06/2022 09:26	12/09/2022	1531
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-02A	ATL	AIR	EPA 325	R03_01_D	12/06/2022 09:26	12/09/2022	1600
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-03A	ATL	AIR	EPA 325	R03_02	12/06/2022 09:14	12/09/2022	1630
2212154-04A	ATL	AIR	EPA 325	R03_02_B	12/06/2022 09:14	12/09/2022	1502
2212154-04A	ATL	AIR	EPA 325	R03_02_B	12/06/2022 09:14	12/09/2022	1502
2212154-04A	ATL	AIR	EPA 325	R03_02_B	12/06/2022 09:14	12/09/2022	1502
2212154-04A	ATL	AIR	EPA 325	R03_02_B	12/06/2022 09:14	12/09/2022	1502

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-24A	ATL	AIR	EPA 325	R03_23	12/06/2022 09:51	12/10/2022	0254
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-25A	ATL	AIR	EPA 325	R03_24	12/06/2022 09:40	12/10/2022	0324
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-26A	ATL	AIR	EPA 325	R03_17	12/06/2022 11:24	12/10/2022	0354
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-27A	ATL	AIR	EPA 325	R03_08	12/06/2022 11:06	12/10/2022	0424
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-28A	ATL	AIR	EPA 325	R03_09	12/06/2022 11:12	12/10/2022	0453
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/09/2022	1408
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30A	ATL	AIR	EPA 325	CCV	00:00	12/09/2022	1957
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30B	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0124
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212154-30C	ATL	AIR	EPA 325	CCV	00:00	12/10/2022	0553
2212541-01A	ATL	AIR	EPA 325	R04_18	12/19/2022 14:37	12/29/2022	1224
2212541-01A	ATL	AIR	EPA 325	R04_18	12/19/2022 14:37	12/29/2022	1224
2212541-01A	ATL	AIR	EPA 325	R04_18	12/19/2022 14:37	12/29/2022	1224
2212541-01A	ATL	AIR	EPA 325	R04_18	12/19/2022 14:37	12/29/2022	1224

[illegible]

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-21A	ATL	AIR	EPA 325	R04_08	12/20/2022 13:31	12/29/2022	2257
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-22A	ATL	AIR	EPA 325	R04_09	12/20/2022 13:38	12/29/2022	2326
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-23A	ATL	AIR	EPA 325	R04_07	12/19/2022 13:36	12/29/2022	2355
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-24A	ATL	AIR	EPA 325	R04_19	12/19/2022 14:43	12/30/2022	0024
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-25A	ATL	AIR	EPA 325	R04_01_B	12/19/2022 12:42	12/30/2022	0053
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-26A	ATL	AIR	EPA 325	R04_02_B	12/19/2022 12:57	12/29/2022	1155
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-27A	ATL	AIR	EPA 325	R04_12_B	12/19/2022 15:47	12/30/2022	0122
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-28A	ATL	AIR	EPA 325	R04_13_D	12/19/2022 14:11	12/30/2022	0152
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-29A	ATL	AIR	EPA 325	Lab Blank	00:00	12/29/2022	1106
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643

LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643
2212541-30A	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	1643
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30B	ATL	AIR	EPA 325	CCV	00:00	12/29/2022	2200
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2212541-30C	ATL	AIR	EPA 325	CCV	00:00	12/30/2022	0319
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-01A	ATL	AIR	EPA 325	R05_01	01/03/2023 12:04	01/11/2023	1204
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-02A	ATL	AIR	EPA 325	R05_01_D	01/03/2023 12:04	01/11/2023	1233
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-03A	ATL	AIR	EPA 325	R05_02	01/03/2023 12:17	01/11/2023	1303
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-04A	ATL	AIR	EPA 325	R05_02_B	01/03/2023 12:17	01/11/2023	1135
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-05A	ATL	AIR	EPA 325	R05_03	01/03/2023 12:22	01/11/2023	1332
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-06A	ATL	AIR	EPA 325	R05_04	01/03/2023 12:26	01/11/2023	1401
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-07A	ATL	AIR	EPA 325	R05_05	01/03/2023 12:32	01/11/2023	1430
2301045-08A	ATL	AIR	EPA 325	R05_06	01/03/2023 12:44	01/11/2023	1459
2301045-08A	ATL	AIR	EPA 325	R05_06	01/03/2023 12:44	01/11/2023	1459

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2301045-27A	ATL	AIR	EPA 325	R05_08	01/04/2023 13:28	01/12/2023	0043
2301045-27A	ATL	AIR	EPA 325	R05_08	01/04/2023 13:28	01/12/2023	0043
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-28A	ATL	AIR	EPA 325	R05_09	01/04/2023 13:21	01/12/2023	0112
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/11/2023	1045
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30A	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	1627
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30B	ATL	AIR	EPA 325	CCV	00:00	01/11/2023	2148
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301045-30C	ATL	AIR	EPA 325	CCV	00:00	01/12/2023	0310
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-01A	ATL	AIR	EPA 325	R06_01	01/17/2023 11:50	01/19/2023	1228
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-02A	ATL	AIR	EPA 325	R06_01_D	01/17/2023 11:50	01/19/2023	1258
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-03A	ATL	AIR	EPA 325	R06_02	01/17/2023 12:03	01/19/2023	1328
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-04A	ATL	AIR	EPA 325	R06_02_B	01/17/2023 12:03	01/19/2023	1158
2301268-05A	ATL	AIR	EPA 325	R06_03	01/17/2023 12:09	01/19/2023	1358
2301268-05A	ATL	AIR	EPA 325	R06_03	01/17/2023 12:09	01/19/2023	1358

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2301268-24A	ATL	AIR	EPA 325	R06_23	01/17/2023 14:04	01/20/2023	0010
2301268-24A	ATL	AIR	EPA 325	R06_23	01/17/2023 14:04	01/20/2023	0010
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-25A	ATL	AIR	EPA 325	R06_24	01/17/2023 14:10	01/20/2023	0040
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-26A	ATL	AIR	EPA 325	R06_17	01/17/2023 14:22	01/20/2023	0110
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-27A	ATL	AIR	EPA 325	R06_08	01/17/2023 14:43	01/20/2023	0141
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-28A	ATL	AIR	EPA 325	R06_09	01/17/2023 14:38	01/20/2023	0211
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-29A	ATL	AIR	EPA 325	Lab Blank	00:00	01/19/2023	1107
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30A	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	1702
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30B	ATL	AIR	EPA 325	CCV	00:00	01/19/2023	2239
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2301268-30C	ATL	AIR	EPA 325	CCV	00:00	01/20/2023	0412
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-01A	ATL	AIR	EPA 325	R07_01	02/01/2023 09:48	02/02/2023	1533
2302034-02A	ATL	AIR	EPA 325	R07_01_D	02/01/2023 09:48	02/02/2023	1602
2302034-02A	ATL	AIR	EPA 325	R07_01_D	02/01/2023 09:48	02/02/2023	1602

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LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2302034-21A	ATL	AIR	EPA 325	R07_20	02/01/2023 11:49	02/03/2023	0050
2302034-21A	ATL	AIR	EPA 325	R07_20	02/01/2023 11:49	02/03/2023	0050
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-22A	ATL	AIR	EPA 325	R07_21	02/01/2023 11:54	02/03/2023	1202
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-23A	ATL	AIR	EPA 325	R07_22	02/01/2023 11:59	02/03/2023	1231
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-24A	ATL	AIR	EPA 325	R07_23	02/01/2023 12:03	02/03/2023	1300
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-25A	ATL	AIR	EPA 325	R07_24	02/01/2023 12:09	02/03/2023	1330
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-26A	ATL	AIR	EPA 325	R07_17	02/01/2023 12:21	02/03/2023	1359
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-27A	ATL	AIR	EPA 325	R07_09	02/01/2023 12:32	02/03/2023	1428
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-28A	ATL	AIR	EPA 325	R07_08	02/01/2023 12:27	02/03/2023	1457
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29A	ATL	AIR	EPA 325	Lab Blank	00:00	02/02/2023	1409
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-29B	ATL	AIR	EPA 325	Lab Blank	00:00	02/03/2023	1043
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956

LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATETIME	ANALDATE	ANALTIME
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956
2302034-30A	ATL	AIR	EPA 325	CCV	00:00	02/02/2023	1956
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30B	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	0119
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556
2302034-30C	ATL	AIR	EPA 325	CCV	00:00	02/03/2023	1556

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R01_24	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_24	msd1009NOV22	1.02	0.28	UG/M3	0.60		Benzene	71-43-2	
R01_24	msd1009NOV22	1.02	0.36	UG/M3	0.45		Toluene	108-88-3	
R01_24	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_24	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_24	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_23	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_23	msd1009NOV22	1.02	0.28	UG/M3	0.94		Benzene	71-43-2	
R01_23	msd1009NOV22	1.02	0.36	UG/M3	0.56		Toluene	108-88-3	
R01_23	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_23	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_23	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_22	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_22	msd1009NOV22	1.02	0.28	UG/M3	0.82		Benzene	71-43-2	
R01_22	msd1009NOV22	1.02	0.36	UG/M3	0.44		Toluene	108-88-3	
R01_22	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_22	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_22	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_21	msd1009NOV22	1.02	0.21	UG/M3	1.1		1,3-Butadiene	106-99-0	
R01_21	msd1009NOV22	1.02	0.28	UG/M3	1.8		Benzene	71-43-2	
R01_21	msd1009NOV22	1.02	0.36	UG/M3	2.1		Toluene	108-88-3	
R01_21	msd1009NOV22	1.02	0.40	UG/M3	0.28	J	Ethyl Benzene	100-41-4	
R01_21	msd1009NOV22	1.02	0.40	UG/M3	1.3		m,p-Xylene	108-38-3/1	
R01_21	msd1009NOV22	1.02	0.40	UG/M3	0.48		o-Xylene	95-47-6	
R01_01	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_01	msd1009NOV22	1.02	0.28	UG/M3	1.6		Benzene	71-43-2	
R01_01	msd1009NOV22	1.02	0.36	UG/M3	0.82		Toluene	108-88-3	
R01_01	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_01	msd1009NOV22	1.02	0.40	UG/M3	0.32	J	m,p-Xylene	108-38-3/1	
R01_01	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_01_D	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_01_D	msd1009NOV22	1.02	0.28	UG/M3	1.5		Benzene	71-43-2	
R01_01_D	msd1009NOV22	1.02	0.36	UG/M3	0.71		Toluene	108-88-3	
R01_01_D	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_01_D	msd1009NOV22	1.02	0.40	UG/M3	0.26	J	m,p-Xylene	108-38-3/1	
R01_01_D	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_02	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_02	msd1009NOV22	1.02	0.28	UG/M3	5.8		Benzene	71-43-2	
R01_02	msd1009NOV22	1.02	0.36	UG/M3	1.8		Toluene	108-88-3	
R01_02	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_02	msd1009NOV22	1.02	0.40	UG/M3	0.62		m,p-Xylene	108-38-3/1	
R01_02	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_02_B	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_02_B	msd1009NOV22	1.02	0.28	UG/M3	0.14	U	Benzene	71-43-2	
R01_02_B	msd1009NOV22	1.02	0.36	UG/M3	0.18	U	Toluene	108-88-3	
R01_02_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_02_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_02_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_03	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_03	msd1009NOV22	1.02	0.28	UG/M3	5.2		Benzene	71-43-2	
R01_03	msd1009NOV22	1.02	0.36	UG/M3	1.7		Toluene	108-88-3	
R01_03	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_03	msd1009NOV22	1.02	0.40	UG/M3	0.59		m,p-Xylene	108-38-3/1	
R01_03	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_04	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_04	msd1009NOV22	1.02	0.28	UG/M3	5.7		Benzene	71-43-2	
R01_04	msd1009NOV22	1.02	0.36	UG/M3	1.8		Toluene	108-88-3	
R01_04	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R01_04	msd1009NOV22	1.02	0.40	UG/M3	0.67		m,p-Xylene	108-38-3/1	
R01_04	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_05	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_05	msd1009NOV22	1.02	0.28	UG/M3	2.7		Benzene	71-43-2	
R01_05	msd1009NOV22	1.02	0.36	UG/M3	0.96		Toluene	108-88-3	
R01_05	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_05	msd1009NOV22	1.02	0.40	UG/M3	0.33	J	m,p-Xylene	108-38-3/1	
R01_05	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_06	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_06	msd1009NOV22	1.02	0.28	UG/M3	1.4		Benzene	71-43-2	
R01_06	msd1009NOV22	1.02	0.36	UG/M3	0.71		Toluene	108-88-3	
R01_06	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_06	msd1009NOV22	1.02	0.40	UG/M3	0.24	J	m,p-Xylene	108-38-3/1	
R01_06	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_07	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_07	msd1009NOV22	1.02	0.28	UG/M3	1.9		Benzene	71-43-2	
R01_07	msd1009NOV22	1.02	0.36	UG/M3	0.83		Toluene	108-88-3	
R01_07	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_07	msd1009NOV22	1.02	0.40	UG/M3	0.30	J	m,p-Xylene	108-38-3/1	
R01_07	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_12	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_12	msd1009NOV22	1.02	0.28	UG/M3	0.49		Benzene	71-43-2	
R01_12	msd1009NOV22	1.02	0.36	UG/M3	0.43		Toluene	108-88-3	
R01_12	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_12	msd1009NOV22	1.02	0.40	UG/M3	0.35	J	m,p-Xylene	108-38-3/1	
R01_12	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_12_B	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_12_B	msd1009NOV22	1.02	0.28	UG/M3	0.14	U	Benzene	71-43-2	
R01_12_B	msd1009NOV22	1.02	0.36	UG/M3	0.18	U	Toluene	108-88-3	
R01_12_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_12_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_12_B	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_11	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_11	msd1009NOV22	1.02	0.28	UG/M3	0.54		Benzene	71-43-2	
R01_11	msd1009NOV22	1.02	0.36	UG/M3	0.49		Toluene	108-88-3	
R01_11	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_11	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_11	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_10	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_10	msd1009NOV22	1.02	0.28	UG/M3	0.75		Benzene	71-43-2	
R01_10	msd1009NOV22	1.02	0.36	UG/M3	0.54		Toluene	108-88-3	
R01_10	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_10	msd1009NOV22	1.02	0.40	UG/M3	0.21	J	m,p-Xylene	108-38-3/1	
R01_10	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_13_D	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_13_D	msd1009NOV22	1.02	0.28	UG/M3	0.48		Benzene	71-43-2	
R01_13_D	msd1009NOV22	1.02	0.36	UG/M3	0.51		Toluene	108-88-3	
R01_13_D	msd1009NOV22	1.02	0.40	UG/M3	0.72		Ethyl Benzene	100-41-4	
R01_13_D	msd1009NOV22	1.02	0.40	UG/M3	3.0		m,p-Xylene	108-38-3/1	
R01_13_D	msd1009NOV22	1.02	0.40	UG/M3	1.0		o-Xylene	95-47-6	
R01_13	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_13	msd1009NOV22	1.02	0.28	UG/M3	0.53		Benzene	71-43-2	
R01_13	msd1009NOV22	1.02	0.36	UG/M3	0.51		Toluene	108-88-3	
R01_13	msd1009NOV22	1.02	0.40	UG/M3	0.70		Ethyl Benzene	100-41-4	
R01_13	msd1009NOV22	1.02	0.40	UG/M3	3.0		m,p-Xylene	108-38-3/1	
R01_13	msd1009NOV22	1.02	0.40	UG/M3	0.96		o-Xylene	95-47-6	
R01_14	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_14	msd1009NOV22	1.02	0.28	UG/M3	0.42		Benzene	71-43-2	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R01_14	msd1009NOV22	1.02	0.36	UG/M3	0.41		Toluene	108-88-3	
R01_14	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_14	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_14	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_15	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_15	msd1009NOV22	1.02	0.28	UG/M3	0.39		Benzene	71-43-2	
R01_15	msd1009NOV22	1.02	0.36	UG/M3	0.43		Toluene	108-88-3	
R01_15	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_15	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_15	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_16	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_16	msd1009NOV22	1.02	0.28	UG/M3	0.47		Benzene	71-43-2	
R01_16	msd1009NOV22	1.02	0.36	UG/M3	0.59		Toluene	108-88-3	
R01_16	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_16	msd1009NOV22	1.02	0.40	UG/M3	0.22	J	m,p-Xylene	108-38-3/1	
R01_16	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_18	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_18	msd1009NOV22	1.02	0.28	UG/M3	0.42		Benzene	71-43-2	
R01_18	msd1009NOV22	1.02	0.36	UG/M3	0.35	J	Toluene	108-88-3	
R01_18	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_18	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_18	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_19	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_19	msd1009NOV22	1.02	0.28	UG/M3	0.45		Benzene	71-43-2	
R01_19	msd1009NOV22	1.02	0.36	UG/M3	0.43		Toluene	108-88-3	
R01_19	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_19	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_19	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_20	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_20	msd1009NOV22	1.02	0.28	UG/M3	0.50		Benzene	71-43-2	
R01_20	msd1009NOV22	1.02	0.36	UG/M3	0.25	J	Toluene	108-88-3	
R01_20	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_20	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_20	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_17	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_17	msd1009NOV22	1.02	0.28	UG/M3	0.40		Benzene	71-43-2	
R01_17	msd1009NOV22	1.02	0.36	UG/M3	0.38		Toluene	108-88-3	
R01_17	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_17	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_17	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_08	msd1009NOV22	1.02	0.21	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_08	msd1009NOV22	1.02	0.28	UG/M3	0.64		Benzene	71-43-2	
R01_08	msd1009NOV22	1.02	0.36	UG/M3	0.43		Toluene	108-88-3	
R01_08	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_08	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_08	msd1009NOV22	1.02	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	
R01_09	msd1009NOV22	1.02	0.23	UG/M3	0.10	U	1,3-Butadiene	106-99-0	
R01_09	msd1009NOV22	1.02	0.31	UG/M3	0.36		Benzene	71-43-2	
R01_09	msd1009NOV22	1.02	0.40	UG/M3	0.32	J	Toluene	108-88-3	
R01_09	msd1009NOV22	1.02	0.45	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
R01_09	msd1009NOV22	1.02	0.45	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
R01_09	msd1009NOV22	1.02	0.45	UG/M3	0.20	U	o-Xylene	95-47-6	
Lab Blank	msd1009NOV22	1.00	0.20	UG/M3	0.097	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1009NOV22	1.00	0.27	UG/M3	0.14	U	Benzene	71-43-2	
Lab Blank	msd1009NOV22	1.00	0.35	UG/M3	0.18	U	Toluene	108-88-3	
Lab Blank	msd1009NOV22	1.00	0.40	UG/M3	0.20	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1009NOV22	1.00	0.40	UG/M3	0.20	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1009NOV22	1.00	0.40	UG/M3	0.20	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
CCV	msd1009NOV22	1.00		%R	96		1,3-Butadiene	106-99-0	
CCV	msd1009NOV22	1.00		%R	90		Benzene	71-43-2	
CCV	msd1009NOV22	1.00		%R	94		Toluene	108-88-3	
CCV	msd1009NOV22	1.00		%R	108		Ethyl Benzene	100-41-4	
CCV	msd1009NOV22	1.00		%R	110		m,p-Xylene	108-38-3/1	
CCV	msd1009NOV22	1.00		%R	109		o-Xylene	95-47-6	
CCV	msd1009NOV22	1.00		%R	95		1,3-Butadiene	106-99-0	
CCV	msd1009NOV22	1.00		%R	99		Benzene	71-43-2	
CCV	msd1009NOV22	1.00		%R	98		Toluene	108-88-3	
CCV	msd1009NOV22	1.00		%R	103		Ethyl Benzene	100-41-4	
CCV	msd1009NOV22	1.00		%R	107		m,p-Xylene	108-38-3/1	
CCV	msd1009NOV22	1.00		%R	106		o-Xylene	95-47-6	
CCV	msd1009NOV22	1.00		%R	94		1,3-Butadiene	106-99-0	
CCV	msd1009NOV22	1.00		%R	88		Benzene	71-43-2	
CCV	msd1009NOV22	1.00		%R	91		Toluene	108-88-3	
CCV	msd1009NOV22	1.00		%R	94		Ethyl Benzene	100-41-4	
CCV	msd1009NOV22	1.00		%R	100		m,p-Xylene	108-38-3/1	
CCV	msd1009NOV22	1.00		%R	96		o-Xylene	95-47-6	
R02_01	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_01	msd1029NOV22	1.04	0.38	UG/M3	1.1		Benzene	71-43-2	
R02_01	msd1029NOV22	1.04	0.50	UG/M3	0.59		Toluene	108-88-3	
R02_01	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_01	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_01	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_01_D	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_01_D	msd1029NOV22	1.04	0.38	UG/M3	1.3		Benzene	71-43-2	
R02_01_D	msd1029NOV22	1.04	0.50	UG/M3	0.72		Toluene	108-88-3	
R02_01_D	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_01_D	msd1029NOV22	1.04	0.56	UG/M3	0.30	J	m,p-Xylene	108-38-3/1	
R02_01_D	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_02	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_02	msd1029NOV22	1.04	0.38	UG/M3	2.0		Benzene	71-43-2	
R02_02	msd1029NOV22	1.04	0.50	UG/M3	0.80		Toluene	108-88-3	
R02_02	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_02	msd1029NOV22	1.04	0.56	UG/M3	0.30	J	m,p-Xylene	108-38-3/1	
R02_02	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_02_B	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_02_B	msd1029NOV22	1.04	0.38	UG/M3	0.19	U	Benzene	71-43-2	
R02_02_B	msd1029NOV22	1.04	0.50	UG/M3	0.25	U	Toluene	108-88-3	
R02_02_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_02_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_02_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_03	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_03	msd1029NOV22	1.04	0.38	UG/M3	1.6		Benzene	71-43-2	
R02_03	msd1029NOV22	1.04	0.50	UG/M3	0.66		Toluene	108-88-3	
R02_03	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_03	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_03	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_04	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_04	msd1029NOV22	1.04	0.38	UG/M3	1.9		Benzene	71-43-2	
R02_04	msd1029NOV22	1.04	0.50	UG/M3	0.75		Toluene	108-88-3	
R02_04	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_04	msd1029NOV22	1.04	0.56	UG/M3	0.31	J	m,p-Xylene	108-38-3/1	
R02_04	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_05	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_05	msd1029NOV22	1.04	0.38	UG/M3	1.4		Benzene	71-43-2	
R02_05	msd1029NOV22	1.04	0.50	UG/M3	0.70		Toluene	108-88-3	
R02_05	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R02_05	msd1029NOV22	1.04	0.56	UG/M3	0.29	J	m,p-Xylene	108-38-3/1	
R02_05	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_06	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_06	msd1029NOV22	1.04	0.38	UG/M3	1.0		Benzene	71-43-2	
R02_06	msd1029NOV22	1.04	0.50	UG/M3	0.52		Toluene	108-88-3	
R02_06	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_06	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_06	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_07	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_07	msd1029NOV22	1.04	0.38	UG/M3	2.7		Benzene	71-43-2	
R02_07	msd1029NOV22	1.04	0.50	UG/M3	0.98		Toluene	108-88-3	
R02_07	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_07	msd1029NOV22	1.04	0.56	UG/M3	0.35	J	m,p-Xylene	108-38-3/1	
R02_07	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_12	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_12	msd1029NOV22	1.04	0.38	UG/M3	0.57		Benzene	71-43-2	
R02_12	msd1029NOV22	1.04	0.50	UG/M3	0.38	J	Toluene	108-88-3	
R02_12	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_12	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_12	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_12_B	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_12_B	msd1029NOV22	1.04	0.38	UG/M3	0.19	U	Benzene	71-43-2	
R02_12_B	msd1029NOV22	1.04	0.50	UG/M3	0.25	U	Toluene	108-88-3	
R02_12_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_12_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_12_B	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_11	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_11	msd1029NOV22	1.04	0.38	UG/M3	1.4		Benzene	71-43-2	
R02_11	msd1029NOV22	1.04	0.50	UG/M3	0.60		Toluene	108-88-3	
R02_11	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_11	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_11	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_10	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_10	msd1029NOV22	1.04	0.38	UG/M3	1.4		Benzene	71-43-2	
R02_10	msd1029NOV22	1.04	0.50	UG/M3	0.64		Toluene	108-88-3	
R02_10	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_10	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_10	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_13	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_13	msd1029NOV22	1.04	0.38	UG/M3	0.57		Benzene	71-43-2	
R02_13	msd1029NOV22	1.04	0.50	UG/M3	0.39	J	Toluene	108-88-3	
R02_13	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_13	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_13	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_13_D	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_13_D	msd1029NOV22	1.04	0.38	UG/M3	0.60		Benzene	71-43-2	
R02_13_D	msd1029NOV22	1.04	0.50	UG/M3	0.40	J	Toluene	108-88-3	
R02_13_D	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_13_D	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_13_D	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_14	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_14	msd1029NOV22	1.04	0.38	UG/M3	0.50		Benzene	71-43-2	
R02_14	msd1029NOV22	1.04	0.50	UG/M3	0.36	J	Toluene	108-88-3	
R02_14	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_14	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_14	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_15	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_15	msd1029NOV22	1.04	0.38	UG/M3	0.52		Benzene	71-43-2	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R02_15	msd1029NOV22	1.04	0.50	UG/M3	0.45	J	Toluene	108-88-3	
R02_15	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_15	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_15	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_16	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_16	msd1029NOV22	1.04	0.38	UG/M3	0.61		Benzene	71-43-2	
R02_16	msd1029NOV22	1.04	0.50	UG/M3	0.52		Toluene	108-88-3	
R02_16	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_16	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_16	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_18	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_18	msd1029NOV22	1.04	0.38	UG/M3	0.62		Benzene	71-43-2	
R02_18	msd1029NOV22	1.04	0.50	UG/M3	0.33	J	Toluene	108-88-3	
R02_18	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_18	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_18	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_19	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_19	msd1029NOV22	1.04	0.38	UG/M3	0.86		Benzene	71-43-2	
R02_19	msd1029NOV22	1.04	0.50	UG/M3	0.45	J	Toluene	108-88-3	
R02_19	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_19	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_19	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_20	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_20	msd1029NOV22	1.04	0.38	UG/M3	1.2		Benzene	71-43-2	
R02_20	msd1029NOV22	1.04	0.50	UG/M3	0.64		Toluene	108-88-3	
R02_20	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_20	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_20	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_21	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_21	msd1029NOV22	1.04	0.38	UG/M3	0.98		Benzene	71-43-2	
R02_21	msd1029NOV22	1.04	0.50	UG/M3	0.47	J	Toluene	108-88-3	
R02_21	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_21	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_21	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_22	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_22	msd1029NOV22	1.04	0.38	UG/M3	1.0		Benzene	71-43-2	
R02_22	msd1029NOV22	1.04	0.50	UG/M3	0.49	J	Toluene	108-88-3	
R02_22	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_22	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_22	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_23	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_23	msd1029NOV22	1.04	0.38	UG/M3	1.1		Benzene	71-43-2	
R02_23	msd1029NOV22	1.04	0.50	UG/M3	0.49	J	Toluene	108-88-3	
R02_23	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_23	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_23	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_24	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_24	msd1029NOV22	1.04	0.38	UG/M3	0.58		Benzene	71-43-2	
R02_24	msd1029NOV22	1.04	0.50	UG/M3	0.35	J	Toluene	108-88-3	
R02_24	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_24	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_24	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_17	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_17	msd1029NOV22	1.04	0.38	UG/M3	0.54		Benzene	71-43-2	
R02_17	msd1029NOV22	1.04	0.50	UG/M3	0.35	J	Toluene	108-88-3	
R02_17	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_17	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_17	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R02_08	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_08	msd1029NOV22	1.04	0.38	UG/M3	0.59		Benzene	71-43-2	
R02_08	msd1029NOV22	1.04	0.50	UG/M3	0.41	J	Toluene	108-88-3	
R02_08	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_08	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_08	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R02_09	msd1029NOV22	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R02_09	msd1029NOV22	1.04	0.38	UG/M3	0.37	J	Benzene	71-43-2	
R02_09	msd1029NOV22	1.04	0.50	UG/M3	0.27	J	Toluene	108-88-3	
R02_09	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R02_09	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R02_09	msd1029NOV22	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
Lab Blank	msd1029NOV22	1.00	0.28	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1029NOV22	1.00	0.37	UG/M3	0.18	U	Benzene	71-43-2	
Lab Blank	msd1029NOV22	1.00	0.48	UG/M3	0.24	U	Toluene	108-88-3	
Lab Blank	msd1029NOV22	1.00	0.54	UG/M3	0.27	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1029NOV22	1.00	0.54	UG/M3	0.27	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1029NOV22	1.00	0.54	UG/M3	0.27	U	o-Xylene	95-47-6	
CCV	msd1029NOV22	1.00		%R	94		1,3-Butadiene	106-99-0	
CCV	msd1029NOV22	1.00		%R	88		Benzene	71-43-2	
CCV	msd1029NOV22	1.00		%R	87		Toluene	108-88-3	
CCV	msd1029NOV22	1.00		%R	85		Ethyl Benzene	100-41-4	
CCV	msd1029NOV22	1.00		%R	85		m,p-Xylene	108-38-3/1	
CCV	msd1029NOV22	1.00		%R	84		o-Xylene	95-47-6	
CCV	msd1029NOV22	1.00		%R	103		1,3-Butadiene	106-99-0	
CCV	msd1029NOV22	1.00		%R	93		Benzene	71-43-2	
CCV	msd1029NOV22	1.00		%R	94		Toluene	108-88-3	
CCV	msd1029NOV22	1.00		%R	93		Ethyl Benzene	100-41-4	
CCV	msd1029NOV22	1.00		%R	94		m,p-Xylene	108-38-3/1	
CCV	msd1029NOV22	1.00		%R	93		o-Xylene	95-47-6	
CCV	msd1029NOV22	1.00		%R	95		1,3-Butadiene	106-99-0	
CCV	msd1029NOV22	1.00		%R	90		Benzene	71-43-2	
CCV	msd1029NOV22	1.00		%R	94		Toluene	108-88-3	
CCV	msd1029NOV22	1.00		%R	100		Ethyl Benzene	100-41-4	
CCV	msd1029NOV22	1.00		%R	101		m,p-Xylene	108-38-3/1	
CCV	msd1029NOV22	1.00		%R	100		o-Xylene	95-47-6	
R03_01	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_01	msd1009DEC22	1.04	0.38	UG/M3	2.7		Benzene	71-43-2	
R03_01	msd1009DEC22	1.04	0.50	UG/M3	1.2		Toluene	108-88-3	
R03_01	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_01	msd1009DEC22	1.04	0.56	UG/M3	0.38	J	m,p-Xylene	108-38-3/1	
R03_01	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_01_D	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_01_D	msd1009DEC22	1.04	0.38	UG/M3	2.9		Benzene	71-43-2	
R03_01_D	msd1009DEC22	1.04	0.50	UG/M3	1.4		Toluene	108-88-3	
R03_01_D	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_01_D	msd1009DEC22	1.04	0.56	UG/M3	0.43	J	m,p-Xylene	108-38-3/1	
R03_01_D	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_02	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_02	msd1009DEC22	1.04	0.38	UG/M3	4.1		Benzene	71-43-2	
R03_02	msd1009DEC22	1.04	0.50	UG/M3	1.6		Toluene	108-88-3	
R03_02	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_02	msd1009DEC22	1.04	0.56	UG/M3	0.45	J	m,p-Xylene	108-38-3/1	
R03_02	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_02_B	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_02_B	msd1009DEC22	1.04	0.38	UG/M3	0.19	J	Benzene	71-43-2	
R03_02_B	msd1009DEC22	1.04	0.50	UG/M3	0.23	U	Toluene	108-88-3	
R03_02_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R03_02_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_02_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_03	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_03	msd1009DEC22	1.04	0.38	UG/M3	4.0		Benzene	71-43-2	
R03_03	msd1009DEC22	1.04	0.50	UG/M3	1.5		Toluene	108-88-3	
R03_03	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_03	msd1009DEC22	1.04	0.56	UG/M3	0.46	J	m,p-Xylene	108-38-3/1	
R03_03	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_04	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_04	msd1009DEC22	1.04	0.38	UG/M3	3.6		Benzene	71-43-2	
R03_04	msd1009DEC22	1.04	0.50	UG/M3	1.4		Toluene	108-88-3	
R03_04	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_04	msd1009DEC22	1.04	0.56	UG/M3	0.46	J	m,p-Xylene	108-38-3/1	
R03_04	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_05	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_05	msd1009DEC22	1.04	0.38	UG/M3	1.9		Benzene	71-43-2	
R03_05	msd1009DEC22	1.04	0.50	UG/M3	0.96		Toluene	108-88-3	
R03_05	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_05	msd1009DEC22	1.04	0.56	UG/M3	0.29	J	m,p-Xylene	108-38-3/1	
R03_05	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_06	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_06	msd1009DEC22	1.04	0.38	UG/M3	1.3		Benzene	71-43-2	
R03_06	msd1009DEC22	1.04	0.50	UG/M3	0.78		Toluene	108-88-3	
R03_06	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_06	msd1009DEC22	1.04	0.56	UG/M3	0.27	J	m,p-Xylene	108-38-3/1	
R03_06	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_07	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_07	msd1009DEC22	1.04	0.38	UG/M3	0.93		Benzene	71-43-2	
R03_07	msd1009DEC22	1.04	0.50	UG/M3	0.72		Toluene	108-88-3	
R03_07	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_07	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_07	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_12	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_12	msd1009DEC22	1.04	0.38	UG/M3	0.92		Benzene	71-43-2	
R03_12	msd1009DEC22	1.04	0.50	UG/M3	0.61		Toluene	108-88-3	
R03_12	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_12	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_12	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_12_B	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_12_B	msd1009DEC22	1.04	0.38	UG/M3	0.23	J	Benzene	71-43-2	
R03_12_B	msd1009DEC22	1.04	0.50	UG/M3	0.23	U	Toluene	108-88-3	
R03_12_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_12_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_12_B	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_11	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_11	msd1009DEC22	1.04	0.38	UG/M3	0.68	B	Benzene	71-43-2	
R03_11	msd1009DEC22	1.04	0.50	UG/M3	0.62		Toluene	108-88-3	
R03_11	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_11	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_11	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_10	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_10	msd1009DEC22	1.04	0.38	UG/M3	0.86		Benzene	71-43-2	
R03_10	msd1009DEC22	1.04	0.50	UG/M3	0.62		Toluene	108-88-3	
R03_10	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_10	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_10	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_13	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_13	msd1009DEC22	1.04	0.38	UG/M3	0.84		Benzene	71-43-2	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R03_13	msd1009DEC22	1.04	0.50	UG/M3	0.61		Toluene	108-88-3	
R03_13	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_13	msd1009DEC22	1.04	0.56	UG/M3	0.54		m,p-Xylene	108-38-3/1	
R03_13	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_13_D	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_13_D	msd1009DEC22	1.04	0.38	UG/M3	0.90		Benzene	71-43-2	
R03_13_D	msd1009DEC22	1.04	0.50	UG/M3	0.63		Toluene	108-88-3	
R03_13_D	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_13_D	msd1009DEC22	1.04	0.56	UG/M3	0.52	J	m,p-Xylene	108-38-3/1	
R03_13_D	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_14	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_14	msd1009DEC22	1.04	0.38	UG/M3	0.82		Benzene	71-43-2	
R03_14	msd1009DEC22	1.04	0.50	UG/M3	0.59		Toluene	108-88-3	
R03_14	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_14	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_14	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_15	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_15	msd1009DEC22	1.04	0.38	UG/M3	0.98		Benzene	71-43-2	
R03_15	msd1009DEC22	1.04	0.50	UG/M3	0.68		Toluene	108-88-3	
R03_15	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_15	msd1009DEC22	1.04	0.56	UG/M3	0.27	J	m,p-Xylene	108-38-3/1	
R03_15	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_16	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_16	msd1009DEC22	1.04	0.38	UG/M3	0.86		Benzene	71-43-2	
R03_16	msd1009DEC22	1.04	0.50	UG/M3	0.75		Toluene	108-88-3	
R03_16	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_16	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_16	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_18	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_18	msd1009DEC22	1.04	0.38	UG/M3	0.74		Benzene	71-43-2	
R03_18	msd1009DEC22	1.04	0.50	UG/M3	0.51		Toluene	108-88-3	
R03_18	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_18	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_18	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_19	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_19	msd1009DEC22	1.04	0.38	UG/M3	0.76		Benzene	71-43-2	
R03_19	msd1009DEC22	1.04	0.50	UG/M3	0.58		Toluene	108-88-3	
R03_19	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_19	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_19	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_20	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_20	msd1009DEC22	1.04	0.38	UG/M3	0.83		Benzene	71-43-2	
R03_20	msd1009DEC22	1.04	0.50	UG/M3	0.67		Toluene	108-88-3	
R03_20	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_20	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_20	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_21	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_21	msd1009DEC22	1.04	0.38	UG/M3	0.84		Benzene	71-43-2	
R03_21	msd1009DEC22	1.04	0.50	UG/M3	0.56		Toluene	108-88-3	
R03_21	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_21	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_21	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_22	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_22	msd1009DEC22	1.04	0.38	UG/M3	1.2		Benzene	71-43-2	
R03_22	msd1009DEC22	1.04	0.50	UG/M3	0.69		Toluene	108-88-3	
R03_22	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_22	msd1009DEC22	1.04	0.56	UG/M3	0.30	J	m,p-Xylene	108-38-3/1	
R03_22	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R03_23	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_23	msd1009DEC22	1.04	0.38	UG/M3	1.3		Benzene	71-43-2	
R03_23	msd1009DEC22	1.04	0.50	UG/M3	0.75		Toluene	108-88-3	
R03_23	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_23	msd1009DEC22	1.04	0.56	UG/M3	0.34	J	m,p-Xylene	108-38-3/1	
R03_23	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_24	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_24	msd1009DEC22	1.04	0.38	UG/M3	0.95		Benzene	71-43-2	
R03_24	msd1009DEC22	1.04	0.50	UG/M3	0.56		Toluene	108-88-3	
R03_24	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_24	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_24	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_17	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_17	msd1009DEC22	1.04	0.38	UG/M3	0.88		Benzene	71-43-2	
R03_17	msd1009DEC22	1.04	0.50	UG/M3	0.81		Toluene	108-88-3	
R03_17	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_17	msd1009DEC22	1.04	0.56	UG/M3	0.39	J	m,p-Xylene	108-38-3/1	
R03_17	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_08	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_08	msd1009DEC22	1.04	0.38	UG/M3	0.76		Benzene	71-43-2	
R03_08	msd1009DEC22	1.04	0.50	UG/M3	0.64		Toluene	108-88-3	
R03_08	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_08	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_08	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
R03_09	msd1009DEC22	1.04	0.29	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R03_09	msd1009DEC22	1.04	0.38	UG/M3	0.45	B	Benzene	71-43-2	
R03_09	msd1009DEC22	1.04	0.50	UG/M3	0.46		Toluene	108-88-3	
R03_09	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R03_09	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R03_09	msd1009DEC22	1.04	0.56	UG/M3	0.26	U	o-Xylene	95-47-6	
Lab Blank	msd1009DEC22	1.00	0.28	UG/M3	0.12	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1009DEC22	1.00	0.37	UG/M3	0.17	U	Benzene	71-43-2	
Lab Blank	msd1009DEC22	1.00	0.48	UG/M3	0.22	U	Toluene	108-88-3	
Lab Blank	msd1009DEC22	1.00	0.54	UG/M3	0.25	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1009DEC22	1.00	0.54	UG/M3	0.25	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1009DEC22	1.00	0.54	UG/M3	0.25	U	o-Xylene	95-47-6	
CCV	msd1009DEC22	1.00		%R	88		1,3-Butadiene	106-99-0	
CCV	msd1009DEC22	1.00		%R	95		Benzene	71-43-2	
CCV	msd1009DEC22	1.00		%R	109		Toluene	108-88-3	
CCV	msd1009DEC22	1.00		%R	102		Ethyl Benzene	100-41-4	
CCV	msd1009DEC22	1.00		%R	98		m,p-Xylene	108-38-3/1	
CCV	msd1009DEC22	1.00		%R	106		o-Xylene	95-47-6	
CCV	msd1009DEC22	1.00		%R	102		1,3-Butadiene	106-99-0	
CCV	msd1009DEC22	1.00		%R	99		Benzene	71-43-2	
CCV	msd1009DEC22	1.00		%R	110		Toluene	108-88-3	
CCV	msd1009DEC22	1.00		%R	103		Ethyl Benzene	100-41-4	
CCV	msd1009DEC22	1.00		%R	103		m,p-Xylene	108-38-3/1	
CCV	msd1009DEC22	1.00		%R	108		o-Xylene	95-47-6	
CCV	msd1009DEC22	1.00		%R	92		1,3-Butadiene	106-99-0	
CCV	msd1009DEC22	1.00		%R	99		Benzene	71-43-2	
CCV	msd1009DEC22	1.00		%R	110		Toluene	108-88-3	
CCV	msd1009DEC22	1.00		%R	98		Ethyl Benzene	100-41-4	
CCV	msd1009DEC22	1.00		%R	98		m,p-Xylene	108-38-3/1	
CCV	msd1009DEC22	1.00		%R	106		o-Xylene	95-47-6	
R04_18	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_18	msd1029DEC22	1.04	0.42	UG/M3	0.71	B	Benzene	71-43-2	
R04_18	msd1029DEC22	1.04	0.53	UG/M3	0.37	J	Toluene	108-88-3	
R04_18	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R04_18	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_18	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_06	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_06	msd1029DEC22	1.04	0.42	UG/M3	1.8		Benzene	71-43-2	
R04_06	msd1029DEC22	1.04	0.53	UG/M3	0.79		Toluene	108-88-3	
R04_06	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_06	msd1029DEC22	1.04	0.60	UG/M3	0.31	J	m,p-Xylene	108-38-3/1	
R04_06	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_05	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_05	msd1029DEC22	1.04	0.42	UG/M3	2.8		Benzene	71-43-2	
R04_05	msd1029DEC22	1.04	0.53	UG/M3	1.1		Toluene	108-88-3	
R04_05	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_05	msd1029DEC22	1.04	0.60	UG/M3	0.32	J	m,p-Xylene	108-38-3/1	
R04_05	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_04	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_04	msd1029DEC22	1.04	0.42	UG/M3	1.3		Benzene	71-43-2	
R04_04	msd1029DEC22	1.04	0.53	UG/M3	0.72		Toluene	108-88-3	
R04_04	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_04	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_04	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_03	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_03	msd1029DEC22	1.04	0.42	UG/M3	0.71	B	Benzene	71-43-2	
R04_03	msd1029DEC22	1.04	0.53	UG/M3	0.58		Toluene	108-88-3	
R04_03	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_03	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_03	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_02	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_02	msd1029DEC22	1.04	0.42	UG/M3	0.82		Benzene	71-43-2	
R04_02	msd1029DEC22	1.04	0.53	UG/M3	0.60		Toluene	108-88-3	
R04_02	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_02	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_02	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_01	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_01	msd1029DEC22	1.04	0.42	UG/M3	0.86		Benzene	71-43-2	
R04_01	msd1029DEC22	1.04	0.53	UG/M3	0.56		Toluene	108-88-3	
R04_01	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_01	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_01	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_24	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_24	msd1029DEC22	1.04	0.42	UG/M3	0.80		Benzene	71-43-2	
R04_24	msd1029DEC22	1.04	0.53	UG/M3	0.51	J	Toluene	108-88-3	
R04_24	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_24	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_24	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_23	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_23	msd1029DEC22	1.04	0.42	UG/M3	1.1		Benzene	71-43-2	
R04_23	msd1029DEC22	1.04	0.53	UG/M3	0.67		Toluene	108-88-3	
R04_23	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_23	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_23	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_22	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_22	msd1029DEC22	1.04	0.42	UG/M3	1.1		Benzene	71-43-2	
R04_22	msd1029DEC22	1.04	0.53	UG/M3	0.61		Toluene	108-88-3	
R04_22	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_22	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_22	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_21	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_21	msd1029DEC22	1.04	0.42	UG/M3	1.3		Benzene	71-43-2	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R04_21	msd1029DEC22	1.04	0.53	UG/M3	1.1		Toluene	108-88-3	
R04_21	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_21	msd1029DEC22	1.04	0.60	UG/M3	0.43	J	m,p-Xylene	108-38-3/1	
R04_21	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_20	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_20	msd1029DEC22	1.04	0.42	UG/M3	1.3		Benzene	71-43-2	
R04_20	msd1029DEC22	1.04	0.53	UG/M3	0.86		Toluene	108-88-3	
R04_20	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_20	msd1029DEC22	1.04	0.60	UG/M3	0.31	J	m,p-Xylene	108-38-3/1	
R04_20	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_16	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_16	msd1029DEC22	1.04	0.42	UG/M3	0.56	B	Benzene	71-43-2	
R04_16	msd1029DEC22	1.04	0.53	UG/M3	0.56		Toluene	108-88-3	
R04_16	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_16	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_16	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_15	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_15	msd1029DEC22	1.04	0.42	UG/M3	0.49	B	Benzene	71-43-2	
R04_15	msd1029DEC22	1.04	0.53	UG/M3	0.50	J	Toluene	108-88-3	
R04_15	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_15	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_15	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_14	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_14	msd1029DEC22	1.04	0.42	UG/M3	0.58	B	Benzene	71-43-2	
R04_14	msd1029DEC22	1.04	0.53	UG/M3	0.38	J	Toluene	108-88-3	
R04_14	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_14	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_14	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_13	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_13	msd1029DEC22	1.04	0.42	UG/M3	0.58	B	Benzene	71-43-2	
R04_13	msd1029DEC22	1.04	0.53	UG/M3	0.57		Toluene	108-88-3	
R04_13	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_13	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_13	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_12	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_12	msd1029DEC22	1.04	0.42	UG/M3	0.60	B	Benzene	71-43-2	
R04_12	msd1029DEC22	1.04	0.53	UG/M3	0.44	J	Toluene	108-88-3	
R04_12	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_12	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_12	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_11	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_11	msd1029DEC22	1.04	0.42	UG/M3	0.77		Benzene	71-43-2	
R04_11	msd1029DEC22	1.04	0.53	UG/M3	0.56		Toluene	108-88-3	
R04_11	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_11	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_11	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_10	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_10	msd1029DEC22	1.04	0.42	UG/M3	0.75		Benzene	71-43-2	
R04_10	msd1029DEC22	1.04	0.53	UG/M3	0.54		Toluene	108-88-3	
R04_10	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_10	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_10	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_17	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_17	msd1029DEC22	1.04	0.42	UG/M3	0.59	B	Benzene	71-43-2	
R04_17	msd1029DEC22	1.04	0.53	UG/M3	0.49	J	Toluene	108-88-3	
R04_17	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_17	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_17	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R04_08	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_08	msd1029DEC22	1.04	0.42	UG/M3	0.72		Benzene	71-43-2	
R04_08	msd1029DEC22	1.04	0.53	UG/M3	0.59		Toluene	108-88-3	
R04_08	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_08	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_08	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_09	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_09	msd1029DEC22	1.04	0.42	UG/M3	0.51	B	Benzene	71-43-2	
R04_09	msd1029DEC22	1.04	0.53	UG/M3	0.45	J	Toluene	108-88-3	
R04_09	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_09	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_09	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_07	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_07	msd1029DEC22	1.04	0.42	UG/M3	4.9		Benzene	71-43-2	
R04_07	msd1029DEC22	1.04	0.53	UG/M3	1.6		Toluene	108-88-3	
R04_07	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_07	msd1029DEC22	1.04	0.60	UG/M3	0.45	J	m,p-Xylene	108-38-3/1	
R04_07	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_19	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_19	msd1029DEC22	1.04	0.42	UG/M3	0.83		Benzene	71-43-2	
R04_19	msd1029DEC22	1.04	0.53	UG/M3	0.57		Toluene	108-88-3	
R04_19	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_19	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_19	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_01_B	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_01_B	msd1029DEC22	1.04	0.42	UG/M3	0.24	J	Benzene	71-43-2	
R04_01_B	msd1029DEC22	1.04	0.53	UG/M3	0.27	U	Toluene	108-88-3	
R04_01_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_01_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_01_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_02_B	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_02_B	msd1029DEC22	1.04	0.42	UG/M3	0.21	U	Benzene	71-43-2	
R04_02_B	msd1029DEC22	1.04	0.53	UG/M3	0.27	U	Toluene	108-88-3	
R04_02_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_02_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_02_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_12_B	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_12_B	msd1029DEC22	1.04	0.42	UG/M3	0.21	U	Benzene	71-43-2	
R04_12_B	msd1029DEC22	1.04	0.53	UG/M3	0.27	U	Toluene	108-88-3	
R04_12_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_12_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_12_B	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R04_13_D	msd1029DEC22	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R04_13_D	msd1029DEC22	1.04	0.42	UG/M3	0.68	B	Benzene	71-43-2	
R04_13_D	msd1029DEC22	1.04	0.53	UG/M3	0.49	J	Toluene	108-88-3	
R04_13_D	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R04_13_D	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R04_13_D	msd1029DEC22	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
Lab Blank	msd1029DEC22	1.00	0.30	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1029DEC22	1.00	0.40	UG/M3	0.20	U	Benzene	71-43-2	
Lab Blank	msd1029DEC22	1.00	0.51	UG/M3	0.26	U	Toluene	108-88-3	
Lab Blank	msd1029DEC22	1.00	0.58	UG/M3	0.29	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1029DEC22	1.00	0.58	UG/M3	0.29	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1029DEC22	1.00	0.58	UG/M3	0.29	U	o-Xylene	95-47-6	
CCV	msd1029DEC22	1.00		%R	107		1,3-Butadiene	106-99-0	
CCV	msd1029DEC22	1.00		%R	98		Benzene	71-43-2	
CCV	msd1029DEC22	1.00		%R	104		Toluene	108-88-3	
CCV	msd1029DEC22	1.00		%R	97		Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
CCV	msd1029DEC22	1.00		%R	94		m,p-Xylene	108-38-3/1	
CCV	msd1029DEC22	1.00		%R	99		o-Xylene	95-47-6	
CCV	msd1029DEC22	1.00		%R	93		1,3-Butadiene	106-99-0	
CCV	msd1029DEC22	1.00		%R	96		Benzene	71-43-2	
CCV	msd1029DEC22	1.00		%R	99		Toluene	108-88-3	
CCV	msd1029DEC22	1.00		%R	91		Ethyl Benzene	100-41-4	
CCV	msd1029DEC22	1.00		%R	88		m,p-Xylene	108-38-3/1	
CCV	msd1029DEC22	1.00		%R	90		o-Xylene	95-47-6	
CCV	msd1029DEC22	1.00		%R	108		1,3-Butadiene	106-99-0	
CCV	msd1029DEC22	1.00		%R	89		Benzene	71-43-2	
CCV	msd1029DEC22	1.00		%R	98		Toluene	108-88-3	
CCV	msd1029DEC22	1.00		%R	91		Ethyl Benzene	100-41-4	
CCV	msd1029DEC22	1.00		%R	90		m,p-Xylene	108-38-3/1	
CCV	msd1029DEC22	1.00		%R	92		o-Xylene	95-47-6	
R05_01	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_01	msd1011JAN23	1.05	0.37	UG/M3	2.1	P	Benzene	71-43-2	
R05_01	msd1011JAN23	1.05	0.47	UG/M3	0.93	PC	Toluene	108-88-3	
R05_01	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_01	msd1011JAN23	1.05	0.52	UG/M3	0.33	J	m,p-Xylene	108-38-3/1	
R05_01	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_01_D	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_01_D	msd1011JAN23	1.05	0.37	UG/M3	1.5	P	Benzene	71-43-2	
R05_01_D	msd1011JAN23	1.05	0.47	UG/M3	0.66	PC	Toluene	108-88-3	
R05_01_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_01_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_01_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_02	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_02	msd1011JAN23	1.05	0.37	UG/M3	2.3	P	Benzene	71-43-2	
R05_02	msd1011JAN23	1.05	0.47	UG/M3	0.92	PC	Toluene	108-88-3	
R05_02	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_02	msd1011JAN23	1.05	0.52	UG/M3	0.40	J	m,p-Xylene	108-38-3/1	
R05_02	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_02_B	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_02_B	msd1011JAN23	1.05	0.37	UG/M3	0.18	U,P	Benzene	71-43-2	
R05_02_B	msd1011JAN23	1.05	0.47	UG/M3	0.23	U,PC	Toluene	108-88-3	
R05_02_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_02_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_02_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_03	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_03	msd1011JAN23	1.05	0.37	UG/M3	1.4	P	Benzene	71-43-2	
R05_03	msd1011JAN23	1.05	0.47	UG/M3	0.69	PC	Toluene	108-88-3	
R05_03	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_03	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_03	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_04	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_04	msd1011JAN23	1.05	0.37	UG/M3	1.6	P	Benzene	71-43-2	
R05_04	msd1011JAN23	1.05	0.47	UG/M3	0.67	PC	Toluene	108-88-3	
R05_04	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_04	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_04	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_05	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_05	msd1011JAN23	1.05	0.37	UG/M3	1.4	P	Benzene	71-43-2	
R05_05	msd1011JAN23	1.05	0.47	UG/M3	0.83	PC	Toluene	108-88-3	
R05_05	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_05	msd1011JAN23	1.05	0.52	UG/M3	0.31	J	m,p-Xylene	108-38-3/1	
R05_05	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_06	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_06	msd1011JAN23	1.05	0.37	UG/M3	1.5	P	Benzene	71-43-2	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R05_06	msd1011JAN23	1.05	0.47	UG/M3	0.77	PC	Toluene	108-88-3	
R05_06	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_06	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_06	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_07	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_07	msd1011JAN23	1.05	0.37	UG/M3	1.1	P	Benzene	71-43-2	
R05_07	msd1011JAN23	1.05	0.47	UG/M3	0.67	PC	Toluene	108-88-3	
R05_07	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_07	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_07	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_12	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_12	msd1011JAN23	1.05	0.37	UG/M3	1.1	P	Benzene	71-43-2	
R05_12	msd1011JAN23	1.05	0.47	UG/M3	0.55	PC	Toluene	108-88-3	
R05_12	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_12	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_12	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_12_B	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_12_B	msd1011JAN23	1.05	0.37	UG/M3	0.18	U,P	Benzene	71-43-2	
R05_12_B	msd1011JAN23	1.05	0.47	UG/M3	0.23	U	Toluene	108-88-3	
R05_12_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_12_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_12_B	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_11	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_11	msd1011JAN23	1.05	0.37	UG/M3	0.99	P	Benzene	71-43-2	
R05_11	msd1011JAN23	1.05	0.47	UG/M3	0.65	PC	Toluene	108-88-3	
R05_11	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_11	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_11	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_10	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_10	msd1011JAN23	1.05	0.37	UG/M3	0.64	P	Benzene	71-43-2	
R05_10	msd1011JAN23	1.05	0.47	UG/M3	0.57	PC	Toluene	108-88-3	
R05_10	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_10	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_10	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_13	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_13	msd1011JAN23	1.05	0.37	UG/M3	1.2	P	Benzene	71-43-2	
R05_13	msd1011JAN23	1.05	0.47	UG/M3	0.54	PC	Toluene	108-88-3	
R05_13	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_13	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_13	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_13_D	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_13_D	msd1011JAN23	1.05	0.37	UG/M3	1.1	P	Benzene	71-43-2	
R05_13_D	msd1011JAN23	1.05	0.47	UG/M3	0.62	PC	Toluene	108-88-3	
R05_13_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_13_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_13_D	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_14	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_14	msd1011JAN23	1.05	0.37	UG/M3	1.2	P	Benzene	71-43-2	
R05_14	msd1011JAN23	1.05	0.47	UG/M3	0.60	PC	Toluene	108-88-3	
R05_14	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_14	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_14	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_15	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_15	msd1011JAN23	1.05	0.37	UG/M3	0.91	P	Benzene	71-43-2	
R05_15	msd1011JAN23	1.05	0.47	UG/M3	0.45	J,PC	Toluene	108-88-3	
R05_15	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_15	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_15	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R05_16	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_16	msd1011JAN23	1.05	0.37	UG/M3	1.1	P	Benzene	71-43-2	
R05_16	msd1011JAN23	1.05	0.47	UG/M3	0.56	PC	Toluene	108-88-3	
R05_16	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_16	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_16	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_18	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_18	msd1011JAN23	1.05	0.37	UG/M3	0.75	P	Benzene	71-43-2	
R05_18	msd1011JAN23	1.05	0.47	UG/M3	0.50	PC	Toluene	108-88-3	
R05_18	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_18	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_18	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_19	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_19	msd1011JAN23	1.05	0.37	UG/M3	0.81	P	Benzene	71-43-2	
R05_19	msd1011JAN23	1.05	0.47	UG/M3	0.50	PC	Toluene	108-88-3	
R05_19	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_19	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_19	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_20	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_20	msd1011JAN23	1.05	0.37	UG/M3	1.0	P	Benzene	71-43-2	
R05_20	msd1011JAN23	1.05	0.47	UG/M3	0.73	PC	Toluene	108-88-3	
R05_20	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_20	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_20	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_21	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_21	msd1011JAN23	1.05	0.37	UG/M3	0.95	P	Benzene	71-43-2	
R05_21	msd1011JAN23	1.05	0.47	UG/M3	0.55	PC	Toluene	108-88-3	
R05_21	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_21	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_21	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_22	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_22	msd1011JAN23	1.05	0.37	UG/M3	0.94	P	Benzene	71-43-2	
R05_22	msd1011JAN23	1.05	0.47	UG/M3	0.58	PC	Toluene	108-88-3	
R05_22	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_22	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_22	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_23	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_23	msd1011JAN23	1.05	0.37	UG/M3	0.92	P	Benzene	71-43-2	
R05_23	msd1011JAN23	1.05	0.47	UG/M3	0.53	PC	Toluene	108-88-3	
R05_23	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_23	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_23	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_24	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_24	msd1011JAN23	1.05	0.37	UG/M3	0.68	P	Benzene	71-43-2	
R05_24	msd1011JAN23	1.05	0.47	UG/M3	0.51	PC	Toluene	108-88-3	
R05_24	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_24	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_24	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_17	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_17	msd1011JAN23	1.05	0.37	UG/M3	0.93	P	Benzene	71-43-2	
R05_17	msd1011JAN23	1.05	0.47	UG/M3	0.44	J,PC	Toluene	108-88-3	
R05_17	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_17	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_17	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_08	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_08	msd1011JAN23	1.05	0.37	UG/M3	0.57	P	Benzene	71-43-2	
R05_08	msd1011JAN23	1.05	0.47	UG/M3	0.51	PC	Toluene	108-88-3	
R05_08	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R05_08	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_08	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R05_09	msd1011JAN23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R05_09	msd1011JAN23	1.05	0.37	UG/M3	0.52	P	Benzene	71-43-2	
R05_09	msd1011JAN23	1.05	0.47	UG/M3	0.30	J,PC	Toluene	108-88-3	
R05_09	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R05_09	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R05_09	msd1011JAN23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
Lab Blank	msd1011JAN23	1.00	0.26	UG/M3	0.12	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1011JAN23	1.00	0.35	UG/M3	0.17	U	Benzene	71-43-2	
Lab Blank	msd1011JAN23	1.00	0.45	UG/M3	0.22	U	Toluene	108-88-3	
Lab Blank	msd1011JAN23	1.00	0.50	UG/M3	0.25	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1011JAN23	1.00	0.50	UG/M3	0.25	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1011JAN23	1.00	0.50	UG/M3	0.25	U	o-Xylene	95-47-6	
CCV	msd1011JAN23	1.00		%R	95		1,3-Butadiene	106-99-0	
CCV	msd1011JAN23	1.00		%R	96		Benzene	71-43-2	
CCV	msd1011JAN23	1.00		%R	102		Toluene	108-88-3	
CCV	msd1011JAN23	1.00		%R	108		Ethyl Benzene	100-41-4	
CCV	msd1011JAN23	1.00		%R	109		m,p-Xylene	108-38-3/1	
CCV	msd1011JAN23	1.00		%R	110		o-Xylene	95-47-6	
CCV	msd1011JAN23	1.00		%R	104		1,3-Butadiene	106-99-0	
CCV	msd1011JAN23	1.00		%R	97		Benzene	71-43-2	
CCV	msd1011JAN23	1.00		%R	105		Toluene	108-88-3	
CCV	msd1011JAN23	1.00		%R	115		Ethyl Benzene	100-41-4	
CCV	msd1011JAN23	1.00		%R	114		m,p-Xylene	108-38-3/1	
CCV	msd1011JAN23	1.00		%R	114		o-Xylene	95-47-6	
CCV	msd1011JAN23	1.00		%R	103		1,3-Butadiene	106-99-0	
CCV	msd1011JAN23	1.00		%R	92		Benzene	71-43-2	
CCV	msd1011JAN23	1.00		%R	105		Toluene	108-88-3	
CCV	msd1011JAN23	1.00		%R	108		Ethyl Benzene	100-41-4	
CCV	msd1011JAN23	1.00		%R	113		m,p-Xylene	108-38-3/1	
CCV	msd1011JAN23	1.00		%R	114		o-Xylene	95-47-6	
R06_01	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_01	msd1019JAN23	1.04	0.38	UG/M3	0.93		Benzene	71-43-2	
R06_01	msd1019JAN23	1.04	0.50	UG/M3	0.47	J	Toluene	108-88-3	
R06_01	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_01	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_01	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_01_D	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_01_D	msd1019JAN23	1.04	0.38	UG/M3	1.2		Benzene	71-43-2	
R06_01_D	msd1019JAN23	1.04	0.50	UG/M3	0.57		Toluene	108-88-3	
R06_01_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_01_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_01_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_02	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_02	msd1019JAN23	1.04	0.38	UG/M3	3.1		Benzene	71-43-2	
R06_02	msd1019JAN23	1.04	0.50	UG/M3	1.0		Toluene	108-88-3	
R06_02	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_02	msd1019JAN23	1.04	0.56	UG/M3	0.34	J	m,p-Xylene	108-38-3/1	
R06_02	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_02_B	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_02_B	msd1019JAN23	1.04	0.38	UG/M3	0.19	U	Benzene	71-43-2	
R06_02_B	msd1019JAN23	1.04	0.50	UG/M3	0.25	U	Toluene	108-88-3	
R06_02_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_02_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_02_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_03	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_03	msd1019JAN23	1.04	0.38	UG/M3	2.6		Benzene	71-43-2	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R06_03	msd1019JAN23	1.04	0.50	UG/M3	0.82		Toluene	108-88-3	
R06_03	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_03	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_03	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_04	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_04	msd1019JAN23	1.04	0.38	UG/M3	2.2		Benzene	71-43-2	
R06_04	msd1019JAN23	1.04	0.50	UG/M3	0.82		Toluene	108-88-3	
R06_04	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_04	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_04	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_05	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_05	msd1019JAN23	1.04	0.38	UG/M3	3.4		Benzene	71-43-2	
R06_05	msd1019JAN23	1.04	0.50	UG/M3	1.2		Toluene	108-88-3	
R06_05	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_05	msd1019JAN23	1.04	0.56	UG/M3	0.42	J	m,p-Xylene	108-38-3/1	
R06_05	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_06	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_06	msd1019JAN23	1.04	0.38	UG/M3	1.6		Benzene	71-43-2	
R06_06	msd1019JAN23	1.04	0.50	UG/M3	1.1		Toluene	108-88-3	
R06_06	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_06	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_06	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_07	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_07	msd1019JAN23	1.04	0.38	UG/M3	0.79		Benzene	71-43-2	
R06_07	msd1019JAN23	1.04	0.50	UG/M3	0.45	J	Toluene	108-88-3	
R06_07	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_07	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_07	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_12	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_12	msd1019JAN23	1.04	0.38	UG/M3	0.57		Benzene	71-43-2	
R06_12	msd1019JAN23	1.04	0.50	UG/M3	0.31	J	Toluene	108-88-3	
R06_12	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_12	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_12	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_12_B	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_12_B	msd1019JAN23	1.04	0.38	UG/M3	0.19	U	Benzene	71-43-2	
R06_12_B	msd1019JAN23	1.04	0.50	UG/M3	0.25	U	Toluene	108-88-3	
R06_12_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_12_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_12_B	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_11	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_11	msd1019JAN23	1.04	0.38	UG/M3	0.67		Benzene	71-43-2	
R06_11	msd1019JAN23	1.04	0.50	UG/M3	0.40	J	Toluene	108-88-3	
R06_11	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_11	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_11	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_10	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_10	msd1019JAN23	1.04	0.38	UG/M3	0.95		Benzene	71-43-2	
R06_10	msd1019JAN23	1.04	0.50	UG/M3	0.48	J	Toluene	108-88-3	
R06_10	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_10	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_10	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_13	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_13	msd1019JAN23	1.04	0.38	UG/M3	0.57		Benzene	71-43-2	
R06_13	msd1019JAN23	1.04	0.50	UG/M3	0.39	J	Toluene	108-88-3	
R06_13	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_13	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_13	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R06_13_D	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_13_D	msd1019JAN23	1.04	0.38	UG/M3	0.58		Benzene	71-43-2	
R06_13_D	msd1019JAN23	1.04	0.50	UG/M3	0.35	J	Toluene	108-88-3	
R06_13_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_13_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_13_D	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_14	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_14	msd1019JAN23	1.04	0.38	UG/M3	0.50		Benzene	71-43-2	
R06_14	msd1019JAN23	1.04	0.50	UG/M3	0.34	J	Toluene	108-88-3	
R06_14	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_14	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_14	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_15	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_15	msd1019JAN23	1.04	0.38	UG/M3	0.46		Benzene	71-43-2	
R06_15	msd1019JAN23	1.04	0.50	UG/M3	0.32	J	Toluene	108-88-3	
R06_15	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_15	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_15	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_16	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_16	msd1019JAN23	1.04	0.38	UG/M3	0.55		Benzene	71-43-2	
R06_16	msd1019JAN23	1.04	0.50	UG/M3	0.44	J	Toluene	108-88-3	
R06_16	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_16	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_16	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_18	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_18	msd1019JAN23	1.04	0.38	UG/M3	0.61		Benzene	71-43-2	
R06_18	msd1019JAN23	1.04	0.50	UG/M3	0.28	J	Toluene	108-88-3	
R06_18	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_18	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_18	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_19	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_19	msd1019JAN23	1.04	0.38	UG/M3	0.67		Benzene	71-43-2	
R06_19	msd1019JAN23	1.04	0.50	UG/M3	0.38	J	Toluene	108-88-3	
R06_19	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_19	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_19	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_20	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_20	msd1019JAN23	1.04	0.38	UG/M3	1.0		Benzene	71-43-2	
R06_20	msd1019JAN23	1.04	0.50	UG/M3	0.53		Toluene	108-88-3	
R06_20	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_20	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_20	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_21	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_21	msd1019JAN23	1.04	0.38	UG/M3	0.88		Benzene	71-43-2	
R06_21	msd1019JAN23	1.04	0.50	UG/M3	0.40	J	Toluene	108-88-3	
R06_21	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_21	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_21	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_22	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_22	msd1019JAN23	1.04	0.38	UG/M3	1.2		Benzene	71-43-2	
R06_22	msd1019JAN23	1.04	0.50	UG/M3	0.49	J	Toluene	108-88-3	
R06_22	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_22	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_22	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_23	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_23	msd1019JAN23	1.04	0.38	UG/M3	1.4		Benzene	71-43-2	
R06_23	msd1019JAN23	1.04	0.50	UG/M3	0.69		Toluene	108-88-3	
R06_23	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R06_23	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_23	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_24	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_24	msd1019JAN23	1.04	0.38	UG/M3	0.68		Benzene	71-43-2	
R06_24	msd1019JAN23	1.04	0.50	UG/M3	0.40	J	Toluene	108-88-3	
R06_24	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_24	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_24	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_17	msd1019JAN23	1.04	0.29	UG/M3	0.14	U	1,3-Butadiene	106-99-0	
R06_17	msd1019JAN23	1.04	0.38	UG/M3	0.55		Benzene	71-43-2	
R06_17	msd1019JAN23	1.04	0.50	UG/M3	0.33	J	Toluene	108-88-3	
R06_17	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	Ethyl Benzene	100-41-4	
R06_17	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	m,p-Xylene	108-38-3/1	
R06_17	msd1019JAN23	1.04	0.56	UG/M3	0.28	U	o-Xylene	95-47-6	
R06_08	msd1019JAN23	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R06_08	msd1019JAN23	1.04	0.42	UG/M3	0.63		Benzene	71-43-2	
R06_08	msd1019JAN23	1.04	0.53	UG/M3	0.46	J	Toluene	108-88-3	
R06_08	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R06_08	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R06_08	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
R06_09	msd1019JAN23	1.04	0.31	UG/M3	0.15	U	1,3-Butadiene	106-99-0	
R06_09	msd1019JAN23	1.04	0.42	UG/M3	0.69		Benzene	71-43-2	
R06_09	msd1019JAN23	1.04	0.53	UG/M3	0.50	J	Toluene	108-88-3	
R06_09	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	Ethyl Benzene	100-41-4	
R06_09	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	m,p-Xylene	108-38-3/1	
R06_09	msd1019JAN23	1.04	0.60	UG/M3	0.30	U	o-Xylene	95-47-6	
Lab Blank	msd1019JAN23	1.00	0.28	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1019JAN23	1.00	0.37	UG/M3	0.18	U	Benzene	71-43-2	
Lab Blank	msd1019JAN23	1.00	0.48	UG/M3	0.24	U	Toluene	108-88-3	
Lab Blank	msd1019JAN23	1.00	0.54	UG/M3	0.27	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1019JAN23	1.00	0.54	UG/M3	0.27	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1019JAN23	1.00	0.54	UG/M3	0.27	U	o-Xylene	95-47-6	
CCV	msd1019JAN23	1.00		%R	92		1,3-Butadiene	106-99-0	
CCV	msd1019JAN23	1.00		%R	99		Benzene	71-43-2	
CCV	msd1019JAN23	1.00		%R	105		Toluene	108-88-3	
CCV	msd1019JAN23	1.00		%R	110		Ethyl Benzene	100-41-4	
CCV	msd1019JAN23	1.00		%R	107		m,p-Xylene	108-38-3/1	
CCV	msd1019JAN23	1.00		%R	115		o-Xylene	95-47-6	
CCV	msd1019JAN23	1.00		%R	94		1,3-Butadiene	106-99-0	
CCV	msd1019JAN23	1.00		%R	100		Benzene	71-43-2	
CCV	msd1019JAN23	1.00		%R	106		Toluene	108-88-3	
CCV	msd1019JAN23	1.00		%R	111		Ethyl Benzene	100-41-4	
CCV	msd1019JAN23	1.00		%R	109		m,p-Xylene	108-38-3/1	
CCV	msd1019JAN23	1.00		%R	113		o-Xylene	95-47-6	
CCV	msd1019JAN23	1.00		%R	92		1,3-Butadiene	106-99-0	
CCV	msd1019JAN23	1.00		%R	100		Benzene	71-43-2	
CCV	msd1019JAN23	1.00		%R	106		Toluene	108-88-3	
CCV	msd1019JAN23	1.00		%R	115		Ethyl Benzene	100-41-4	
CCV	msd1019JAN23	1.00		%R	118		m,p-Xylene	108-38-3/1	
CCV	msd1019JAN23	1.00		%R	119		o-Xylene	95-47-6	
R07_01	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_01	msd1002FEB23	1.05	0.37	UG/M3	1.5		Benzene	71-43-2	
R07_01	msd1002FEB23	1.05	0.47	UG/M3	0.76		Toluene	108-88-3	
R07_01	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_01	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_01	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_01_D	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_01_D	msd1002FEB23	1.05	0.37	UG/M3	1.2		Benzene	71-43-2	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R07_01_D	msd1002FEB23	1.05	0.47	UG/M3	0.58		Toluene	108-88-3	
R07_01_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_01_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_01_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_02	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_02	msd1002FEB23	1.05	0.37	UG/M3	1.8		Benzene	71-43-2	
R07_02	msd1002FEB23	1.05	0.47	UG/M3	0.79		Toluene	108-88-3	
R07_02	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_02	msd1002FEB23	1.05	0.52	UG/M3	0.28	J	m,p-Xylene	108-38-3/1	
R07_02	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_02_B	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_02_B	msd1002FEB23	1.05	0.37	UG/M3	0.18	U	Benzene	71-43-2	
R07_02_B	msd1002FEB23	1.05	0.47	UG/M3	0.23	U	Toluene	108-88-3	
R07_02_B	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_02_B	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_02_B	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_03	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_03	msd1002FEB23	1.05	0.37	UG/M3	1.4		Benzene	71-43-2	
R07_03	msd1002FEB23	1.05	0.47	UG/M3	0.63		Toluene	108-88-3	
R07_03	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_03	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_03	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_04	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_04	msd1002FEB23	1.05	0.37	UG/M3	2.0		Benzene	71-43-2	
R07_04	msd1002FEB23	1.05	0.47	UG/M3	0.85		Toluene	108-88-3	
R07_04	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_04	msd1002FEB23	1.05	0.52	UG/M3	0.29	J	m,p-Xylene	108-38-3/1	
R07_04	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_05	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_05	msd1002FEB23	1.05	0.37	UG/M3	7.0		Benzene	71-43-2	
R07_05	msd1002FEB23	1.05	0.47	UG/M3	2.9		Toluene	108-88-3	
R07_05	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_05	msd1002FEB23	1.05	0.52	UG/M3	0.86		m,p-Xylene	108-38-3/1	
R07_05	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_06	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_06	msd1002FEB23	1.05	0.37	UG/M3	1.3		Benzene	71-43-2	
R07_06	msd1002FEB23	1.05	0.47	UG/M3	0.76		Toluene	108-88-3	
R07_06	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_06	msd1002FEB23	1.05	0.52	UG/M3	0.31	J	m,p-Xylene	108-38-3/1	
R07_06	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_07	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_07	msd1002FEB23	1.05	0.37	UG/M3	1.2		Benzene	71-43-2	
R07_07	msd1002FEB23	1.05	0.47	UG/M3	0.64		Toluene	108-88-3	
R07_07	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_07	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_07	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_12	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_12	msd1003FEB23	1.05	0.37	UG/M3	1.3		Benzene	71-43-2	
R07_12	msd1003FEB23	1.05	0.47	UG/M3	0.54		Toluene	108-88-3	
R07_12	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_12	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_12	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_12_B	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_12_B	msd1003FEB23	1.05	0.37	UG/M3	0.27	J	Benzene	71-43-2	
R07_12_B	msd1003FEB23	1.05	0.47	UG/M3	0.23	U	Toluene	108-88-3	
R07_12_B	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_12_B	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_12_B	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
R07_11	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_11	msd1002FEB23	1.05	0.37	UG/M3	1.2		Benzene	71-43-2	
R07_11	msd1002FEB23	1.05	0.47	UG/M3	0.62		Toluene	108-88-3	
R07_11	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_11	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_11	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_10	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_10	msd1002FEB23	1.05	0.37	UG/M3	1.5		Benzene	71-43-2	
R07_10	msd1002FEB23	1.05	0.47	UG/M3	0.65		Toluene	108-88-3	
R07_10	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_10	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_10	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_13	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_13	msd1002FEB23	1.05	0.37	UG/M3	0.88		Benzene	71-43-2	
R07_13	msd1002FEB23	1.05	0.47	UG/M3	0.45	J	Toluene	108-88-3	
R07_13	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_13	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_13	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_13_D	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_13_D	msd1002FEB23	1.05	0.37	UG/M3	0.94		Benzene	71-43-2	
R07_13_D	msd1002FEB23	1.05	0.47	UG/M3	0.50		Toluene	108-88-3	
R07_13_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_13_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_13_D	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_14	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_14	msd1002FEB23	1.05	0.37	UG/M3	0.89		Benzene	71-43-2	
R07_14	msd1002FEB23	1.05	0.47	UG/M3	0.50		Toluene	108-88-3	
R07_14	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_14	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_14	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_15	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_15	msd1002FEB23	1.05	0.37	UG/M3	0.73	B	Benzene	71-43-2	
R07_15	msd1002FEB23	1.05	0.47	UG/M3	0.44	J	Toluene	108-88-3	
R07_15	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_15	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_15	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_16	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_16	msd1002FEB23	1.05	0.37	UG/M3	0.82		Benzene	71-43-2	
R07_16	msd1002FEB23	1.05	0.47	UG/M3	0.59		Toluene	108-88-3	
R07_16	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_16	msd1002FEB23	1.05	0.52	UG/M3	0.30	J	m,p-Xylene	108-38-3/1	
R07_16	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_18	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_18	msd1002FEB23	1.05	0.37	UG/M3	0.73	B	Benzene	71-43-2	
R07_18	msd1002FEB23	1.05	0.47	UG/M3	0.35	J	Toluene	108-88-3	
R07_18	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_18	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_18	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_19	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_19	msd1002FEB23	1.05	0.37	UG/M3	0.81		Benzene	71-43-2	
R07_19	msd1002FEB23	1.05	0.47	UG/M3	0.46	J	Toluene	108-88-3	
R07_19	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_19	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_19	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_20	msd1002FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_20	msd1002FEB23	1.05	0.37	UG/M3	1.4		Benzene	71-43-2	
R07_20	msd1002FEB23	1.05	0.47	UG/M3	0.73		Toluene	108-88-3	
R07_20	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	

CLIENTSAMPID	LABCTID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT1
R07_20	msd1002FEB23	1.05	0.52	UG/M3	0.33	J	m,p-Xylene	108-38-3/1	
R07_20	msd1002FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_21	msd1003FEB23	1.05	0.27	UG/M3	0.14	J	1,3-Butadiene	106-99-0	
R07_21	msd1003FEB23	1.05	0.37	UG/M3	1.7		Benzene	71-43-2	
R07_21	msd1003FEB23	1.05	0.47	UG/M3	1.0		Toluene	108-88-3	
R07_21	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_21	msd1003FEB23	1.05	0.52	UG/M3	0.38	J	m,p-Xylene	108-38-3/1	
R07_21	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_22	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_22	msd1003FEB23	1.05	0.37	UG/M3	1.3		Benzene	71-43-2	
R07_22	msd1003FEB23	1.05	0.47	UG/M3	0.54		Toluene	108-88-3	
R07_22	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_22	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_22	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_23	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_23	msd1003FEB23	1.05	0.37	UG/M3	1.2		Benzene	71-43-2	
R07_23	msd1003FEB23	1.05	0.47	UG/M3	0.59		Toluene	108-88-3	
R07_23	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_23	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_23	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_24	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_24	msd1003FEB23	1.05	0.37	UG/M3	0.96		Benzene	71-43-2	
R07_24	msd1003FEB23	1.05	0.47	UG/M3	0.50		Toluene	108-88-3	
R07_24	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_24	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_24	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_17	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_17	msd1003FEB23	1.05	0.37	UG/M3	1.0		Benzene	71-43-2	
R07_17	msd1003FEB23	1.05	0.47	UG/M3	0.45	J	Toluene	108-88-3	
R07_17	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_17	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_17	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_09	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_09	msd1003FEB23	1.05	0.37	UG/M3	0.66	B	Benzene	71-43-2	
R07_09	msd1003FEB23	1.05	0.47	UG/M3	0.33	J	Toluene	108-88-3	
R07_09	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_09	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_09	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
R07_08	msd1003FEB23	1.05	0.27	UG/M3	0.13	U	1,3-Butadiene	106-99-0	
R07_08	msd1003FEB23	1.05	0.37	UG/M3	0.84		Benzene	71-43-2	
R07_08	msd1003FEB23	1.05	0.47	UG/M3	0.45	J	Toluene	108-88-3	
R07_08	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	Ethyl Benzene	100-41-4	
R07_08	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	m,p-Xylene	108-38-3/1	
R07_08	msd1003FEB23	1.05	0.52	UG/M3	0.26	U	o-Xylene	95-47-6	
Lab Blank	msd1002FEB23	1.00	0.26	UG/M3	0.12	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1002FEB23	1.00	0.35	UG/M3	0.17	U	Benzene	71-43-2	
Lab Blank	msd1002FEB23	1.00	0.45	UG/M3	0.22	U	Toluene	108-88-3	
Lab Blank	msd1002FEB23	1.00	0.50	UG/M3	0.25	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1002FEB23	1.00	0.50	UG/M3	0.25	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1002FEB23	1.00	0.50	UG/M3	0.25	U	o-Xylene	95-47-6	
Lab Blank	msd1003FEB23	1.00	0.26	UG/M3	0.12	U	1,3-Butadiene	106-99-0	
Lab Blank	msd1003FEB23	1.00	0.35	UG/M3	0.17	U	Benzene	71-43-2	
Lab Blank	msd1003FEB23	1.00	0.45	UG/M3	0.22	U	Toluene	108-88-3	
Lab Blank	msd1003FEB23	1.00	0.50	UG/M3	0.25	U	Ethyl Benzene	100-41-4	
Lab Blank	msd1003FEB23	1.00	0.50	UG/M3	0.25	U	m,p-Xylene	108-38-3/1	
Lab Blank	msd1003FEB23	1.00	0.50	UG/M3	0.25	U	o-Xylene	95-47-6	
CCV	msd1002FEB23	1.00		%R	100		1,3-Butadiene	106-99-0	
CCV	msd1002FEB23	1.00		%R	98		Benzene	71-43-2	

CLIENTSAMPID	LABCTLID	DILUTION	REPLMT	UNITS	RESULTS	DATAFLAGS	COMPOUND NAME	CASNUM	COMMENT
CCV	msd1002FEB23	1.00		%R	103		Toluene	108-88-3	
CCV	msd1002FEB23	1.00		%R	107		Ethyl Benzene	100-41-4	
CCV	msd1002FEB23	1.00		%R	111		m,p-Xylene	108-38-3/1	
CCV	msd1002FEB23	1.00		%R	108		o-Xylene	95-47-6	
CCV	msd1002FEB23	1.00		%R	97		1,3-Butadiene	106-99-0	
CCV	msd1002FEB23	1.00		%R	96		Benzene	71-43-2	
CCV	msd1002FEB23	1.00		%R	93		Toluene	108-88-3	
CCV	msd1002FEB23	1.00		%R	88		Ethyl Benzene	100-41-4	
CCV	msd1002FEB23	1.00		%R	89		m,p-Xylene	108-38-3/1	
CCV	msd1002FEB23	1.00		%R	85		o-Xylene	95-47-6	
CCV	msd1003FEB23	1.00		%R	98		1,3-Butadiene	106-99-0	
CCV	msd1003FEB23	1.00		%R	99		Benzene	71-43-2	
CCV	msd1003FEB23	1.00		%R	100		Toluene	108-88-3	
CCV	msd1003FEB23	1.00		%R	98		Ethyl Benzene	100-41-4	
CCV	msd1003FEB23	1.00		%R	98		m,p-Xylene	108-38-3/1	
CCV	msd1003FEB23	1.00		%R	96		o-Xylene	95-47-6	

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

**TO-13A (PAH)
Run Data and Parameters**

Sample ID No.	R01_UW	R01_DW1	R01_DW2	R01_INT1	R01_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2022)	Oct 27	Oct 27	Oct 27	Oct 27	Oct 27
Start Time (approx.)	14:17	15:00	15:42	16:25	16:45
Stop Date (2022)	Oct 28	Oct 28	Oct 28	Oct 28	Oct 28
Stop Time (approx.)	12:57	14:07	14:49	15:22	15:37
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	754.75	754.71	754.76	754.78	754.78
T _s Temperature (°K)	280.75	281.32	281.22	281.38	281.38
Sampling Parameters					
θ Total sampling time (hours)	22.59	23.15	23.14	22.97	22.83
Q _s Sample flow rate, standard (scm /min)	0.2181	0.2290	0.2269	0.2178	0.2190
V _{mstd} Volume metered, standard (scm)	295.61	318.04	315.07	300.22	300.05

PAHs	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0051	No 0.0069	No 0.0057	No 0.2565	No 0.1500
Acenaphthylene (µg/m3)	Yes 0.0007	No 0.0010	Yes 0.0006	No 1.5989	No 1.9330
Anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.5663	No 0.3333
Benzo(a) anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.3264	No 0.1366
Benzo(a)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.2132	No 0.0733
Benzo(b)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.4330	No 0.1700
Benzo(e)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.2198	No 0.0900
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.1732	No 0.0633
Benzo(k)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.1199	No 0.0500
Chrysene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.3664	No 0.1633
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.0333	No 0.0140
Fluoranthene (µg/m3)	Yes 0.0007	No 0.0010	Yes 0.0006	No 1.4656	No 0.6999
Fluorene (µg/m3)	No 0.0037	No 0.0047	No 0.0035	No 0.6995	No 0.6666
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.2198	No 0.0767
Naphthalene (µg/m3)	No 0.0152	No 0.0943	No 0.0140	No 29.3123	No 46.6594
Perylene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0006	No 0.0799	No 0.0260
Phenanthrene (µg/m3)	No 0.0061	No 0.0069	No 0.0044	No 2.9312	No 1.6997
Pyrene (µg/m3)	Yes 0.0007	No 0.0007	Yes 0.0006	No 1.0326	No 0.4999

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

**TO-13A (PAH)
Run Data and Parameters**

Sample ID No.	R02_UW	R02_DW1	R02_DW2	R02_INT1	R02_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2022)	Nov 8	Nov 8	Nov 8	Nov 8	Nov 8
Start Time (approx.)	12:32	10:53	11:25	09:56	10:21
Stop Date (2022)	Nov 9	Nov 9	Nov 9	Nov 9	Nov 9
Stop Time (approx.)	12:00	10:35	11:15	09:34	10:00
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	754.85	755.56	755.21	755.92	755.56
T _s Temperature (°K)	283.45	283.07	283.26	282.98	283.07
Sampling Parameters					
θ Total sampling time (hours)	23.47	23.69	23.68	23.63	23.65
Q _s Sample flow rate, standard (scm /min)	0.2211	0.2197	0.2208	0.2213	0.2159
V _{mstd} Volume metered, standard (scm)	311.38	312.25	313.68	313.70	306.42

PAHs

	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0039	No 0.0074	No 0.0024	No 0.1976	No 0.0653
Acenaphthylene (µg/m3)	Yes 0.0006	No 0.0090	Yes 0.0006	No 2.2633	No 0.2774
Anthracene (µg/m3)	Yes 0.0006	No 0.0064	Yes 0.0006	No 0.7013	No 0.2709
Benzo(a) anthracene (µg/m3)	Yes 0.0006	No 0.0029	Yes 0.0006	No 0.3188	No 0.1436
Benzo(a)pyrene (µg/m3)	Yes 0.0006	No 0.0022	Yes 0.0006	No 0.1913	No 0.0849
Benzo(b)fluoranthene (µg/m3)	Yes 0.0006	No 0.0045	Yes 0.0006	No 0.3825	No 0.1762
Benzo(e)pyrene (µg/m3)	Yes 0.0006	No 0.0023	Yes 0.0006	No 0.1721	No 0.0849
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0006	No 0.0017	Yes 0.0006	No 0.1179	No 0.0555
Benzo(k)fluoranthene (µg/m3)	Yes 0.0006	No 0.0014	Yes 0.0006	No 0.1307	No 0.0653
Chrysene (µg/m3)	Yes 0.0006	No 0.0035	Yes 0.0006	No 0.3507	No 0.1730
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	Yes 0.0638	Yes 0.0326
Fluoranthene (µg/m3)	Yes 0.0006	No 0.0141	No 0.0009	No 1.4345	No 0.7180
Fluorene (µg/m3)	No 0.0027	No 0.0141	No 0.0023	No 1.1795	No 0.2872
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0006	No 0.0020	Yes 0.0006	No 0.1371	No 0.0685
Naphthalene (µg/m3)	No 0.0045	No 0.1857	No 0.0051	No 23.2708	No 3.1983
Perylene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	Yes 0.0638	Yes 0.0326
Phenanthrene (µg/m3)	No 0.0039	No 0.0307	No 0.0032	No 3.0284	No 1.2401
Pyrene (µg/m3)	Yes 0.0006	No 0.0077	Yes 0.0006	No 0.8607	No 0.4243

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

**TO-13A (PAH)
Run Data and Parameters**

Sample ID No.	R03_UW	R03_DW1	R03_DW2	R03_INT1	R03_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2022)	Nov 22	Nov 22	Nov 22	Nov 22	Nov 22
Start Time (approx.)	14:42	13:36	14:09	12:56	12:35
Stop Date (2022)	Nov 23	Nov 23	Nov 23	Nov 23	Nov 23
Stop Time (approx.)	12:45	11:36	12:09	11:12	10:53
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	749.38	749.40	749.38	749.40	749.39
T _s Temperature (°K)	277.94	277.79	277.94	278.10	277.73
Sampling Parameters					
θ Total sampling time (hours)	22.02	22.02	22.21	22.27	22.30
Q _s Sample flow rate, standard (scm /min)	0.2225	0.2270	0.2013	0.2295	0.2261
V _{mstd} Volume metered, standard (scm)	293.93	299.91	268.28	306.65	302.48

BDL? BDL? BDL? BDL? BDL?

PAHs

Acenaphthene (µg/m3)	No	0.0032	No	0.0063	No	0.0060	Yes	0.0163	No	0.1620
Acenaphthylene (µg/m3)	Yes	0.0007	Yes	0.0033	No	0.0093	No	0.1011	No	4.2978
Anthracene (µg/m3)	Yes	0.0007	Yes	0.0033	No	0.0045	Yes	0.0163	No	0.2050
Benzo(a) anthracene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Benzo(a)pyrene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Benzo(b)fluoranthene (µg/m3)	Yes	0.0007	Yes	0.0033	No	0.0045	Yes	0.0163	Yes	0.0165
Benzo(e)pyrene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Benzo(g,h,i)perylene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Benzo(k)fluoranthene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Chrysene (µg/m3)	Yes	0.0007	Yes	0.0033	No	0.0045	Yes	0.0163	Yes	0.0165
Dibenzo(a,h)anthracene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Fluoranthene (µg/m3)	No	0.0009	Yes	0.0033	No	0.0160	Yes	0.0163	No	0.1190
Fluorene (µg/m3)	No	0.0037	No	0.0063	No	0.0123	No	0.0489	No	1.4546
2-Methylnaphthalene (µg/m3)	No	0.0085	No	0.0187	No	0.0294	No	0.3065	No	7.6037
Naphthalene (µg/m3)	No	0.0153	No	0.0634	No	0.1938	No	4.5655	No	66.1195
Perylene (µg/m3)	Yes	0.0007	Yes	0.0033	Yes	0.0037	Yes	0.0163	Yes	0.0165
Phenanthrene (µg/m3)	No	0.0065	No	0.0107	No	0.0298	No	0.0424	No	1.0249
Pyrene (µg/scm)	Yes	0.0007	Yes	0.0033	No	0.0101	Yes	0.0163	No	0.0628

Cleveland Cliffs Burns Harbor LLC
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TO-13A (PAH) Run Data and Parameters

Sample ID No.	R04_UW	R04_DW1	R04_DW2	R04_INT1	R04_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2022)	Dec 6	Dec 6	Dec 6	Dec 6	Dec 6
Start Time (approx.)	14:09	13:08	13:38	12:30	12:16
Stop Date (2022)	Dec 7	Dec 7	Dec 7	Dec 7	Dec 7
Stop Time (approx.)	13:36	12:16	12:48	11:55	11:33
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	748.47	748.18	748.18	747.90	747.90
T _s Temperature (°K)	278.41	278.39	278.39	278.31	278.31
Sampling Parameters					
θ Total sampling time (hours)	23.46	23.13	23.16	23.40	24.18
Q _s Sample flow rate, standard (scm /min)	0.2248	0.2279	0.2257	0.2268	0.2307
V _{mstd} Volume metered, standard (scm)	316.46	316.27	313.65	318.41	334.67

PAHs	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0057	No 0.0085	No 0.0038	No 0.0258	No 0.0807
Acenaphthylene (µg/m3)	No 0.0041	No 0.0443	No 0.0009	No 0.2010	No 2.2410
Anthracene (µg/m3)	No 0.0011	No 0.0021	No 0.0083	No 0.0597	No 0.2241
Benzo(a) anthracene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0377	No 0.0657
Benzo(a)pyrene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0195	No 0.0329
Benzo(b)fluoranthene (µg/m3)	No 0.0007	Yes 0.0006	Yes 0.0006	No 0.0345	No 0.0627
Benzo(e)pyrene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0154	No 0.0296
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0116	No 0.0215
Benzo(k)fluoranthene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0122	No 0.0224
Chrysene (µg/m3)	Yes 0.0006	No 0.0008	Yes 0.0006	No 0.0345	No 0.0657
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0038	No 0.0066
Fluoranthene (µg/m3)	No 0.0027	No 0.0082	No 0.0026	No 0.1256	No 0.2659
Fluorene (µg/m3)	No 0.0070	No 0.0196	No 0.0051	No 0.1131	No 0.8665
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0141	No 0.0272
Naphthalene (µg/m3)	No 0.1201	No 0.3794	No 0.0255	No 4.7109	No 35.8563
Perylene (µg/m3)	Yes 0.0006	Yes 0.0006	Yes 0.0006	No 0.0050	No 0.0102
Phenanthrene (µg/m3)	No 0.0149	No 0.0193	No 0.0077	No 0.2355	No 0.9562
Pyrene (µg/m3)	No 0.0015	No 0.0047	No 0.0012	No 0.0691	No 0.1494

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TO-13A (PAH) Run Data and Parameters

Sample ID No.	R05_UW	R05_DW1	R05_DW2	R05_INT1	R05_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2022)	Dec 20	Dec 20	Dec 20	Dec 20	Dec 20
Start Time (approx.)	14:00	12:14	13:03	11:06	11:34
Stop Date (2022)	Dec 21	Dec 21	Dec 21	Dec 21	Dec 21
Stop Time (approx.)	12:08	11:05	11:35	10:09	10:43
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	756.39	756.47	756.50	756.52	756.52
T _s Temperature (°K)	271.69	271.77	271.67	271.84	271.84
Sampling Parameters					
θ Total sampling time (hours)	22.15	22.86	22.61	23.06	23.14
Q _s Sample flow rate, standard (scm /min)	0.2205	0.2248	0.2252	0.2277	0.2226
V _{mstd} Volume metered, standard (scm)	293.05	308.29	305.46	314.98	309.05

PAHs

	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0019	No 0.0025	No 0.0020	No 0.0603	No 0.1068
Acenaphthylene (µg/m3)	No 0.0024	No 0.0008	Yes 0.0007	No 0.4127	No 2.2003
Anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.1175	No 0.1585
Benzo(a) anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0921	No 0.0485
Benzo(a)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0508	No 0.0223
Benzo(b)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0762	No 0.0421
Benzo(e)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0349	No 0.0191
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0276	No 0.0133
Benzo(k)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0286	No 0.0146
Chrysene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0794	No 0.0453
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0086	No 0.0042
Fluoranthene (µg/m3)	No 0.0019	No 0.0017	No 0.0011	No 0.2159	No 0.1618
Fluorene (µg/m3)	No 0.0029	No 0.0025	No 0.0021	No 0.1968	No 0.7118
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0349	No 0.0168
Naphthalene (µg/m3)	No 0.0955	No 0.0422	No 0.0183	No 11.1119	No 97.0703
Perylene (µg/m3)	Yes 0.0007	Yes 0.0006	Yes 0.0007	No 0.0137	No 0.0061
Phenanthrene (µg/m3)	No 0.0065	No 0.0055	No 0.0039	No 0.3810	No 0.6471
Pyrene (µg/m3)	No 0.0011	No 0.0010	No 0.0009	No 0.1587	No 0.1068

Cleveland Cliffs Burns Harbor LLC
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TO-13A (PAH) Run Data and Parameters

Sample ID No.	R06_UW	R06_DW1	R06_DW2	R06_INT1	R06_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2023)	Jan 4	Jan 4	Jan 4	Jan 4	Jan 4
Start Time (approx.)	13:17	12:17	12:43	11:29	11:53
Stop Date (2023)	Jan 5	Jan 5	Jan 5	Jan 5	Jan 5
Stop Time (approx.)	11:57	10:53	11:22	10:08	10:32
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	741.03	740.88	740.90	740.75	740.75
T _s Temperature (°K)	274.23	274.30	274.27	274.41	274.41
Sampling Parameters					
θ Total sampling time (hours)	22.68	22.61	22.72	22.66	22.66
Q _s Sample flow rate, standard (scm /min)	0.2254	0.2246	0.2249	0.2297	0.2311
V _{mstd} Volume metered, standard (scm)	306.71	304.68	306.54	312.25	314.25

PAHs	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0019	No 0.0030	No 0.0030	No 0.1089	Yes 0.0318
Acenaphthylene (µg/m3)	Yes 0.0007	No 0.0023	No 0.0082	No 2.7222	No 0.0382
Anthracene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0019	No 0.1153	Yes 0.0318
Benzo(a) anthracene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0007	Yes 0.0641	Yes 0.0318
Benzo(a)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Benzo(b)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0010	Yes 0.0641	Yes 0.0318
Benzo(e)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Benzo(k)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Chrysene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0010	Yes 0.0641	Yes 0.0318
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Fluoranthene (µg/m3)	Yes 0.0007	No 0.0014	No 0.0039	Yes 0.0641	Yes 0.0318
Fluorene (µg/m3)	No 0.0015	No 0.0036	No 0.0049	No 0.8967	Yes 0.0318
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Naphthalene (µg/m3)	No 0.0147	No 0.2330	No 0.1892	No 73.6599	No 1.4001
Perylene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0641	Yes 0.0318
Phenanthrene (µg/m3)	No 0.0027	No 0.0066	No 0.0121	No 0.5765	Yes 0.0318
Pyrene (µg/m3)	Yes 0.0007	No 0.0011	No 0.0031	Yes 0.0641	Yes 0.0318

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TO-13A (PAH) Run Data and Parameters

Sample ID No.	R07_UW	R07_DW1	R07_DW2	R07_INT1	R07_INT2
Sampling Location	UPW	DW1	DW2	IN1	IN2
Start Date (2023)	Jan 23	Jan 23	Jan 23	Jan 23	Jan 23
Start Time (approx.)	13:31	12:31	12:58	11:45	12:06
Stop Date (2023)	Jan 24	Jan 24	Jan 24	Jan 24	Jan 24
Stop Time (approx.)	12:02	10:54	11:29	10:07	10:27
Meteorological Conditions					
P _{bar} Barometric pressure (mm Hg)	748.80	748.57	748.65	748.51	748.57
T _s Temperature (°K)	271.94	272.03	272.02	272.09	272.03
Sampling Parameters					
θ Total sampling time (hours)	22.52	22.40	22.57	22.38	22.34
Q _s Sample flow rate, standard (scm /min)	0.2248	0.2237	0.2211	0.2240	0.2228
V _{mstd} Volume metered, standard (scm)	303.76	300.68	299.46	300.80	298.67

PAHs

	BDL?	BDL?	BDL?	BDL?	BDL?
Acenaphthene (µg/m3)	No 0.0017	No 0.0047	No 0.0030	No 0.0731	Yes 0.0134
Acenaphthylene (µg/m3)	Yes 0.0007	No 0.0019	No 0.0033	No 1.2633	No 0.0248
Anthracene (µg/m3)	No 0.0036	No 0.0008	No 0.0017	No 0.0931	Yes 0.0134
Benzo(a) anthracene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0007	No 0.0060	Yes 0.0134
Benzo(a)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	No 0.0047	Yes 0.0134
Benzo(b)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0014	No 0.0070	Yes 0.0134
Benzo(e)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0007	No 0.0033	Yes 0.0134
Benzo(g,h,i)perylene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0033	Yes 0.0134
Benzo(k)fluoranthene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0033	Yes 0.0134
Chrysene (µg/m3)	Yes 0.0007	Yes 0.0007	No 0.0012	No 0.0063	Yes 0.0134
Dibenzo(a,h)anthracene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0033	Yes 0.0134
Fluoranthene (µg/m3)	Yes 0.0007	No 0.0024	No 0.0047	No 0.0565	No 0.0208
Fluorene (µg/m3)	No 0.0018	No 0.0106	No 0.0053	No 0.6316	No 0.0288
Indeno(1,2,3-cd)pyrene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	No 0.0037	Yes 0.0134
Naphthalene (µg/m3)	No 0.0105	No 1.5299	No 0.2004	No 59.8402	No 1.0379
Perylene (µg/m3)	Yes 0.0007	Yes 0.0007	Yes 0.0007	Yes 0.0033	Yes 0.0134
Phenanthrene (µg/m3)	No 0.0032	No 0.0126	No 0.0117	No 0.3989	No 0.0469
Pyrene (µg/m3)	Yes 0.0007	No 0.0017	No 0.0030	No 0.0309	No 0.0147

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Sampler Name	Monitor	PUF_ID	As-Left Elapsed Time (hours)
1	R01_UW	10/27/2022	14:17	10/28/2022	12:57	UW	HighVol	100722-01	11138.76
2	R01_DW1	10/27/2022	15:00	10/28/2022	14:07	DW1	HighVol	100722-02	10531.13
3	R01_DW2	10/27/2022	15:42	10/28/2022	14:49	DW2	HighVol	100722-03	8946.15
4	R01_INT1	10/27/2022	16:25	10/28/2022	15:22	INT1	HighVol	100722-04	7776.84
5	R01_INT2	10/27/2022	16:45	10/28/2022	15:37	INT2	HighVol	100722-05	1189.71
6	R01_BLANK					BLANK	BLANK	100722-06	
7	R02_INT1	11/8/2022	9:56	11/9/2022	9:34	INT1	HighVol	101922B-01	7800.21
8	R02_INT2	11/8/2022	10:21	11/9/2022	10:00	INT2	HighVol	101922B-02	1212.59
9	R02_DW1	11/8/2022	10:53	11/9/2022	10:35	DW1	HighVol	101922B-03	10554.30
10	R02_DW2	11/8/2022	11:25	11/9/2022	11:15	DW2	HighVol	101922B-04	8969.31
11	R02_UW	11/8/2022	12:32	11/9/2022	12:00	UW	HighVol	101922B-05	11161.39
12	R02_BLANK					BLANK	BLANK	101922B-06	
13	R03_INT2	11/22/2022	12:35	11/23/2022	10:53	INT2	HighVol	110222-01	1236.37
14	R03_INT1	11/22/2022	12:56	11/23/2022	11:12	INT1	HighVol	110222-02	7823.89
15	R03_DW1	11/22/2022	13:36	11/23/2022	11:36	DW1	HighVol	110222-04	10578.14
16	R03_DW2	11/22/2022	14:09	11/23/2022	12:09	DW2	HighVol	110222-05	8993.05
17	R03_UW	11/22/2022	14:42	11/23/2022	12:45	UW	HighVol	110222-06	11184.93
18	R03_BLANK					BLANK	BLANK	110222-03	
19	R04_INT2	12/6/2022	12:16	12/7/2022	11:33	INT2	HighVol	112922A-05	1258.78
20	R04_INT1	12/6/2022	12:30	12/7/2022	11:55	INT1	HighVol	112922A-04	7846.24
21	R04_DW1	12/6/2022	13:08	12/7/2022	12:16	DW1	HighVol	112922A-03	10600.22
22	R04_DW2	12/6/2022	13:38	12/7/2022	12:48	DW2	HighVol	112922A-02	9015.40
23	R04_UW	12/6/2022	14:09	12/7/2022	13:36	UW	HighVol	112922A-01	11207.01
24	R04_BLANK					BLANK	BLANK	112922A-06	
25	R05_INT1	12/20/2022	11:06	12/21/2022	10:09	INT1	HighVol	112922C-01	7869.69
26	R05_INT2	12/20/2022	11:34	12/21/2022	10:43	INT2	HighVol	112922C-02	1282.13
27	R05_DW1	12/20/2022	12:14	12/21/2022	11:05	DW1	HighVol	112922C-03	10623.48
28	R05_DW2	12/20/2022	13:03	12/21/2022	11:35	DW2	HighVol	112922C-05	9038.62
29	R05_UW	12/20/2022	14:00	12/21/2022	12:08	UW	HighVol	112922C-06	11230.55
30	R05_BLANK					BLANK	BLANK	112922C-04	
31	R06_INT1	1/4/2023	11:29	1/5/2023	10:08	INT1	HighVol	12122A-02	1305.40
32	R06_INT2	1/4/2023	11:53	1/5/2023	10:32	INT2	HighVol	12122A-01	7892.88
33	R06_DW1	1/4/2023	12:17	1/5/2023	10:53	DW1	HighVol	12122A-03	10646.49
34	R06_DW2	1/4/2023	12:43	1/5/2023	11:22	DW2	HighVol	12122A-04	9061.35
35	R06_UW	1/4/2023	13:17	1/5/2023	11:57	UW	HighVol	12122A-05	11252.83
36	R06_BLANK					BLANK	BLANK	12122A-06	
37	R07_INT1	1/23/2023	11:45	1/24/2023	10:07	INT1	HighVol	122322A-01	7915.67
38	R07_INT2	1/23/2023	12:06	1/24/2023	10:27	INT2	HighVol	122322A-02	1328.19
39	R07_DW1	1/23/2023	12:31	1/24/2023	10:54	DW1	HighVol	122322A-03	10669.27
40	R07_DW2	1/23/2023	12:58	1/24/2023	11:29	DW2	HighVol	122322A-04	9084.18
41	R07_UW	1/23/2023	13:31	1/24/2023	12:02	UW	HighVol	122322A-05	11275.63
42	R07_BLANK					BLANK	BLANK	122322A-06	

ID	Sample ID	As-Left Flow Rate (Magn)	As-Found Elapsed Time (hours)	As-Found Flow Rate (Magn)	Slope	Intercept	Total Sampling Time, Actual (Hours)	Total Sampling Time, Elapsed Timer (Hours)	Average Flow Rate (Magn)	Average Sample Temp (C)	Average Sample BP (in Hg)
1	R01_UW	37	11161.35	42	29.9151	-0.0716	22.67	22.59	39.5	7.8	29.7
2	R01_DW1	38	10554.28	38	33.7423	-1.4035	23.12	23.15	38.0	8.3	29.7
3	R01_DW2	38	8969.29	38	30.7237	-0.6484	23.12	23.14	38.0	8.2	29.7
4	R01_INT1	38	7799.81	33	33.4998	-1.1868	22.95	22.97	35.5	8.4	29.7
5	R01_INT2	36	1212.54	37	32.3871	-0.8982	22.87	22.83	36.5	8.4	29.7
6	R01_BLANK										
7	R02_INT1	38	7823.84	36	33.4998	-1.1868	23.63	23.63	37.0	10.0	29.8
8	R02_INT2	38	1236.24	33	32.3871	-0.8982	23.65	23.65	35.5	10.1	29.7
9	R02_DW1	36	10577.99	33	33.7423	-1.4035	23.70	23.69	34.5	10.1	29.7
10	R02_DW2	37	8992.99	35	30.7237	-0.6484	23.83	23.68	36.0	10.3	29.7
11	R02_UW	42	11184.86	40	29.9151	-0.0716	23.47	23.47	41.0	10.5	29.7
12	R02_BLANK										
13	R03_INT2	40	1258.67	38	32.3871	-0.8982	22.30	22.30	39.0	4.7	29.5
14	R03_INT1	40	7846.16	40	33.4998	-1.1868	22.27	22.27	40.0	5.1	29.5
15	R03_DW1	38	10600.16	36	33.7423	-1.4035	22.00	22.02	37.0	4.8	29.5
16	R03_DW2	38	9015.26	20	30.7237	-0.6484	22.00	22.21	29.0	4.9	29.5
17	R03_UW	42	11206.95	40	29.9151	-0.0716	22.05	22.02	41.0	4.9	29.5
18	R03_BLANK										
19	R04_INT2	40	1282.96	42	32.3871	-0.8982	23.28	24.18	41.0	5.3	29.4
20	R04_INT1	40	7869.64	38	33.4998	-1.1868	23.42	23.40	39.0	5.3	29.4
21	R04_DW1	38	10623.35	37	33.7423	-1.4035	23.13	23.13	37.5	5.4	29.5
22	R04_DW2	38	9038.56	37	30.7237	-0.6484	23.17	23.16	37.5	5.4	29.5
23	R04_UW	44	11230.47	40	29.9151	-0.0716	23.45	23.46	42.0	5.4	29.5
24	R04_BLANK										
25	R05_INT1	38	7892.75	38	33.4998	-1.1868	23.05	23.06	38.0	-1.2	29.8
26	R05_INT2	38	1305.27	35	32.3871	-0.8982	23.15	23.14	36.5	-1.2	29.8
27	R05_DW1	36	10646.34	34	33.7423	-1.4035	22.85	22.86	35.0	-1.2	29.8
28	R05_DW2	36	9061.23	36	30.7237	-0.6484	22.53	22.61	36.0	-1.3	29.8
29	R05_UW	40	11252.70	38	29.9151	-0.0716	22.13	22.15	39.0	-1.3	29.8
30	R05_BLANK										
31	R06_INT1	40	1328.06	40	33.4998	-1.1868	22.65	22.66	40.0	1.4	29.2
32	R06_INT2	40	7915.54	42	32.3871	-0.8982	22.65	22.66	41.0	1.4	29.2
33	R06_DW1	36	10669.10	36	33.7423	-1.4035	22.60	22.61	36.0	1.3	29.2
34	R06_DW2	38	9084.07	36	30.7237	-0.6484	22.65	22.72	37.0	1.3	29.2
35	R06_UW	42	11275.51	42	29.9151	-0.0716	22.67	22.68	42.0	1.2	29.2
36	R06_BLANK										
37	R07_INT1	38	7938.05	36	33.4998	-1.1868	22.37	22.38	37.0	-0.9	29.5
38	R07_INT2	38	1350.53	36	32.3871	-0.8982	22.35	22.34	37.0	-1.0	29.5
39	R07_DW1	36	10691.67	34	33.7423	-1.4035	22.38	22.40	35.0	-1.0	29.5
40	R07_DW2	36	9106.75	34	30.7237	-0.6484	22.52	22.57	35.0	-1.0	29.5
41	R07_UW	42	11298.15	40	29.9151	-0.0716	22.52	22.52	41.0	-1.1	29.5
42	R07_BLANK										

ID	Sample ID	Average Sample Temp (K)	Average Sample BP (mm Hg)	Average Flow Rate (scm/min)	Total Flow (scm)
1	R01_UW	280.8	754.8	0.218	296
2	R01_DW1	281.3	754.7	0.229	318
3	R01_DW2	281.2	754.8	0.227	315
4	R01_INT1	281.4	754.8	0.218	300
5	R01_INT2	281.4	754.8	0.219	300
6	R01_BLANK				
7	R02_INT1	283.0	755.9	0.221	314
8	R02_INT2	283.1	755.6	0.216	306
9	R02_DW1	283.1	755.6	0.220	312
10	R02_DW2	283.3	755.2	0.221	314
11	R02_UW	283.5	754.9	0.221	311
12	R02_BLANK				
13	R03_INT2	277.7	749.4	0.226	302
14	R03_INT1	278.1	749.4	0.229	307
15	R03_DW1	277.8	749.4	0.227	300
16	R03_DW2	277.9	749.4	0.201	268
17	R03_UW	277.9	749.4	0.222	294
18	R03_BLANK				
19	R04_INT2	278.3	747.9	0.231	335
20	R04_INT1	278.3	747.9	0.227	318
21	R04_DW1	278.4	748.2	0.228	316
22	R04_DW2	278.4	748.2	0.226	314
23	R04_UW	278.4	748.5	0.225	316
24	R04_BLANK				
25	R05_INT1	271.8	756.5	0.228	315
26	R05_INT2	271.8	756.5	0.223	309
27	R05_DW1	271.8	756.5	0.225	308
28	R05_DW2	271.7	756.5	0.225	305
29	R05_UW	271.7	756.4	0.221	293
30	R05_BLANK				
31	R06_INT1	274.4	740.7	0.230	312
32	R06_INT2	274.4	740.7	0.231	314
33	R06_DW1	274.3	740.9	0.225	305
34	R06_DW2	274.3	740.9	0.225	307
35	R06_UW	274.2	741.0	0.225	307
36	R06_BLANK				
37	R07_INT1	272.1	748.5	0.224	301
38	R07_INT2	272.0	748.6	0.223	299
39	R07_DW1	272.0	748.6	0.224	301
40	R07_DW2	272.0	748.7	0.221	299
41	R07_UW	271.9	748.8	0.225	304
42	R07_BLANK				

ID	Sample ID	Acenaphthene (BDL?)	Acenaphthylene (BDL?)	Anthracene (BDL?)	Benzo(a)anthracene (BDL?)	Benzo(a)pyrene (BDL?)	Benzo(b)fluoranthene (BDL?)	Benzo(e)pyrene (BDL?)	Benzo(g,h,i)perylene (BDL?)
1	R01_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	R01_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3	R01_DW2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	R01_INT1	No	No	No	No	No	No	No	No
5	R01_INT2	No	No	No	No	No	No	No	No
6	R01_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	R02_INT1	No	No	No	No	No	No	No	No
8	R02_INT2	No	No	No	No	No	No	No	No
9	R02_DW1	No	No	No	No	No	No	No	No
10	R02_DW2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	R02_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	R02_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	R03_INT2	No	No	No	Yes	Yes	Yes	Yes	Yes
14	R03_INT1	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
15	R03_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	R03_DW2	No	No	No	Yes	Yes	No	Yes	Yes
17	R03_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	R03_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	R04_INT2	No	No	No	No	No	No	No	No
20	R04_INT1	No	No	No	No	No	No	No	No
21	R04_DW1	No	No	No	Yes	Yes	Yes	Yes	Yes
22	R04_DW2	No	No	No	Yes	Yes	Yes	Yes	Yes
23	R04_UW	No	No	No	Yes	Yes	No	Yes	Yes
24	R04_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	R05_INT1	No	No	No	No	No	No	No	No
26	R05_INT2	No	No	No	No	No	No	No	No
27	R05_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes
28	R05_DW2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	R05_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes
30	R05_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	R06_INT1	No	No	No	Yes	Yes	Yes	Yes	Yes
32	R06_INT2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
33	R06_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes
34	R06_DW2	No	No	No	No	Yes	No	Yes	Yes
35	R06_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
36	R06_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37	R07_INT1	No	No	No	No	No	No	No	Yes
38	R07_INT2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
39	R07_DW1	No	No	No	Yes	Yes	Yes	Yes	Yes
40	R07_DW2	No	No	No	No	Yes	No	No	Yes
41	R07_UW	No	Yes	No	Yes	Yes	Yes	Yes	Yes
42	R07_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	Benzo(k)fluoranthene (BDL?)	Chrysene (BDL?)	Dibenz(a,h)anthracene (BDL?)	Fluoranthene (BDL?)	Fluorene (BDL?)	Indeno(1,2,3-cd)pyrene (BDL?)	Naphthalene (BDL?)	Perylene (BDL?)	Phenanthrene (BDL?)
1	R01_UW	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
2	R01_DW1	Yes	Yes	Yes	No	No	Yes	No	Yes	No
3	R01_DW2	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
4	R01_INT1	No	No	No	No	No	No	No	No	No
5	R01_INT2	No	No	No	No	No	No	No	No	No
6	R01_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7	R02_INT1	No	No	Yes	No	No	No	No	Yes	No
8	R02_INT2	No	No	Yes	No	No	No	No	Yes	No
9	R02_DW1	No	No	Yes	No	No	No	No	Yes	No
10	R02_DW2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
11	R02_UW	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
12	R02_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	R03_INT2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
14	R03_INT1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
15	R03_DW1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
16	R03_DW2	Yes	No	Yes	No	No	Yes	No	Yes	No
17	R03_UW	Yes	Yes	Yes	No	No	Yes	No	Yes	No
18	R03_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	R04_INT2	No	No	No	No	No	No	No	No	No
20	R04_INT1	No	No	No	No	No	No	No	No	No
21	R04_DW1	Yes	No	Yes	No	No	Yes	No	Yes	No
22	R04_DW2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
23	R04_UW	Yes	Yes	Yes	No	No	Yes	No	Yes	No
24	R04_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	R05_INT1	No	No	No	No	No	No	No	No	No
26	R05_INT2	No	No	No	No	No	No	No	No	No
27	R05_DW1	Yes	Yes	Yes	No	No	Yes	No	Yes	No
28	R05_DW2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
29	R05_UW	Yes	Yes	Yes	No	No	Yes	No	Yes	No
30	R05_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	R06_INT1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
32	R06_INT2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
33	R06_DW1	Yes	Yes	Yes	No	No	Yes	No	Yes	No
34	R06_DW2	Yes	No	Yes	No	No	Yes	No	Yes	No
35	R06_UW	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
36	R06_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
37	R07_INT1	Yes	No	Yes	No	No	No	No	Yes	No
38	R07_INT2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
39	R07_DW1	Yes	Yes	Yes	No	No	Yes	No	Yes	No
40	R07_DW2	Yes	No	Yes	No	No	Yes	No	Yes	No
41	R07_UW	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
42	R07_BLANK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	Pyrene (BDL?)
1	R01_UW	Yes
2	R01_DW1	No
3	R01_DW2	Yes
4	R01_INT1	No
5	R01_INT2	No
6	R01_BLANK	Yes
7	R02_INT1	No
8	R02_INT2	No
9	R02_DW1	No
10	R02_DW2	Yes
11	R02_UW	Yes
12	R02_BLANK	Yes
13	R03_INT2	No
14	R03_INT1	Yes
15	R03_DW1	Yes
16	R03_DW2	No
17	R03_UW	Yes
18	R03_BLANK	Yes
19	R04_INT2	No
20	R04_INT1	No
21	R04_DW1	No
22	R04_DW2	No
23	R04_UW	No
24	R04_BLANK	Yes
25	R05_INT1	No
26	R05_INT2	No
27	R05_DW1	No
28	R05_DW2	No
29	R05_UW	No
30	R05_BLANK	Yes
31	R06_INT1	Yes
32	R06_INT2	Yes
33	R06_DW1	No
34	R06_DW2	No
35	R06_UW	Yes
36	R06_BLANK	Yes
37	R07_INT1	No
38	R07_INT2	No
39	R07_DW1	No
40	R07_DW2	No
41	R07_UW	Yes
42	R07_BLANK	Yes

ID	Sample ID	Acenaphthene (µg)	Acenaphthylene (µg)	Anthracene (µg)	Benzo(a)anthracene (µg)
1	R01_UW	1.50	0.20	0.20	0.20
2	R01_DW1	2.20	0.32	0.20	0.20
3	R01_DW2	1.80	0.20	0.20	0.20
4	R01_INT1	77.00	480.00	170.00	98.00
5	R01_INT2	45.00	580.00	100.00	41.00
6	R01_BLANK	0.20	0.20	0.20	0.20
7	R02_INT1	62.00	710.00	220.00	100.00
8	R02_INT2	20.00	85.00	83.00	44.00
9	R02_DW1	2.30	2.80	2.00	0.92
10	R02_DW2	0.74	0.20	0.20	0.20
11	R02_UW	1.20	0.20	0.20	0.20
12	R02_BLANK	0.20	0.20	0.20	0.20
13	R03_INT2	49.00	1300.00	62.00	5.0
14	R03_INT1	5.0	31.00	5.0	5.0
15	R03_DW1	1.90	1.0	1.0	1.0
16	R03_DW2	1.60	2.50	1.20	1.0
17	R03_UW	0.93	0.20	0.20	0.20
18	R03_BLANK	0.20	0.20	0.20	0.20
19	R04_INT2	27.00	750.00	75.00	22.00
20	R04_INT1	8.20	64.00	19.00	12.00
21	R04_DW1	2.70	14.00	0.65	0.20
22	R04_DW2	1.20	0.27	2.60	0.20
23	R04_UW	1.80	1.30	0.34	0.20
24	R04_BLANK	0.20	0.20	0.20	0.20
25	R05_INT1	19.00	130.00	37.00	29.00
26	R05_INT2	33.00	680.00	49.00	15.00
27	R05_DW1	0.76	0.25	0.20	0.20
28	R05_DW2	0.60	0.20	0.20	0.20
29	R05_UW	0.57	0.70	0.20	0.20
30	R05_BLANK	0.20	0.20	0.20	0.20
31	R06_INT1	34.00	850.00	36.00	20
32	R06_INT2	10	12.00	10	10
33	R06_DW1	0.92	0.71	0.20	0.20
34	R06_DW2	0.93	2.50	0.59	0.21
35	R06_UW	0.58	0.20	0.20	0.20
36	R06_BLANK	0.20	0.20	0.20	0.20
37	R07_INT1	22.00	380.00	28.00	1.80
38	R07_INT2	4.0	7.40	4.0	4.0
39	R07_DW1	1.40	0.57	0.23	0.20
40	R07_DW2	0.90	0.99	0.50	0.22
41	R07_UW	0.52	0.20	1.10	0.20
42	R07_BLANK	0.20	0.20	0.20	0.20

ID	Sample ID	Benzo(a)pyrene (µg)	Benzo(b)fluoranthene (µg)	Benzo(e)pyrene (µg)	Benzo(g,h,i)perylene (µg)
1	R01_UW	0.20	0.20	0.20	0.20
2	R01_DW1	0.20	0.20	0.20	0.20
3	R01_DW2	0.20	0.20	0.20	0.20
4	R01_INT1	64.00	130.00	66.00	52.00
5	R01_INT2	22.00	51.00	27.00	19.00
6	R01_BLANK	0.20	0.20	0.20	0.20
7	R02_INT1	60.00	120.00	54.00	37.00
8	R02_INT2	26.00	54.00	26.00	17.00
9	R02_DW1	0.69	1.40	0.72	0.52
10	R02_DW2	0.20	0.20	0.20	0.20
11	R02_UW	0.20	0.20	0.20	0.20
12	R02_BLANK	0.20	0.20	0.20	0.20
13	R03_INT2	5.0	5.0	5.0	5.0
14	R03_INT1	5.0	5.0	5.0	5.0
15	R03_DW1	1.0	1.0	1.0	1.0
16	R03_DW2	1.0	1.20	1.0	1.0
17	R03_UW	0.20	0.20	0.20	0.20
18	R03_BLANK	0.20	0.20	0.20	0.20
19	R04_INT2	11.00	21.00	9.90	7.20
20	R04_INT1	6.20	11.00	4.90	3.70
21	R04_DW1	0.20	0.20	0.20	0.20
22	R04_DW2	0.20	0.20	0.20	0.20
23	R04_UW	0.20	0.21	0.20	0.20
24	R04_BLANK	0.20	0.20	0.20	0.20
25	R05_INT1	16.00	24.00	11.00	8.70
26	R05_INT2	6.90	13.00	5.90	4.10
27	R05_DW1	0.20	0.20	0.20	0.20
28	R05_DW2	0.20	0.20	0.20	0.20
29	R05_UW	0.20	0.20	0.20	0.20
30	R05_BLANK	0.20	0.20	0.20	0.20
31	R06_INT1	20	20	20	20
32	R06_INT2	10	10	10	10
33	R06_DW1	0.20	0.20	0.20	0.20
34	R06_DW2	0.20	0.31	0.20	0.20
35	R06_UW	0.20	0.20	0.20	0.20
36	R06_BLANK	0.20	0.20	0.20	0.20
37	R07_INT1	1.40	2.10	1.00	1.0
38	R07_INT2	4.0	4.0	4.0	4.0
39	R07_DW1	0.20	0.20	0.20	0.20
40	R07_DW2	0.20	0.42	0.20	0.20
41	R07_UW	0.20	0.20	0.20	0.20
42	R07_BLANK	0.20	0.20	0.20	0.20

ID	Sample ID	Benzo(k)fluoranthene (µg)	Chrysene (µg)	Dibenz(a,h)anthracene (µg)	Fluoranthene (µg)
1	R01_UW	0.20	0.20	0.20	0.20
2	R01_DW1	0.20	0.20	0.20	0.33
3	R01_DW2	0.20	0.20	0.20	0.20
4	R01_INT1	36.00	110.00	10.00	440.00
5	R01_INT2	15.00	49.00	4.20	210.00
6	R01_BLANK	0.20	0.20	0.20	0.20
7	R02_INT1	41.00	110.00	20	450.00
8	R02_INT2	20.00	53.00	10	220.00
9	R02_DW1	0.45	1.10	0.20	4.40
10	R02_DW2	0.20	0.20	0.20	0.27
11	R02_UW	0.20	0.20	0.20	0.20
12	R02_BLANK	0.20	0.20	0.20	0.20
13	R03_INT2	5.0	5.0	5.0	36.00
14	R03_INT1	5.0	5.0	5.0	5.0
15	R03_DW1	1.0	1.0	1.0	1.0
16	R03_DW2	1.0	1.20	1.0	4.30
17	R03_UW	0.20	0.20	0.20	0.26
18	R03_BLANK	0.20	0.20	0.20	0.20
19	R04_INT2	7.50	22.00	2.20	89.00
20	R04_INT1	3.90	11.00	1.20	40.00
21	R04_DW1	0.20	0.25	0.20	2.60
22	R04_DW2	0.20	0.20	0.20	0.81
23	R04_UW	0.20	0.20	0.20	0.85
24	R04_BLANK	0.20	0.20	0.20	0.20
25	R05_INT1	9.00	25.00	2.70	68.00
26	R05_INT2	4.50	14.00	1.30	50.00
27	R05_DW1	0.20	0.20	0.20	0.52
28	R05_DW2	0.20	0.20	0.20	0.34
29	R05_UW	0.20	0.20	0.20	0.55
30	R05_BLANK	0.20	0.20	0.20	0.20
31	R06_INT1	20	20	20	20
32	R06_INT2	10	10	10	10
33	R06_DW1	0.20	0.20	0.20	0.42
34	R06_DW2	0.20	0.31	0.20	1.20
35	R06_UW	0.20	0.20	0.20	0.20
36	R06_BLANK	0.20	0.20	0.20	0.20
37	R07_INT1	1.0	1.90	1.0	17.00
38	R07_INT2	4.0	4.0	4.0	6.20
39	R07_DW1	0.20	0.20	0.20	0.71
40	R07_DW2	0.20	0.36	0.20	1.40
41	R07_UW	0.20	0.20	0.20	0.20
42	R07_BLANK	0.20	0.20	0.20	0.20

ID	Sample ID	Fluorene (µg)	Indeno(1,2,3-cd)pyrene (µg)	
1	R01_UW	1.10	0.20	
2	R01_DW1	1.50	0.20	
3	R01_DW2	1.10	0.20	
4	R01_INT1	210.00	66.00	
5	R01_INT2	200.00	23.00	
6	R01_BLANK	0.20	0.20	
7	R02_INT1	370.00	43.00	
8	R02_INT2	88.00	21.00	
9	R02_DW1	4.40	0.63	
10	R02_DW2	0.73	0.20	
11	R02_UW	0.83	0.20	
12	R02_BLANK	0.20	0.20	
13	R03_INT2	440.00	5.0	
14	R03_INT1	15.00	5.0	
15	R03_DW1	1.90	1.0	
16	R03_DW2	3.30	1.0	
17	R03_UW	1.10	0.20	
18	R03_BLANK	0.20	0.20	
19	R04_INT2	290.00	9.10	
20	R04_INT1	36.00	4.50	
21	R04_DW1	6.20	0.20	
22	R04_DW2	1.60	0.20	
23	R04_UW	2.20	0.20	
24	R04_BLANK	0.20	0.20	
25	R05_INT1	62.00	11.00	
26	R05_INT2	220.00	5.20	
27	R05_DW1	0.77	0.20	
28	R05_DW2	0.64	0.20	
29	R05_UW	0.84	0.20	
30	R05_BLANK	0.20	0.20	
31	R06_INT1	280.00	20	
32	R06_INT2	10	10	
33	R06_DW1	1.10	0.20	
34	R06_DW2	1.50	0.20	
35	R06_UW	0.47	0.20	
36	R06_BLANK	0.20	0.20	
37	R07_INT1	190.00	1.10	
38	R07_INT2	8.60	4.0	
39	R07_DW1	3.20	0.20	
40	R07_DW2	1.60	0.20	
41	R07_UW	0.54	0.20	
42	R07_BLANK	0.20	0.20	

ID	Sample ID	Naphthalene (µg)	Perylene (µg)	Phenanthrene (µg)	Pyrene (µg)
1	R01_UW	4.50	0.20	1.80	0.20
2	R01_DW1	30.00	0.20	2.20	0.23
3	R01_DW2	4.40	0.20	1.40	0.20
4	R01_INT1	8800.00	24.00	880.00	310.00
5	R01_INT2	14000.00	7.80	510.00	150.00
6	R01_BLANK	2.50	0.20	0.20	0.20
7	R02_INT1	7300.00	20	950.00	270.00
8	R02_INT2	980.00	10	380.00	130.00
9	R02_DW1	58.00	0.20	9.60	2.40
10	R02_DW2	1.60	0.20	1.00	0.20
11	R02_UW	1.40	0.20	1.20	0.20
12	R02_BLANK	0.50	0.20	0.20	0.20
13	R03_INT2	20000.00	5.0	310.00	19.00
14	R03_INT1	1400.00	5.0	13.00	5.0
15	R03_DW1	19.00	1.0	3.20	1.0
16	R03_DW2	52.00	1.0	8.00	2.70
17	R03_UW	4.50	0.20	1.90	0.20
18	R03_BLANK	0.50	0.20	0.20	0.20
19	R04_INT2	12000.00	3.40	320.00	50.00
20	R04_INT1	1500.00	1.60	75.00	22.00
21	R04_DW1	120.00	0.20	6.10	1.50
22	R04_DW2	8.00	0.20	2.40	0.38
23	R04_UW	38.00	0.20	4.70	0.47
24	R04_BLANK	0.50	0.20	0.20	0.20
25	R05_INT1	3500.00	4.30	120.00	50.00
26	R05_INT2	30000.00	1.90	200.00	33.00
27	R05_DW1	13.00	0.20	1.70	0.32
28	R05_DW2	5.60	0.20	1.20	0.28
29	R05_UW	28.00	0.20	1.90	0.33
30	R05_BLANK	0.50	0.20	0.20	0.20
31	R06_INT1	23000.00	20	180.00	20
32	R06_INT2	440.00	10	10	10
33	R06_DW1	71.00	0.20	2.00	0.34
34	R06_DW2	58.00	0.20	3.70	0.94
35	R06_UW	4.50	0.20	0.83	0.20
36	R06_BLANK	1.70	0.20	0.20	0.20
37	R07_INT1	18000.00	1.0	120.00	9.30
38	R07_INT2	310.00	4.0	14.00	4.40
39	R07_DW1	460.00	0.20	3.80	0.52
40	R07_DW2	60.00	0.20	3.50	0.90
41	R07_UW	3.20	0.20	0.96	0.20
42	R07_BLANK	0.50	0.20	0.20	0.20

ID	Sample ID	Acenaphthene (µg/scm)	Acenaphthylene (µg/scm)	Anthracene (µg/scm)	Benzo(a)anthracene (µg/scm)
1	R01_UW	0.00507	0.00068	0.00068	0.00068
2	R01_DW1	0.00692	0.00101	0.00063	0.00063
3	R01_DW2	0.00571	0.00063	0.00063	0.00063
4	R01_INT1	0.25648	1.59885	0.56626	0.32643
5	R01_INT2	0.14998	1.93303	0.33328	0.13665
6	R01_BLANK				
7	R02_INT1	0.19764	2.26332	0.70131	0.31878
8	R02_INT2	0.06527	0.27740	0.27087	0.14360
9	R02_DW1	0.00737	0.00897	0.00641	0.00295
10	R02_DW2	0.00236	0.00064	0.00064	0.00064
11	R02_UW	0.00385	0.00064	0.00064	0.00064
12	R02_BLANK				
13	R03_INT2	0.16199	4.29777	0.20497	0.01653
14	R03_INT1	0.01631	0.10109	0.01631	0.01631
15	R03_DW1	0.00634	0.00333	0.00333	0.00333
16	R03_DW2	0.00596	0.00932	0.00447	0.00373
17	R03_UW	0.00316	0.00068	0.00068	0.00068
18	R03_BLANK				
19	R04_INT2	0.08068	2.24102	0.22410	0.06574
20	R04_INT1	0.02575	0.20100	0.05967	0.03769
21	R04_DW1	0.00854	0.04427	0.00206	0.00063
22	R04_DW2	0.00383	0.00086	0.00829	0.00064
23	R04_UW	0.00569	0.00411	0.00107	0.00063
24	R04_BLANK				
25	R05_INT1	0.06032	0.41273	0.11747	0.09207
26	R05_INT2	0.10678	2.20026	0.15855	0.04854
27	R05_DW1	0.00247	0.00081	0.00065	0.00065
28	R05_DW2	0.00196	0.00065	0.00065	0.00065
29	R05_UW	0.00195	0.00239	0.00068	0.00068
30	R05_BLANK				
31	R06_INT1	0.10889	2.72221	0.11529	0.06405
32	R06_INT2	0.03182	0.03819	0.03182	0.03182
33	R06_DW1	0.00302	0.00233	0.00066	0.00066
34	R06_DW2	0.00303	0.00816	0.00192	0.00069
35	R06_UW	0.00189	0.00065	0.00065	0.00065
36	R06_BLANK				
37	R07_INT1	0.07314	1.26329	0.09308	0.00598
38	R07_INT2	0.01339	0.02478	0.01339	0.01339
39	R07_DW1	0.00466	0.00190	0.00076	0.00067
40	R07_DW2	0.00301	0.00331	0.00167	0.00073
41	R07_UW	0.00171	0.00066	0.00362	0.00066
42	R07_BLANK				

ID	Sample ID	Benzo(a)pyrene (µg/scm)	Benzo(b)fluoranthene (µg/scm)	Benzo(e)pyrene (µg/scm)
1	R01_UW	0.00068	0.00068	0.00068
2	R01_DW1	0.00063	0.00063	0.00063
3	R01_DW2	0.00063	0.00063	0.00063
4	R01_INT1	0.21318	0.43302	0.21984
5	R01_INT2	0.07332	0.16997	0.08999
6	R01_BLANK			
7	R02_INT1	0.19127	0.38253	0.17214
8	R02_INT2	0.08485	0.17623	0.08485
9	R02_DW1	0.00221	0.00448	0.00231
10	R02_DW2	0.00064	0.00064	0.00064
11	R02_UW	0.00064	0.00064	0.00064
12	R02_BLANK			
13	R03_INT2	0.01653	0.01653	0.01653
14	R03_INT1	0.01631	0.01631	0.01631
15	R03_DW1	0.00333	0.00333	0.00333
16	R03_DW2	0.00373	0.00447	0.00373
17	R03_UW	0.00068	0.00068	0.00068
18	R03_BLANK			
19	R04_INT2	0.03287	0.06275	0.02958
20	R04_INT1	0.01947	0.03455	0.01539
21	R04_DW1	0.00063	0.00063	0.00063
22	R04_DW2	0.00064	0.00064	0.00064
23	R04_UW	0.00063	0.00066	0.00063
24	R04_BLANK			
25	R05_INT1	0.05080	0.07620	0.03492
26	R05_INT2	0.02233	0.04206	0.01909
27	R05_DW1	0.00065	0.00065	0.00065
28	R05_DW2	0.00065	0.00065	0.00065
29	R05_UW	0.00068	0.00068	0.00068
30	R05_BLANK			
31	R06_INT1	0.06405	0.06405	0.06405
32	R06_INT2	0.03182	0.03182	0.03182
33	R06_DW1	0.00066	0.00066	0.00066
34	R06_DW2	0.00065	0.00101	0.00065
35	R06_UW	0.00065	0.00065	0.00065
36	R06_BLANK			
37	R07_INT1	0.00465	0.00698	0.00332
38	R07_INT2	0.01339	0.01339	0.01339
39	R07_DW1	0.00067	0.00067	0.00067
40	R07_DW2	0.00067	0.00140	0.00067
41	R07_UW	0.00066	0.00066	0.00066
42	R07_BLANK			

ID	Sample ID	Benzo(g,h,i)perylene (µg/scm)	Benzo(k)fluoranthene (µg/scm)	Chrysene (µg/scm)
1	R01_UW	0.00068	0.00068	0.00068
2	R01_DW1	0.00063	0.00063	0.00063
3	R01_DW2	0.00063	0.00063	0.00063
4	R01_INT1	0.17321	0.11991	0.36640
5	R01_INT2	0.06332	0.04999	0.16331
6	R01_BLANK			
7	R02_INT1	0.11795	0.13070	0.35066
8	R02_INT2	0.05548	0.06527	0.17297
9	R02_DW1	0.00167	0.00144	0.00352
10	R02_DW2	0.00064	0.00064	0.00064
11	R02_UW	0.00064	0.00064	0.00064
12	R02_BLANK			
13	R03_INT2	0.01653	0.01653	0.01653
14	R03_INT1	0.01631	0.01631	0.01631
15	R03_DW1	0.00333	0.00333	0.00333
16	R03_DW2	0.00373	0.00373	0.00447
17	R03_UW	0.00068	0.00068	0.00068
18	R03_BLANK			
19	R04_INT2	0.02151	0.02241	0.06574
20	R04_INT1	0.01162	0.01225	0.03455
21	R04_DW1	0.00063	0.00063	0.00079
22	R04_DW2	0.00064	0.00064	0.00064
23	R04_UW	0.00063	0.00063	0.00063
24	R04_BLANK			
25	R05_INT1	0.02762	0.02857	0.07937
26	R05_INT2	0.01327	0.01456	0.04530
27	R05_DW1	0.00065	0.00065	0.00065
28	R05_DW2	0.00065	0.00065	0.00065
29	R05_UW	0.00068	0.00068	0.00068
30	R05_BLANK			
31	R06_INT1	0.06405	0.06405	0.06405
32	R06_INT2	0.03182	0.03182	0.03182
33	R06_DW1	0.00066	0.00066	0.00066
34	R06_DW2	0.00065	0.00065	0.00101
35	R06_UW	0.00065	0.00065	0.00065
36	R06_BLANK			
37	R07_INT1	0.00332	0.00332	0.00632
38	R07_INT2	0.01339	0.01339	0.01339
39	R07_DW1	0.00067	0.00067	0.00067
40	R07_DW2	0.00067	0.00067	0.00120
41	R07_UW	0.00066	0.00066	0.00066
42	R07_BLANK			

ID	Sample ID	Dibenz(a,h)anthracene (µg/scm)	Fluoranthene (µg/scm)	Fluorene (µg/scm)
1	R01_UW	0.00068	0.00068	0.00372
2	R01_DW1	0.00063	0.00104	0.00472
3	R01_DW2	0.00063	0.00063	0.00349
4	R01_INT1	0.03331	1.46561	0.69950
5	R01_INT2	0.01400	0.69989	0.66656
6	R01_BLANK			
7	R02_INT1	0.06376	1.43450	1.17948
8	R02_INT2	0.03264	0.71798	0.28719
9	R02_DW1	0.00064	0.01409	0.01409
10	R02_DW2	0.00064	0.00086	0.00233
11	R02_UW	0.00064	0.00064	0.00267
12	R02_BLANK			
13	R03_INT2	0.01653	0.11902	1.45463
14	R03_INT1	0.01631	0.01631	0.04892
15	R03_DW1	0.00333	0.00333	0.00634
16	R03_DW2	0.00373	0.01603	0.01230
17	R03_UW	0.00068	0.00088	0.00374
18	R03_BLANK			
19	R04_INT2	0.00657	0.26593	0.86653
20	R04_INT1	0.00377	0.12563	0.11306
21	R04_DW1	0.00063	0.00822	0.01960
22	R04_DW2	0.00064	0.00258	0.00510
23	R04_UW	0.00063	0.00269	0.00695
24	R04_BLANK			
25	R05_INT1	0.00857	0.21589	0.19684
26	R05_INT2	0.00421	0.16178	0.71185
27	R05_DW1	0.00065	0.00169	0.00250
28	R05_DW2	0.00065	0.00111	0.00210
29	R05_UW	0.00068	0.00188	0.00287
30	R05_BLANK			
31	R06_INT1	0.06405	0.06405	0.89673
32	R06_INT2	0.03182	0.03182	0.03182
33	R06_DW1	0.00066	0.00138	0.00361
34	R06_DW2	0.00065	0.00391	0.00489
35	R06_UW	0.00065	0.00065	0.00153
36	R06_BLANK			
37	R07_INT1	0.00332	0.05652	0.63165
38	R07_INT2	0.01339	0.02076	0.02879
39	R07_DW1	0.00067	0.00236	0.01064
40	R07_DW2	0.00067	0.00468	0.00534
41	R07_UW	0.00066	0.00066	0.00178
42	R07_BLANK			

ID	Sample ID	Indeno(1,2,3-cd)pyrene (µg/scm)	
1	R01_UW	0.00068	
2	R01_DW1	0.00063	
3	R01_DW2	0.00063	
4	R01_INT1	0.21984	
5	R01_INT2	0.07665	
6	R01_BLANK		
7	R02_INT1	0.13707	
8	R02_INT2	0.06853	
9	R02_DW1	0.00202	
10	R02_DW2	0.00064	
11	R02_UW	0.00064	
12	R02_BLANK		
13	R03_INT2	0.01653	
14	R03_INT1	0.01631	
15	R03_DW1	0.00333	
16	R03_DW2	0.00373	
17	R03_UW	0.00068	
18	R03_BLANK		
19	R04_INT2	0.02719	
20	R04_INT1	0.01413	
21	R04_DW1	0.00063	
22	R04_DW2	0.00064	
23	R04_UW	0.00063	
24	R04_BLANK		
25	R05_INT1	0.03492	
26	R05_INT2	0.01683	
27	R05_DW1	0.00065	
28	R05_DW2	0.00065	
29	R05_UW	0.00068	
30	R05_BLANK		
31	R06_INT1	0.06405	
32	R06_INT2	0.03182	
33	R06_DW1	0.00066	
34	R06_DW2	0.00065	
35	R06_UW	0.00065	
36	R06_BLANK		
37	R07_INT1	0.00366	
38	R07_INT2	0.01339	
39	R07_DW1	0.00067	
40	R07_DW2	0.00067	
41	R07_UW	0.00066	
42	R07_BLANK		

ID	Sample ID	Naphthalene (µg/scm)	Perylene (µg/scm)	Phenanthrene (µg/scm)	Pyrene (µg/scm)
1	R01_UW	0.01522	0.00068	0.00609	0.00068
2	R01_DW1	0.09433	0.00063	0.00692	0.00072
3	R01_DW2	0.01397	0.00063	0.00444	0.00063
4	R01_INT1	29.31227	0.07994	2.93123	1.03259
5	R01_INT2	46.65940	0.02600	1.69974	0.49992
6	R01_BLANK				
7	R02_INT1	23.27078	0.06376	3.02839	0.86070
8	R02_INT2	3.19827	0.03264	1.24015	0.42426
9	R02_DW1	0.18575	0.00064	0.03074	0.00769
10	R02_DW2	0.00510	0.00064	0.00319	0.00064
11	R02_UW	0.00450	0.00064	0.00385	0.00064
12	R02_BLANK				
13	R03_INT2	66.11946	0.01653	1.02485	0.06281
14	R03_INT1	4.56551	0.01631	0.04239	0.01631
15	R03_DW1	0.06335	0.00333	0.01067	0.00333
16	R03_DW2	0.19382	0.00373	0.02982	0.01006
17	R03_UW	0.01531	0.00068	0.00646	0.00068
18	R03_BLANK				
19	R04_INT2	35.85627	0.01016	0.95617	0.14940
20	R04_INT1	4.71094	0.00503	0.23555	0.06909
21	R04_DW1	0.37942	0.00063	0.01929	0.00474
22	R04_DW2	0.02551	0.00064	0.00765	0.00121
23	R04_UW	0.12008	0.00063	0.01485	0.00149
24	R04_BLANK				
25	R05_INT1	11.11193	0.01365	0.38098	0.15874
26	R05_INT2	97.07033	0.00615	0.64714	0.10678
27	R05_DW1	0.04217	0.00065	0.00551	0.00104
28	R05_DW2	0.01833	0.00065	0.00393	0.00092
29	R05_UW	0.09555	0.00068	0.00648	0.00113
30	R05_BLANK				
31	R06_INT1	73.65985	0.06405	0.57647	0.06405
32	R06_INT2	1.40015	0.03182	0.03182	0.03182
33	R06_DW1	0.23303	0.00066	0.00656	0.00112
34	R06_DW2	0.18921	0.00065	0.01207	0.00307
35	R06_UW	0.01467	0.00065	0.00271	0.00065
36	R06_BLANK				
37	R07_INT1	59.84016	0.00332	0.39893	0.03092
38	R07_INT2	1.03792	0.01339	0.04687	0.01473
39	R07_DW1	1.52988	0.00067	0.01264	0.00173
40	R07_DW2	0.20036	0.00067	0.01169	0.00301
41	R07_UW	0.01053	0.00066	0.00316	0.00066
42	R07_BLANK				

ID	Sample ID	Other Data Flags	Notes
1	R01_UW		
2	R01_DW1		
3	R01_DW2		
4	R01_INT1		
5	R01_INT2		
6	R01_BLANK		
7	R02_INT1		
8	R02_INT2		
9	R02_DW1		
10	R02_DW2		
11	R02_UW		
12	R02_BLANK		
13	R03_INT2		
14	R03_INT1		
15	R03_DW1		
16	R03_DW2		
17	R03_UW		
18	R03_BLANK		
19	R04_INT2		
20	R04_INT1		
21	R04_DW1		
22	R04_DW2		
23	R04_UW		
24	R04_BLANK		
25	R05_INT1		
26	R05_INT2		
27	R05_DW1		
28	R05_DW2		
29	R05_UW		
30	R05_BLANK		
31	R06_INT1		
32	R06_INT2		
33	R06_DW1		
34	R06_DW2		
35	R06_UW		
36	R06_BLANK		
37	R07_INT1		
38	R07_INT2		
39	R07_DW1		
40	R07_DW2		
41	R07_UW		
42	R07_BLANK		

ID	Sample ID	Sampling Period Start Date	Sampling Period Start Time	Sampling Period End Date	Sampling Period End Time	Summa Can ID	Flow Controller ID	Initial Pressure ("Hg)	Final Pressure ("Hg)
1	R01_UW	10/27/2022	14:19	10/28/2022	12:57	3456	3542	-28	-11
2	R01_DW1_D1	10/27/2022	15:00	10/28/2022	14:07	1025	3360	-30	-11
3	R01_DW1_D2	10/27/2022	15:00	10/28/2022	14:07	1722	3486	-28	-3
4	R01_DW2	10/27/2022	15:42	10/28/2022	14:49	2044	3543	-27	-9
5	R01_INT2	10/27/2022	16:45	10/28/2022	15:38	1804	3063	-30	-10
6	R02_INT1	11/08/2022	9:43	11/09/2022	9:34	1298	3717	-29	0
7	R02_INT2	11/08/2022	10:08	11/09/2022	9:59	1216	3718	-29	-7
8	R02_DW1	11/08/2022	10:49	11/09/2022	10:33	2229	3734	-30	-8
9	R02_DW2_D1	11/08/2022	11:36	11/09/2022	11:14	2000	3483	-29	-8
10	R02_DW2_D2	11/08/2022	11:36	11/09/2022	11:14	1979	3476	-30	-7.5
11	R02_UW	11/08/2022	12:40	11/09/2022	11:59	1657	3733	-28	-6
12	R03_INT2	11/22/2022	12:18	11/23/2022	10:46	2184	3523	-28	-8
13	R03_INT1	11/22/2022	12:58	11/23/2022	11:09	2175	3327	-30	-8
14	R03_DW1	11/22/2022	13:40	11/23/2022	11:32	2016	3462	-29	-7
15	R03_DW2_D1	11/22/2022	14:13	11/23/2022	12:06	2010	3605	-28	-10
16	R03_DW2_D2	11/22/2022	14:13	11/23/2022	12:06	1128	3604	-29	-7
17	R03_UW	11/22/2022	14:51	11/23/2022	12:42	1118	3355	-29	-9
18	R04_INT2	12/06/2022	12:18	12/07/2022	11:33	2570	3532	-29	-8
19	R04_INT1	12/06/2022	13:34	12/07/2022	11:53	1043	3534	-28	-8
20	R04_DW1	12/06/2022	13:09	12/07/2022	12:17	1992	3075	-28	-5
21	R04_DW2_D1	12/06/2022	13:39	12/07/2022	12:48	1448	3254	-28	-7
22	R04_DW2_D2	12/06/2022	13:39	12/07/2022	12:48	1866	3715	-29	-7
23	R04_UW	12/06/2022	14:09	12/07/2022	13:35	1319	3716	-29	-6
24	R05_INT1	12/20/2022	10:43	12/21/2022	10:07	1336	3715	-29	-9
25	R05_INT2	12/20/2022	11:13	12/21/2022	10:37	2161	3716	-29	-10
26	R05_DW1	12/20/2022	11:51	12/21/2022	11:01	2176	3730	-28	-8
27	R05_DW2_D1	12/20/2022	12:43	12/21/2022	11:30	2013	3435	-28	-9
28	R05_DW2_D2	12/20/2022	12:43	12/21/2022	11:30	2017	3435	-28	-9
29	R05_UW	12/20/2022	13:43	12/21/2022	12:04	2194	3729	-29	0
30	R06_INT1	01/04/2023	11:11	01/05/2023	10:05	1934	3506	-30	-9
31	R06_INT2	01/04/2023	11:36	01/05/2023	10:28	1024	3484	-28	-10
32	R06_DW1	01/04/2023	12:02	01/05/2023	10:50	1271	3356	-29	-9
33	R06_DW2_D1	01/04/2023	12:32	01/05/2023	11:20	2180	3593	-28	-4
34	R06_DW2_D2	01/04/2023	12:32	01/05/2023	11:20	2148	3593	-28	-4
35	R06_UW	01/04/2023	13:03	01/05/2023	11:54	1965	3065	-29	-8
36	R07_INT1	01/23/2023	11:24	01/24/2023	10:05	2948	4868	-30	-3
37	R07_INT2	01/23/2023	11:52	01/24/2023	10:24	2960	4846	-30	-2
38	R07_DW1	01/23/2023	12:15	01/24/2023	10:51	2995	4848	-29	-5
39	R07_DW2_D1	01/23/2023	12:47	01/24/2023	11:26	2950	4857	-30	-5
40	R07_DW2_D2	01/23/2023	12:47	01/24/2023	11:26	2986	4857	-30	-5
41	R07_UW	01/23/2023	13:17	01/24/2023	12:00	2934	4865	-30	-5

ID	Sample ID	Acetone (BDL?)	Benzene (BDL?)	Benzyl chloride (BDL?)	Bromodic hloromet hane (BDL?)	Bromofo r (BDL?)	Bromome thane (BDL?)	1,3- Butadien e (BDL?)	2- Butanone (MEK) (BDL?)	Carbon Disulfide (BDL?)	Carbon Tetrachlo ride (BDL?)
1	R01_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2	R01_DW1_D1	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
3	R01_DW1_D2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
4	R01_DW2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	R01_INT2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
6	R02_INT1	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
7	R02_INT2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
8	R02_DW1	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
9	R02_DW2_D1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
10	R02_DW2_D2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
11	R02_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
12	R03_INT2	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
13	R03_INT1	No	No	Yes	Yes	Yes	Yes	No	Yes	No	No
14	R03_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
15	R03_DW2_D1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
16	R03_DW2_D2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
17	R03_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
18	R04_INT2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
19	R04_INT1	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
20	R04_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
21	R04_DW2_D1	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
22	R04_DW2_D2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
23	R04_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
24	R05_INT1	No	No	Yes	Yes	Yes	No	No	Yes	Yes	No
25	R05_INT2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
26	R05_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	R05_DW2_D1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
28	R05_DW2_D2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
29	R05_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
30	R06_INT1	No	No	Yes	Yes	Yes	Yes	No	Yes	No	No
31	R06_INT2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
32	R06_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
33	R06_DW2_D1	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
34	R06_DW2_D2	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
35	R06_UW	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
36	R07_INT1	No	No	Yes	Yes	Yes	Yes	No	Yes	No	No
37	R07_INT2	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
38	R07_DW1	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
39	R07_DW2_D1	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
40	R07_DW2_D2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
41	R07_UW	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

ID	Sample ID	Chlorobenzene (BDL?)	Chloroethane (BDL?)	Chloroform (BDL?)	Chloromethane (BDL?)	Cyclohexane (BDL?)	Dibromochloromethane (BDL?)	1,2-Dibromochloroethane (EDB) (BDL?)	1,2-Dichlorobenzene (BDL?)	1,3-Dichlorobenzene (BDL?)	1,4-Dichlorobenzene (BDL?)
1	R01_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2	R01_DW1_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
3	R01_DW1_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
4	R01_DW2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
5	R01_INT2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
6	R02_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
7	R02_INT2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
8	R02_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
9	R02_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
10	R02_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
11	R02_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
12	R03_INT2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
13	R03_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
14	R03_DW1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
15	R03_DW2_D1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
16	R03_DW2_D2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
17	R03_UW	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
18	R04_INT2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
19	R04_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
20	R04_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
21	R04_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
22	R04_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
23	R04_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
24	R05_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
25	R05_INT2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
26	R05_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
27	R05_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
28	R05_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
29	R05_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
30	R06_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
31	R06_INT2	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
32	R06_DW1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
33	R06_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
34	R06_DW2_D2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
35	R06_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
36	R07_INT1	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
37	R07_INT2	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
38	R07_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
39	R07_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
40	R07_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
41	R07_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	Dichlorodifluoromethane (Freon 12)	1,1-Dichloroethane (BDL?)	1,2-Dichloroethane (BDL?)	1,1-Dichloroethylene (BDL?)	cis-1,2-Dichloroethylene (BDL?)	trans-1,2-Dichloroethylene (BDL?)	1,2-Dichloropropane (BDL?)	cis-1,3-Dichloropropene (BDL?)	trans-1,3-Dichloropropene (BDL?)	1,2-Dichloro-1,1,2,2-tetrafluoroethane
1	R01_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	R01_DW1_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	R01_DW1_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	R01_DW2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	R01_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	R02_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	R02_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	R02_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	R02_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	R02_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	R02_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	R03_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	R03_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	R03_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	R03_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	R03_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	R03_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	R04_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	R04_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	R04_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	R04_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	R04_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	R04_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	R05_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	R05_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
26	R05_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	R05_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
28	R05_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	R05_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	R06_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	R06_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
32	R06_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
33	R06_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
34	R06_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	R06_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
36	R07_INT1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37	R07_INT2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
38	R07_DW1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
39	R07_DW2_D1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
40	R07_DW2_D2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
41	R07_UW	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	1,4-Dioxane (BDL?)	Ethanol (BDL?)	Ethyl Acetate (BDL?)	Ethylbenzene (BDL?)	4-Ethyltoluene (BDL?)	Heptane (BDL?)	Hexachlorobutadiene (BDL?)	Hexane (BDL?)	2-Hexanone (MBK) (BDL?)	Isopropanol (BDL?)
1	R01_UW	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
2	R01_DW1_D1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
3	R01_DW1_D2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	R01_DW2	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
5	R01_INT2	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
6	R02_INT1	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
7	R02_INT2	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
8	R02_DW1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
9	R02_DW2_D1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
10	R02_DW2_D2	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
11	R02_UW	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	R03_INT2	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
13	R03_INT1	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes
14	R03_DW1	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
15	R03_DW2_D1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
16	R03_DW2_D2	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
17	R03_UW	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
18	R04_INT2	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
19	R04_INT1	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
20	R04_DW1	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
21	R04_DW2_D1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
22	R04_DW2_D2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
23	R04_UW	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	R05_INT1	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
25	R05_INT2	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes
26	R05_DW1	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
27	R05_DW2_D1	Yes	No	No	Yes	Yes	No	Yes	Yes	No	No
28	R05_DW2_D2	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
29	R05_UW	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
30	R06_INT1	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes
31	R06_INT2	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes
32	R06_DW1	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
33	R06_DW2_D1	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
34	R06_DW2_D2	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	R06_UW	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
36	R07_INT1	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
37	R07_INT2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
38	R07_DW1	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
39	R07_DW2_D1	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
40	R07_DW2_D2	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
41	R07_UW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	Methyl tert-Butyl Ether (MTBE) (BDL?)	Methylen e Chloride (BDL?)	4-Methyl- 2- pentanon e (MIBK) (BDL?)	Napthal ene (BDL?)	Propene (BDL?)	Styrene (BDL?)	1,1,2,2- Tetrachlo roethane (BDL?)	Tetrachlo roethylen e (BDL?)	Tetrahydr ofuran (BDL?)	Toluene (BDL?)
1	R01_UW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2	R01_DW1_D1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3	R01_DW1_D2	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
4	R01_DW2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	R01_INT2	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
6	R02_INT1	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
7	R02_INT2	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No
8	R02_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
9	R02_DW2_D1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
10	R02_DW2_D2	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
11	R02_UW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
12	R03_INT2	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No
13	R03_INT1	Yes	Yes	No	No	No	No	Yes	Yes	Yes	No
14	R03_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
15	R03_DW2_D1	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	No
16	R03_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
17	R03_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
18	R04_INT2	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
19	R04_INT1	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
20	R04_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
21	R04_DW2_D1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
22	R04_DW2_D2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
23	R04_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
24	R05_INT1	Yes	Yes	Yes	No	No	No	Yes	No	Yes	No
25	R05_INT2	Yes	Yes	No	No	No	No	Yes	Yes	Yes	No
26	R05_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
27	R05_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
28	R05_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
29	R05_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
30	R06_INT1	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
31	R06_INT2	Yes	No	No	No	Yes	No	Yes	No	Yes	No
32	R06_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
33	R06_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
34	R06_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
35	R06_UW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
36	R07_INT1	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
37	R07_INT2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
38	R07_DW1	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
39	R07_DW2_D1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
40	R07_DW2_D2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
41	R07_UW	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No

ID	Sample ID	1,2,4- Trichloro benzene (BDL?)	1,1,1- Trichloro ethane (BDL?)	1,1,2- Trichloro ethane (BDL?)	Trichloro ethylene (BDL?)	Trichloro fluoromet hane (Freon 111)	1,1,2- Trichloro- 1,2,2- trifluoroethane	1,2,4- Trimethyl benzene (BDL?)	1,3,5- Trimethyl benzene (BDL?)	Vinyl Acetate (BDL?)	Vinyl Chloride (BDL?)
1	R01_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
2	R01_DW1_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
3	R01_DW1_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	R01_DW2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	R01_INT2	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
6	R02_INT1	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
7	R02_INT2	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
8	R02_DW1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
9	R02_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
10	R02_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
11	R02_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
12	R03_INT2	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
13	R03_INT1	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
14	R03_DW1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes
15	R03_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
16	R03_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
17	R03_UW	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
18	R04_INT2	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
19	R04_INT1	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
20	R04_DW1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
21	R04_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
22	R04_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
23	R04_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
24	R05_INT1	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
25	R05_INT2	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
26	R05_DW1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
27	R05_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
28	R05_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
29	R05_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
30	R06_INT1	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
31	R06_INT2	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes
32	R06_DW1	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
33	R06_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
34	R06_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
35	R06_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
36	R07_INT1	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
37	R07_INT2	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
38	R07_DW1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
39	R07_DW2_D1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
40	R07_DW2_D2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
41	R07_UW	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

ID	Sample ID	m&p-Xylene (BDL?)	o-Xylene (BDL?)
1	R01_UW	Yes	Yes
2	R01_DW1_D1	No	Yes
3	R01_DW1_D2	Yes	Yes
4	R01_DW2	Yes	Yes
5	R01_INT2	No	No
6	R02_INT1	No	No
7	R02_INT2	No	No
8	R02_DW1	Yes	Yes
9	R02_DW2_D1	Yes	Yes
10	R02_DW2_D2	Yes	Yes
11	R02_UW	Yes	Yes
12	R03_INT2	No	No
13	R03_INT1	No	No
14	R03_DW1	No	No
15	R03_DW2_D1	No	No
16	R03_DW2_D2	No	Yes
17	R03_UW	No	Yes
18	R04_INT2	No	No
19	R04_INT1	No	No
20	R04_DW1	Yes	Yes
21	R04_DW2_D1	Yes	Yes
22	R04_DW2_D2	Yes	Yes
23	R04_UW	Yes	Yes
24	R05_INT1	No	No
25	R05_INT2	No	No
26	R05_DW1	Yes	Yes
27	R05_DW2_D1	Yes	Yes
28	R05_DW2_D2	Yes	Yes
29	R05_UW	Yes	Yes
30	R06_INT1	No	No
31	R06_INT2	No	No
32	R06_DW1	No	Yes
33	R06_DW2_D1	Yes	Yes
34	R06_DW2_D2	Yes	Yes
35	R06_UW	Yes	Yes
36	R07_INT1	No	No
37	R07_INT2	No	No
38	R07_DW1	No	Yes
39	R07_DW2_D1	Yes	Yes
40	R07_DW2_D2	Yes	Yes
41	R07_UW	Yes	Yes

ID	Sample ID	Acetone (µg/scm)	Benzene (µg/scm)	Benzyl chloride (µg/scm)	Bromodic hloromet hane (µg/scm)	Bromofo r m (µg/scm)	Bromome thane (µg/scm)	1,3- Butadien e (µg/scm)	2- Butanone (MEK) (µg/scm)	Carbon Disulfide (µg/scm)	Carbon Tetrachlo ride (µg/scm)
1	R01_UW	9.4	0.38	0.36	0.23	0.36	0.14	0.077	4.1	1.1	0.67
2	R01_DW1_D1	5.8	3.9	0.36	0.23	0.36	0.14	0.11	4.1	1.1	0.57
3	R01_DW1_D2	6.7	4	0.36	0.23	0.36	0.14	0.077	4.1	1.1	0.37
4	R01_DW2	7.4	0.32	0.36	0.23	0.36	0.14	0.077	4.1	1.1	0.61
5	R01_INT2	5.1	110	0.36	0.23	0.36	0.14	0.93	4.1	1.1	0.61
6	R02_INT1	15	160	0.18	0.24	0.36	0.14	2.2	4.1	1.1	0.43
7	R02_INT2	11	35	0.18	0.24	0.36	0.14	0.25	4.1	1.1	0.41
8	R02_DW1	15	2.8	0.18	0.24	0.36	0.14	0.081	4.1	1.1	0.41
9	R02_DW2_D1	12	0.31	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.4
10	R02_DW2_D2	17	0.33	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.39
11	R02_UW	5.8	0.29	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.39
12	R03_INT2	15	100	0.18	0.23	0.36	0.14	0.077	4.2	1.1	0.46
13	R03_INT1	15	910	0.18	0.23	0.36	0.14	4.8	4.1	2.9	0.39
14	R03_DW1	15	0.84	0.18	0.23	0.36	0.14	0.077	4.1	1.1	0.47
15	R03_DW2_D1	12	2.4	0.18	0.23	0.36	0.14	0.077	4.1	1.1	0.28
16	R03_DW2_D2	10	2.3	0.18	0.23	0.36	0.14	0.077	4.1	1.1	0.42
17	R03_UW	11	0.92	0.18	0.23	0.36	0.14	0.077	4.1	1.1	0.43
18	R04_INT2	12	130	0.18	0.24	0.36	0.14	1.4	4.1	1.1	0.45
19	R04_INT1	9.5	42	0.18	0.24	0.36	0.14	0.45	4.1	1.1	0.44
20	R04_DW1	14	0.83	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.44
21	R04_DW2_D1	6.7	0.49	0.18	0.24	0.36	0.19	0.078	4.1	1.1	0.45
22	R04_DW2_D2	8.6	0.5	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.45
23	R04_UW	5.8	0.91	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.45
24	R05_INT1	9.9	51	0.18	0.24	0.36	0.14	0.54	4.1	1.1	0.35
25	R05_INT2	14	100	0.18	0.24	0.36	0.14	1.1	4.1	1.1	0.37
26	R05_DW1	8.7	0.46	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.22
27	R05_DW2_D1	8.1	0.39	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.35
28	R05_DW2_D2	8.5	0.4	0.18	0.24	0.36	0.14	0.082	4.1	1.1	0.35
29	R05_UW	6.3	0.61	0.18	0.24	0.36	0.14	0.078	4.1	1.1	0.37
30	R06_INT1	1.7	190	0.035	0.035	0.035	0.035	2.4	1.4	1	0.069
31	R06_INT2	2.6	1.3	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.068
32	R06_DW1	1.9	0.36	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.065
33	R06_DW2_D1	1.8	0.39	0.035	0.035	0.035	0.035	0.039	1.4	0.35	0.066
34	R06_DW2_D2	2	0.41	0.035	0.035	0.035	0.035	0.036	1.4	0.35	0.069
35	R06_UW	2.1	0.13	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.069
36	R07_INT1	2.1	110	0.035	0.035	0.035	0.035	2.1	1.4	0.83	0.068
37	R07_INT2	1.5	0.91	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.072
38	R07_DW1	2.3	1.5	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.071
39	R07_DW2_D1	1.4	0.28	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.075
40	R07_DW2_D2	1.4	0.28	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.078
41	R07_UW	1.4	0.099	0.035	0.035	0.035	0.035	0.035	1.4	0.35	0.074

ID	Sample ID	Chlorobenzene (µg/scm)	Chloroethane (µg/scm)	Chloroform (µg/scm)	Chloromethane (µg/scm)	Cyclohexane (µg/scm)	Dibromochloromethane (µg/scm)	1,2-Dibromoethane (EDB) (µg/scm)	1,2-Dichlorobenzene (µg/scm)	1,3-Dichlorobenzene (µg/scm)	1,4-Dichlorobenzene (µg/scm)
1	R01_UW	0.16	0.092	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
2	R01_DW1_D1	0.16	0.092	0.17	1	0.12	0.30	0.27	0.21	0.21	0.21
3	R01_DW1_D2	0.16	0.092	0.17	1.2	0.12	0.30	0.27	0.21	0.21	0.21
4	R01_DW2	0.16	0.092	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
5	R01_INT2	0.16	0.092	0.17	1.1	0.23	0.30	0.27	0.21	0.21	0.21
6	R02_INT1	0.16	0.093	0.17	0.97	0.31	0.30	0.27	0.21	0.21	0.21
7	R02_INT2	0.16	0.093	0.17	0.87	0.12	0.30	0.27	0.21	0.21	0.21
8	R02_DW1	0.16	0.093	0.17	0.85	0.12	0.30	0.27	0.21	0.21	0.21
9	R02_DW2_D1	0.16	0.093	0.17	0.89	0.12	0.30	0.27	0.21	0.21	0.21
10	R02_DW2_D2	0.16	0.093	0.17	0.92	0.12	0.30	0.27	0.21	0.21	0.21
11	R02_UW	0.16	0.093	0.17	0.92	0.12	0.30	0.27	0.21	0.21	0.21
12	R03_INT2	0.16	0.092	0.17	1	0.41	0.30	0.27	0.21	0.21	0.21
13	R03_INT1	0.16	0.092	0.17	1	0.78	0.30	0.27	0.21	0.21	0.21
14	R03_DW1	0.16	0.092	0.17	1	0.24	0.30	0.27	0.21	0.21	0.21
15	R03_DW2_D1	0.16	0.092	0.17	1.1	0.19	0.30	0.27	0.21	0.21	0.21
16	R03_DW2_D2	0.16	0.092	0.17	1	0.22	0.30	0.27	0.21	0.21	0.21
17	R03_UW	0.16	0.092	0.17	0.97	0.18	0.30	0.27	0.21	0.21	0.21
18	R04_INT2	0.16	0.093	0.17	0.9	0.25	0.30	0.27	0.21	0.21	0.21
19	R04_INT1	0.16	0.093	0.17	0.94	0.23	0.30	0.27	0.21	0.21	0.21
20	R04_DW1	0.16	0.093	0.17	0.83	0.12	0.30	0.27	0.21	0.21	0.21
21	R04_DW2_D1	0.16	0.093	0.17	0.93	0.12	0.30	0.27	0.21	0.21	0.21
22	R04_DW2_D2	0.16	0.093	0.17	0.97	0.12	0.30	0.27	0.21	0.21	0.21
23	R04_UW	0.16	0.093	0.17	1	0.12	0.30	0.27	0.21	0.21	0.21
24	R05_INT1	0.16	0.093	0.17	1.2	0.12	0.30	0.27	0.21	0.21	0.21
25	R05_INT2	0.16	0.093	0.17	1.1	0.15	0.30	0.27	0.21	0.21	0.21
26	R05_DW1	0.16	0.093	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
27	R05_DW2_D1	0.16	0.093	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
28	R05_DW2_D2	0.16	0.093	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
29	R05_UW	0.16	0.093	0.17	1.1	0.12	0.30	0.27	0.21	0.21	0.21
30	R06_INT1	0.035	0.035	0.035	0.45	0.17	0.035	0.035	0.035	0.035	0.035
31	R06_INT2	0.035	0.035	0.036	0.43	0.16	0.035	0.035	0.035	0.035	0.035
32	R06_DW1	0.035	0.035	0.035	0.44	0.039	0.035	0.035	0.035	0.035	0.035
33	R06_DW2_D1	0.035	0.035	0.035	0.41	0.035	0.035	0.035	0.035	0.035	0.035
34	R06_DW2_D2	0.035	0.035	0.035	0.4	0.06	0.035	0.035	0.035	0.035	0.035
35	R06_UW	0.035	0.035	0.035	0.39	0.035	0.035	0.035	0.035	0.035	0.035
36	R07_INT1	0.035	0.035	0.035	0.38	0.1	0.035	0.035	0.035	0.035	0.035
37	R07_INT2	0.035	0.035	0.035	0.33	0.32	0.035	0.035	0.035	0.035	0.035
38	R07_DW1	0.035	0.035	0.035	0.37	0.035	0.035	0.035	0.035	0.035	0.035
39	R07_DW2_D1	0.035	0.035	0.035	0.36	0.035	0.035	0.035	0.035	0.035	0.035
40	R07_DW2_D2	0.035	0.035	0.035	0.39	0.035	0.035	0.035	0.035	0.035	0.035
41	R07_UW	0.035	0.035	0.035	0.37	0.035	0.035	0.035	0.035	0.035	0.035

ID	Sample ID	Dichlorodifluoromethane (Freon 12)	1,1-Dichloroethane (µg/scm)	1,2-Dichloroethane (µg/scm)	1,1-Dichloroethylene (µg/scm)	cis-1,2-Dichloroethylene (µg/scm)	trans-1,2-Dichloroethylene (µg/scm)	1,2-Dichloropropane (µg/scm)	cis-1,3-Dichloropropene (µg/scm)	trans-1,3-Dichloropropene (µg/scm)	1,2-Dichloro-1,1,2,2-tetrafluoroethane
1	R01_UW	2.8	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
2	R01_DW1_D1	2.6	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
3	R01_DW1_D2	3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
4	R01_DW2	2.6	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
5	R01_INT2	2.4	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
6	R02_INT1	1.5	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
7	R02_INT2	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
8	R02_DW1	1.2	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
9	R02_DW2_D1	1.1	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
10	R02_DW2_D2	1.2	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
11	R02_UW	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
12	R03_INT2	3.1	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
13	R03_INT1	2.7	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
14	R03_DW1	3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
15	R03_DW2_D1	2.8	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
16	R03_DW2_D2	2.8	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
17	R03_UW	2.8	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.24
18	R04_INT2	1.5	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
19	R04_INT1	1.2	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
20	R04_DW1	1.4	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
21	R04_DW2_D1	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
22	R04_DW2_D2	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
23	R04_UW	1.5	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
24	R05_INT1	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
25	R05_INT2	1.2	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
26	R05_DW1	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
27	R05_DW2_D1	1.3	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
28	R05_DW2_D2	1.2	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
29	R05_UW	1.7	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.25
30	R06_INT1	0.26	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
31	R06_INT2	0.27	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
32	R06_DW1	0.26	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
33	R06_DW2_D1	0.31	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
34	R06_DW2_D2	0.29	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
35	R06_UW	0.28	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
36	R07_INT1	0.31	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
37	R07_INT2	0.3	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
38	R07_DW1	0.28	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
39	R07_DW2_D1	0.3	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
40	R07_DW2_D2	0.29	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
41	R07_UW	0.3	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035

ID	Sample ID	1,4-Dioxane (µg/scm)	Ethanol (µg/scm)	Ethyl Acetate (µg/scm)	Ethylbenzene (µg/scm)	4-Ethyltoluene (µg/scm)	Heptane (µg/scm)	Hexachlorobutadiene (µg/scm)	Hexane (µg/scm)	2-Hexanone (MBK) (µg/scm)	Isopropanol (µg/scm)
1	R01_UW	1.3	6.7	1.3	0.15	0.17	0.14	0.37	4.9	0.48	3.4
2	R01_DW1_D1	1.3	5.1	1.3	0.15	0.17	0.18	0.37	4.9	0.14	3.4
3	R01_DW1_D2	1.3	5.1	1.3	0.15	0.17	0.14	0.37	4.9	0.14	3.4
4	R01_DW2	1.3	5.7	1.3	0.15	0.17	0.26	0.37	4.9	0.14	3.4
5	R01_INT2	1.3	6	1.3	0.65	0.17	0.35	0.37	4.9	0.14	3.4
6	R02_INT1	1.3	6.8	1.3	0.5	0.17	0.44	0.37	4.9	0.29	3.4
7	R02_INT2	1.3	7	1.3	0.15	0.17	0.17	0.37	4.9	0.43	3.4
8	R02_DW1	1.3	7	1.3	0.15	0.17	0.15	0.37	4.9	0.42	3.4
9	R02_DW2_D1	1.3	7.1	1.3	0.15	0.17	0.2	0.37	4.9	0.4	3.4
10	R02_DW2_D2	1.3	8.4	1.3	0.15	0.17	0.16	0.37	4.9	0.51	3.4
11	R02_UW	1.3	6.1	1.3	0.15	0.17	0.14	0.37	4.9	0.14	3.4
12	R03_INT2	1.3	13	1.3	0.4	0.17	0.42	0.37	4.9	0.69	3.4
13	R03_INT1	1.3	12	1.3	1.9	0.4	0.69	1.3	4.9	0.29	3.4
14	R03_DW1	1.3	10	1.3	0.16	0.17	0.36	0.37	4.9	0.29	3.4
15	R03_DW2_D1	1.3	9.7	1.3	0.15	0.17	0.34	0.37	4.9	0.38	3.4
16	R03_DW2_D2	1.3	9.7	1.3	0.15	0.17	0.33	0.37	4.9	0.29	3.4
17	R03_UW	1.3	10	1.3	0.15	0.17	0.37	0.37	4.9	0.29	3.4
18	R04_INT2	1.3	9.4	1.3	0.35	0.17	0.22	0.37	4.9	0.28	3.4
19	R04_INT1	1.3	6.4	1.3	0.18	0.17	0.22	0.37	4.9	0.18	3.4
20	R04_DW1	1.3	6.1	1.3	0.15	0.17	0.14	0.37	4.9	0.28	3.4
21	R04_DW2_D1	1.3	4	1.3	0.15	0.17	0.17	0.37	4.9	0.14	3.4
22	R04_DW2_D2	1.3	5.3	1.3	0.15	0.17	0.14	0.37	4.9	0.2	3.4
23	R04_UW	1.3	11	1.3	0.15	0.17	0.14	0.37	4.9	0.14	3.4
24	R05_INT1	1.3	6.7	1.3	0.23	0.17	0.24	0.37	4.9	0.22	3.4
25	R05_INT2	1.3	9.7	1.3	0.42	0.17	0.27	0.37	4.9	0.61	3.4
26	R05_DW1	1.3	7.4	1.3	0.15	0.17	0.22	0.37	4.9	0.18	3.4
27	R05_DW2_D1	1.3	7.4	2.3	0.15	0.17	0.2	0.37	4.9	0.22	3.9
28	R05_DW2_D2	1.3	10	1.3	0.15	0.17	0.17	0.37	4.9	0.21	3.4
29	R05_UW	1.3	5.7	1.3	0.15	0.17	0.18	0.37	4.9	0.14	3.4
30	R06_INT1	0.35	1.8	0.35	0.26	0.058	0.11	0.035	1.4	0.035	1.4
31	R06_INT2	0.35	5.3	33	0.042	0.035	0.13	0.035	1.4	0.035	1.4
32	R06_DW1	0.35	2.1	5.4	0.035	0.035	0.085	0.035	1.4	0.035	1.4
33	R06_DW2_D1	0.35	2.2	0.44	0.035	0.035	0.035	0.035	1.4	0.035	1.4
34	R06_DW2_D2	0.35	11	0.35	0.035	0.035	0.035	0.035	1.4	0.035	1.4
35	R06_UW	0.35	1.4	0.35	0.035	0.035	0.035	0.035	1.4	0.044	1.4
36	R07_INT1	0.35	1.4	0.35	0.13	0.035	0.047	0.035	1.4	0.035	1.4
37	R07_INT2	0.35	1.4	0.35	0.035	0.035	0.086	0.035	1.4	0.035	1.4
38	R07_DW1	0.35	1.4	0.35	0.035	0.035	0.041	0.035	1.4	0.035	1.4
39	R07_DW2_D1	0.35	1.6	0.35	0.035	0.035	0.035	0.035	1.4	0.035	1.4
40	R07_DW2_D2	0.35	1.8	0.51	0.035	0.035	0.035	0.035	1.4	0.035	1.4
41	R07_UW	0.35	1.4	0.35	0.035	0.035	0.035	0.035	1.4	0.035	1.4

ID	Sample ID	Methyl tert-Butyl Ether (MTBE) (µg/scm)	Methylen e Chloride (µg/scm)	4-Methyl- 2- pentanon e (MIBK) (µg/scm)	Naphthal ene (µg/scm)	Propene (µg/scm)	Styrene (µg/scm)	1,1,2,2- Tetrachlo roethane (µg/scm)	Tetrachlo roethylen e (µg/scm)	Tetrahydr ofuran (µg/scm)	Toluene (µg/scm)
1	R01_UW	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.53
2	R01_DW1_D1	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	1
3	R01_DW1_D2	0.13	1.2	0.14	2.1	2.4	0.17	0.24	0.24	1.0	1
4	R01_DW2	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.4
5	R01_INT2	0.13	1.2	0.14	140	5.9	8	0.24	0.24	1.0	36
6	R02_INT1	0.13	1.2	0.14	150	14	7.1	0.24	0.24	1.0	40
7	R02_INT2	0.13	1.2	0.14	16	2.4	1.4	0.24	0.59	1.0	8.2
8	R02_DW1	0.13	1.2	0.14	0.66	2.4	0.15	0.24	0.24	1.0	0.64
9	R02_DW2_D1	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.25
10	R02_DW2_D2	0.13	1.2	0.16	0.18	2.4	0.15	0.24	0.24	1.0	0.24
11	R02_UW	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.25
12	R03_INT2	0.13	1.2	0.16	30	2.4	3.8	0.24	0.24	1.0	21
13	R03_INT1	0.13	1.2	0.15	480	24	46	0.24	0.24	1.0	160
14	R03_DW1	0.13	1.2	0.14	4.6	2.4	0.15	0.24	0.24	1.0	0.87
15	R03_DW2_D1	0.13	1.2	0.28	2.1	2.4	0.15	0.24	0.3	1.0	0.85
16	R03_DW2_D2	0.13	1.2	0.14	1.2	2.4	0.15	0.24	0.24	1.0	0.83
17	R03_UW	0.13	1.2	0.14	0.5	2.4	0.15	0.24	0.24	1.0	0.8
18	R04_INT2	0.13	1.2	0.14	240	8.1	9	0.24	0.24	1.0	37
19	R04_INT1	0.13	1.2	0.14	40	2.8	1.9	0.24	0.24	1.0	11
20	R04_DW1	0.13	1.2	0.14	0.5	2.4	0.15	0.24	0.24	1.0	0.56
21	R04_DW2_D1	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.42
22	R04_DW2_D2	0.13	1.2	0.14	0.18	2.4	0.15	0.24	0.24	1.0	0.45
23	R04_UW	0.13	1.2	0.14	0.23	2.4	0.15	0.24	0.24	1.0	0.57
24	R05_INT1	0.13	1.2	0.14	27	2.7	2.1	0.24	0.38	1.0	13
25	R05_INT2	0.13	1.2	0.15	200	4.6	8.3	0.24	0.24	1.0	30
26	R05_DW1	0.13	1.2	0.14	1.9	2.4	0.15	0.24	0.24	1.0	0.55
27	R05_DW2_D1	0.13	1.2	0.14	0.44	2.4	0.15	0.24	0.24	1.0	0.51
28	R05_DW2_D2	0.13	1.2	0.14	0.22	2.4	0.15	0.24	0.24	1.0	0.48
29	R05_UW	0.13	1.2	0.14	0.21	2.4	0.15	0.24	0.24	1.0	0.57
30	R06_INT1	0.035	0.35	0.035	0.035	18	6	0.035	0.035	0.35	29
31	R06_INT2	0.035	0.39	0.039	1.7	1.4	0.059	0.035	0.2	0.35	0.9
32	R06_DW1	0.035	0.35	0.035	0.2	1.4	0.035	0.035	0.053	0.35	0.27
33	R06_DW2_D1	0.035	0.35	0.035	0.11	1.4	0.035	0.035	0.062	0.35	0.12
34	R06_DW2_D2	0.035	0.35	0.035	0.095	1.4	0.035	0.035	0.046	0.35	0.12
35	R06_UW	0.035	0.35	0.035	0.035	1.4	0.035	0.035	0.035	0.35	0.056
36	R07_INT1	0.035	0.35	0.035	35	17	3.1	0.035	0.035	0.35	21
37	R07_INT2	0.035	0.35	0.035	0.76	1.4	0.035	0.035	0.035	0.35	0.23
38	R07_DW1	0.035	0.35	0.035	0.36	1.4	0.035	0.035	0.044	0.35	0.35
39	R07_DW2_D1	0.035	0.35	0.035	0.044	1.4	0.035	0.035	0.035	0.35	0.08
40	R07_DW2_D2	0.035	0.35	0.035	0.037	1.4	0.035	0.035	0.035	0.35	0.084
41	R07_UW	0.035	0.35	0.035	0.76	1.4	0.035	0.035	0.035	0.35	0.041

ID	Sample ID	1,2,4-Trichloro benzene (µg/scm)	1,1,1-Trichloro ethane (µg/scm)	1,1,2-Trichloro ethane (µg/scm)	Trichloro ethylene (µg/scm)	Trichlorofluoromethane (Freon 11)	1,1,2-Trichloro-1,2,2-trifluoroethane	1,2,4-Trimethyl benzene (µg/scm)	1,3,5-Trimethyl benzene (µg/scm)	Vinyl Acetate (µg/scm)	Vinyl Chloride (µg/scm)
1	R01_UW	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.089
2	R01_DW1_D1	0.26	0.19	0.19	0.19	1.2	1.1	0.17	0.17	2.5	0.089
3	R01_DW1_D2	0.26	0.19	0.19	0.19	1.3	1.1	0.17	0.17	2.5	0.089
4	R01_DW2	0.26	0.19	0.19	0.19	1.3	1.1	0.17	0.17	2.5	0.089
5	R01_INT2	0.26	0.19	0.19	0.19	1.2	1.1	3.3	2.1	2.5	0.089
6	R02_INT1	0.26	0.19	0.19	0.19	1.4	1.1	2.9	1.8	2.5	0.090
7	R02_INT2	0.26	0.19	0.19	0.19	1.2	1.1	0.49	0.25	2.5	0.090
8	R02_DW1	0.26	0.19	0.19	0.19	1.2	1.1	0.17	0.17	2.5	0.090
9	R02_DW2_D1	0.26	0.19	0.19	0.19	1.2	1.1	0.17	0.17	2.5	0.090
10	R02_DW2_D2	0.26	0.19	0.19	0.19	1.3	1.1	0.17	0.17	2.5	0.090
11	R02_UW	0.26	0.19	0.19	0.19	1.3	1.1	0.17	0.17	2.5	0.090
12	R03_INT2	0.26	0.19	0.19	0.19	1.5	1.1	1.2	0.89	2.5	0.089
13	R03_INT1	0.26	0.19	0.19	0.19	1.4	1.1	13	9.6	2.5	0.089
14	R03_DW1	0.26	0.19	0.19	0.19	1.4	1.1	0.22	0.17	2.5	0.089
15	R03_DW2_D1	0.26	0.19	0.19	0.19	1.4	1.1	0.21	0.17	2.5	0.089
16	R03_DW2_D2	0.26	0.19	0.19	0.19	1.4	1.1	0.21	0.17	2.5	0.089
17	R03_UW	0.26	0.19	0.19	0.19	1.3	1.1	0.18	0.17	2.5	0.089
18	R04_INT2	0.26	0.19	0.19	0.19	1.4	1.1	3.3	1.8	2.5	0.090
19	R04_INT1	0.26	0.19	0.19	0.19	1.4	1.1	0.67	0.33	2.5	0.090
20	R04_DW1	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
21	R04_DW2_D1	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
22	R04_DW2_D2	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
23	R04_UW	0.26	0.19	0.19	0.19	1.5	1.1	0.17	0.17	2.5	0.090
24	R05_INT1	0.26	0.19	0.19	0.19	1.6	1.2	0.72	0.48	2.5	0.090
25	R05_INT2	0.26	0.19	0.19	0.19	1.4	1.1	3	2.1	2.5	0.090
26	R05_DW1	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
27	R05_DW2_D1	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
28	R05_DW2_D2	0.26	0.19	0.19	0.19	1.4	1.1	0.17	0.17	2.5	0.090
29	R05_UW	0.26	0.19	0.19	0.19	1.5	1.1	0.17	0.17	2.5	0.090
30	R06_INT1	0.035	0.035	0.035	0.035	0.19	0.14	1.6	1.2	0.70	0.035
31	R06_INT2	0.035	0.035	0.035	0.094	0.18	0.14	0.067	0.035	0.70	0.035
32	R06_DW1	0.035	0.035	0.035	0.035	0.19	0.14	0.045	0.035	0.70	0.035
33	R06_DW2_D1	0.035	0.035	0.035	0.035	0.2	0.14	0.035	0.035	0.70	0.035
34	R06_DW2_D2	0.035	0.035	0.035	0.035	0.19	0.14	0.035	0.035	0.70	0.035
35	R06_UW	0.035	0.035	0.035	0.035	0.19	0.14	0.035	0.035	0.70	0.035
36	R07_INT1	0.035	0.035	0.035	0.035	0.27	0.14	1.1	0.62	0.70	0.035
37	R07_INT2	0.035	0.035	0.035	0.035	0.27	0.14	0.052	0.035	0.70	0.035
38	R07_DW1	0.035	0.035	0.035	0.035	0.27	0.14	0.035	0.035	0.70	0.035
39	R07_DW2_D1	0.035	0.035	0.035	0.035	0.28	0.14	0.035	0.035	0.70	0.035
40	R07_DW2_D2	0.035	0.035	0.035	0.035	0.27	0.14	0.035	0.035	0.70	0.035
41	R07_UW	0.035	0.035	0.035	0.035	0.27	0.14	0.035	0.035	0.70	0.035

ID	Sample ID	m&p-Xylene (µg/scm)	o-Xylene (µg/scm)	Other Data Flags
1	R01_UW	0.30	0.15	
2	R01_DW1_D1	0.31	0.15	
3	R01_DW1_D2	0.30	0.15	
4	R01_DW2	0.30	0.15	
5	R01_INT2	15	3.9	
6	R02_INT1	15	3.3	
7	R02_INT2	2.6	0.56	
8	R02_DW1	0.30	0.15	
9	R02_DW2_D1	0.30	0.15	
10	R02_DW2_D2	0.30	0.15	
11	R02_UW	0.30	0.15	
12	R03_INT2	7.1	1.7	
13	R03_INT1	66	15	
14	R03_DW1	0.4	0.17	
15	R03_DW2_D1	0.36	0.15	
16	R03_DW2_D2	0.35	0.15	
17	R03_UW	0.34	0.15	
18	R04_INT2	15	3.1	
19	R04_INT1	3.4	0.72	
20	R04_DW1	0.30	0.15	
21	R04_DW2_D1	0.30	0.15	
22	R04_DW2_D2	0.30	0.15	
23	R04_UW	0.30	0.15	
24	R05_INT1	4.3	0.96	
25	R05_INT2	13	3	
26	R05_DW1	0.30	0.15	
27	R05_DW2_D1	0.30	0.15	
28	R05_DW2_D2	0.30	0.15	
29	R05_UW	0.30	0.15	
30	R06_INT1	9.8	2.2	
31	R06_INT2	0.17	0.067	
32	R06_DW1	0.082	0.035	
33	R06_DW2_D1	0.070	0.035	
34	R06_DW2_D2	0.070	0.035	
35	R06_UW	0.070	0.035	
36	R07_INT1	6.5	1.4	
37	R07_INT2	0.12	0.053	
38	R07_DW1	0.082	0.035	
39	R07_DW2_D1	0.070	0.035	
40	R07_DW2_D2	0.070	0.035	
41	R07_UW	0.070	0.035	

ID	Sample ID	Notes
1	R01_UW	
2	R01_DW1_D1	
3	R01_DW1_D2	
4	R01_DW2	
5	R01_INT2	
6	R02_INT1	
7	R02_INT2	
8	R02_DW1	
9	R02_DW2_D1	
10	R02_DW2_D2	
11	R02_UW	
12	R03_INT2	
13	R03_INT1	
14	R03_DW1	
15	R03_DW2_D1	
16	R03_DW2_D2	
17	R03_UW	
18	R04_INT2	
19	R04_INT1	
20	R04_DW1	
21	R04_DW2_D1	
22	R04_DW2_D2	
23	R04_UW	
24	R05_INT1	
25	R05_INT2	
26	R05_DW1	
27	R05_DW2_D1	
28	R05_DW2_D2	
29	R05_UW	
30	R06_INT1	
31	R06_INT2	
32	R06_DW1	
33	R06_DW2_D1	
34	R06_DW2_D2	
35	R06_UW	
36	R07_INT1	
37	R07_INT2	
38	R07_DW1	
39	R07_DW2_D1	
40	R07_DW2_D2	
41	R07_UW	

Cleveland Cliffs Burns Harbor LLC
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TO-15 (VOC) Run Data and Parameters

Run No.	1	1
Sampling Location	R01_DW1_D2	R01_DW1_D1
Start Date (2022)	Oct 27	Oct 27
Start Time (approx.)	15:00	15:00
Stop Date (2022)	Oct 28	Oct 28
Stop Time (approx.)	14:07	14:07
Sampling Parameters		
SC# Summa Can No.	1722	1025
FC# Flow Controller No.	3486	3360
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-30.0
VAC _{FINA} Final Vacuum (in Hg)	-3.0	-11.0
VAC _{LAB} Receipt Vacuum (in Hg)		

<u>Results</u>	BDL?	BDL?	Average	Precision (%)
Acetone (µg/m3)	No 6.7	No 5.8	6.25	14.4
Benzene (µg/m3)	No 4	No 3.9	3.95	2.5
Benzyl chloride (µg/m3)	Yes 0.36	Yes 0.36	0.36	NA
Bromodichloromethane (µg/m3)	Yes 0.23	Yes 0.23	0.23	NA
Bromoform (µg/m3)	Yes 0.36	Yes 0.36	0.36	NA
Bromomethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,3-Butadiene (µg/m3)	Yes 0.077	No 0.11	0.11	NA
2-Butanone (MEK) (µg/m3)	Yes 4.1	Yes 4.1	4.1	NA
Carbon Disulfide (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
Carbon Tetrachloride (µg/m3)	No 0.37	No 0.57	0.47	42.6
Chlorobenzene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
Chloroethane (µg/m3)	Yes 0.092	Yes 0.092	0.092	NA
Chloroform (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Chloromethane (µg/m3)	No 1.2	No 1	1.1	18.2
Cyclohexane (µg/m3)	Yes 0.12	Yes 0.12	0.12	NA
Dibromochloromethane (µg/m3)	Yes 0.30	Yes 0.30	0.30	NA
1,2-Dibromoethane (EDB) (µg/m3)	Yes 0.27	Yes 0.27	0.27	NA
1,2-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,3-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,4-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
Dichlorodifluoromethane (Freon 12) (µg/m3)	No 3	No 2.6	2.8	14.3
1,1-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,1-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
cis-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
trans-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloropropane (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
cis-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
trans-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
1,4-Dioxane (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA

Cleveland Cliffs Burns Harbor LLC
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TO-15 (VOC) Run Data and Parameters

Run No.	1	1
Sampling Location	R01_DW1_D2	R01_DW1_D1
Start Date (2022)	Oct 27	Oct 27
Start Time (approx.)	15:00	15:00
Stop Date (2022)	Oct 28	Oct 28
Stop Time (approx.)	14:07	14:07
Sampling Parameters		
SC# Summa Can No.	1722	1025
FC# Flow Controller No.	3486	3360
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-30.0
VAC _{FINAL} Final Vacuum (in Hg)	-3.0	-11.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	BDL?	BDL?	Average	Precision (%)
Ethanol (µg/m3)	No 5.1	No 5.1	5.1	NA
Ethyl Acetate (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA
Ethylbenzene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA
4-Ethyltoluene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Heptane (µg/m3)	Yes 0.14	No 0.18	0.18	NA
Hexachlorobutadiene (µg/m3)	Yes 0.37	Yes 0.37	0.37	NA
Hexane (µg/m3)	Yes 4.9	Yes 4.9	4.9	NA
2-Hexanone (MBK) (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
Isopropanol (µg/m3)	Yes 3.4	Yes 3.4	3.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes 0.13	Yes 0.13	0.13	NA
Methylene Chloride (µg/m3)	Yes 1.2	Yes 1.2	1.2	NA
4-Methyl-2-pentanone (MIBK) (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
Naphthalene (µg/m3)	No 2.1	Yes 0.18	2.1	NA
Propene (µg/m3)	Yes 2.4	Yes 2.4	2.4	NA
Styrene (µg/m3)	No 0.17	Yes 0.15	0.17	NA
1,1,2,2-Tetrachloroethane (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Tetrachloroethylene (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Tetrahydrofuran (µg/m3)	Yes 1.0	Yes 1.0	1.0	NA
Toluene (µg/m3)	No 1	No 1	1	NA
1,2,4-Trichlorobenzene (µg/m3)	Yes 0.26	Yes 0.26	0.26	NA
1,1,1-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
1,1,2-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichloroethylene (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichlorofluoromethane (Freon 11) (µg/m3)	No 1.3	No 1.2	1.25	8.0
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
1,2,4-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
1,3,5-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Vinyl Acetate (µg/m3)	Yes 2.5	Yes 2.5	2.5	NA
Vinyl Chloride (µg/m3)	Yes 0.089	Yes 0.089	0.089	NA
m&p-Xylene (µg/m3)	Yes 0.30	No 0.31	0.31	NA
o-Xylene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA

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TO-15 (VOC) Run Data and Parameters

Run No.	1	1	1	1
Sampling Location	R01_UW	R01_DW1_D1	R01_DW2	R01_INT2
Start Date (2022)	Oct 27	Oct 27	Oct 27	Oct 27
Start Time (approx.)	14:19	15:00	15:42	16:45
Stop Date (2022)	Oct 28	Oct 28	Oct 28	Oct 28
Stop Time (approx.)	12:57	14:07	14:49	15:38
Sampling Parameters				
SC# Summa Can No.	3456	1025	2044	1804
FC# Flow Controller No.	3542	3360	3543	3063
Dup Duplicate Sample (Y/N)		Y		
θ Total sampling time (min)				
VAC _{IN} Initial Vacuum (in Hg)	-28.0	-30.0	-27.0	-30.0
VAC _{FINAL} Final Vacuum (in Hg)	-11.0	-11.0	-9.0	-10.0

Results

	BDL?		BDL?		BDL?		BDL?	
Ethanol (µg/m3)	No	6.7	No	5.1	No	5.7	No	6
Ethyl Acetate (µg/m3)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3
Ethylbenzene (µg/m3)	Yes	0.15	Yes	0.15	Yes	0.15	No	0.65
4-Ethyltoluene (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Heptane (µg/m3)	No	0.14	No	0.18	No	0.26	No	0.35
Hexachlorobutadiene (µg/m3)	Yes	0.37	Yes	0.37	Yes	0.37	Yes	0.37
Hexane (µg/m3)	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9
2-Hexanone (MBK) (µg/m3)	No	0.48	Yes	0.14	Yes	0.14	Yes	0.14
Isopropanol (µg/m3)	Yes	3.4	Yes	3.4	Yes	3.4	Yes	3.4
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13
Methylene Chloride (µg/m3)	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2
4-Methyl-2-pentanone (MIBK) (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
Naphthalene (µg/m3)	Yes	0.18	Yes	0.18	Yes	0.18	No	140
Propene (µg/m3)	Yes	2.4	Yes	2.4	Yes	2.4	No	5.9
Styrene (µg/m3)	Yes	0.15	Yes	0.15	Yes	0.15	No	8
1,1,2,2-Tetrachloroethane (µg/m3)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrachloroethylene (µg/m3)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrahydrofuran (µg/m3)	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0
Toluene (µg/m3)	No	0.53	No	1	No	0.4	No	36
1,2,4-Trichlorobenzene (µg/m3)	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26
1,1,1-Trichloroethane (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
1,1,2-Trichloroethane (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichloroethylene (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichlorofluoromethane (Freon 11) (µg/m3)	No	1.4	No	1.2	No	1.3	No	1.2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
1,2,4-Trimethylbenzene (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	No	3.3
1,3,5-Trimethylbenzene (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	No	2.1
Vinyl Acetate (µg/m3)	Yes	2.5	Yes	2.5	Yes	2.5	Yes	2.5
Vinyl Chloride (µg/m3)	Yes	0.089	Yes	0.089	Yes	0.089	Yes	0.089
m&p-Xylene (µg/m3)	Yes	0.30	No	0.31	Yes	0.30	No	15
o-Xylene (µg/m3)	Yes	0.15	Yes	0.15	Yes	0.15	No	3.9

Cleveland Cliffs Burns Harbor LLC
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TO-15 (VOC) Run Data and Parameters

Run No.	1	1	1	1
Sampling Location	R01_UW	R01_DW1_D1	R01_DW2	R01_INT2
Start Date (2022)	Oct 27	Oct 27	Oct 27	Oct 27
Start Time (approx.)	14:19	15:00	15:42	16:45
Stop Date (2022)	Oct 28	Oct 28	Oct 28	Oct 28
Stop Time (approx.)	12:57	14:07	14:49	15:38
Sampling Parameters				
SC# Summa Can No.	3456	1025	2044	1804
FC# Flow Controller No.	3542	3360	3543	3063
Dup Duplicate Sample (Y/N)				
θ Total sampling time (min)		Y		
VAC _{IN} Initial Vacuum (in Hg)	-28.0	-30.0	-27.0	-30.0
VAC _{FINAL} Final Vacuum (in Hg)	-11.0	-11.0	-9.0	-10.0

Results

	BDL?		BDL?		BDL?		BDL?	
Acetone (µg/m3)	No	9.4	No	5.8	No	7.4	No	5.1
Benzene (µg/m3)	No	0.38	No	3.9	No	0.32	No	110
Benzyl chloride (µg/m3)	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36
Bromodichloromethane (µg/m3)	Yes	0.23	Yes	0.23	Yes	0.23	Yes	0.23
Bromoform (µg/m3)	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36
Bromomethane (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,3-Butadiene (µg/m3)	Yes	0.077	No	0.11	Yes	0.077	No	0.93
2-Butanone (MEK) (µg/m3)	Yes	4.1	Yes	4.1	Yes	4.1	Yes	4.1
Carbon Disulfide (µg/m3)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
Carbon Tetrachloride (µg/m3)	No	0.67	No	0.57	No	0.61	No	0.61
Chlorobenzene (µg/m3)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
Chloroethane (µg/m3)	Yes	0.092	Yes	0.092	Yes	0.092	Yes	0.092
Chloroform (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Chloromethane (µg/m3)	No	1.1	No	1	No	1.1	No	1.1
Cyclohexane (µg/m3)	Yes	0.12	Yes	0.12	Yes	0.12	No	0.23
Dibromochloromethane (µg/m3)	Yes	0.30	Yes	0.30	Yes	0.30	Yes	0.30
1,2-Dibromoethane (EDB) (µg/m3)	Yes	0.27	Yes	0.27	Yes	0.27	Yes	0.27
1,2-Dichlorobenzene (µg/m3)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,3-Dichlorobenzene (µg/m3)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,4-Dichlorobenzene (µg/m3)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
Dichlorodifluoromethane (Freon 12) (µg/m3)	No	2.8	No	2.6	No	2.6	No	2.4
1,1-Dichloroethane (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloroethane (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,1-Dichloroethylene (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
cis-1,2-Dichloroethylene (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
trans-1,2-Dichloroethylene (µg/m3)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloropropane (µg/m3)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
cis-1,3-Dichloropropene (µg/m3)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
trans-1,3-Dichloropropene (µg/m3)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
1,4-Dioxane (µg/m3)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	2	2
Sampling Location	R02_DW2_D2	R02_DW2_D1
Start Date (2022)	Nov 8	Nov 8
Start Time (approx.)	11:36	11:36
Stop Date (2022)	Nov 9	Nov 9
Stop Time (approx.)	11:14	11:14
Sampling Parameters		
SC# Summa Can No.	1979	2000
FC# Flow Controller No.	3476	3483
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-30	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	-7.5	-8.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	BDL?	BDL?	Average	Precision (%)
Ethanol (µg/m3)	No 8.4	No 7.1	7.75	NA
Ethyl Acetate (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA
Ethylbenzene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA
4-Ethyltoluene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Heptane (µg/m3)	No 0.16	No 0.2	0.18	22.2
Hexachlorobutadiene (µg/m3)	Yes 0.37	Yes 0.37	0.37	NA
Hexane (µg/m3)	Yes 4.9	Yes 4.9	4.9	NA
2-Hexanone (MBK) (µg/m3)	No 0.51	No 0.4	0.455	24.2
Isopropanol (µg/m3)	Yes 3.4	Yes 3.4	3.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes 0.13	Yes 0.13	0.13	NA
Methylene Chloride (µg/m3)	Yes 1.2	Yes 1.2	1.2	NA
4-Methyl-2-pentanone (MIBK) (µg/m3)	No 0.16	Yes 0.14	0.16	NA
Naphthalene (µg/m3)	Yes 0.18	Yes 0.18	0.18	NA
Propene (µg/m3)	Yes 2.4	Yes 2.4	2.4	NA
Styrene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA
1,1,2,2-Tetrachloroethane (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Tetrachloroethylene (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Tetrahydrofuran (µg/m3)	Yes 1.0	Yes 1.0	1.0	NA
Toluene (µg/m3)	No 0.24	No 0.25	0.245	4.1
1,2,4-Trichlorobenzene (µg/m3)	Yes 0.26	Yes 0.26	0.26	NA
1,1,1-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
1,1,2-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichloroethylene (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichlorofluoromethane (Freon 11) (µg/m3)	No 1.3	No 1.2	1.25	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
1,2,4-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
1,3,5-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Vinyl Acetate (µg/m3)	Yes 2.5	Yes 2.5	2.5	NA
Vinyl Chloride (µg/m3)	Yes 0.090	Yes 0.090	0.090	NA
m&p-Xylene (µg/m3)	Yes 0.30	Yes 0.30	0.30	NA
o-Xylene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	2	2
Sampling Location	R02_DW2_D2	R02_DW2_D1
Start Date (2022)	Nov 8	Nov 8
Start Time (approx.)	11:36	11:36
Stop Date (2022)	Nov 9	Nov 9
Stop Time (approx.)	11:14	11:14
Sampling Parameters		
SC# Summa Can No.	1979	2197
FC# Flow Controller No.	3476	3254
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-30	-30.0
VAC _{FINA} Final Vacuum (in Hg)	-7.5	-7.5
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	BDL?	BDL?	Average	Precision (%)
Acetone (µg/m3)	No 17	No 12	14.5	34.5
Benzene (µg/m3)	No 0.33	No 0.31	0.32	6.3
Benzyl chloride (µg/m3)	Yes 0.18	Yes 0.18	0.18	NA
Bromodichloromethane (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Bromoform (µg/m3)	Yes 0.36	Yes 0.36	0.36	NA
Bromomethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,3-Butadiene (µg/m3)	Yes 0.078	Yes 0.078	0.078	NA
2-Butanone (MEK) (µg/m3)	Yes 4.1	Yes 4.1	4.1	NA
Carbon Disulfide (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
Carbon Tetrachloride (µg/m3)	No 0.39	No 0.4	0.395	2.5
Chlorobenzene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
Chloroethane (µg/m3)	Yes 0.093	Yes 0.093	0.093	NA
Chloroform (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Chloromethane (µg/m3)	No 0.92	No 0.89	0.905	3.3
Cyclohexane (µg/m3)	Yes 0.12	Yes 0.12	0.12	NA
Dibromochloromethane (µg/m3)	Yes 0.30	Yes 0.30	0.30	NA
1,2-Dibromoethane (EDB) (µg/m3)	Yes 0.27	Yes 0.27	0.27	NA
1,2-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,3-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,4-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
Dichlorodifluoromethane (Freon 12) (µg/m3)	No 1.2	No 1.1	1.15	8.7
1,1-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,1-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
cis-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
trans-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloropropane (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
cis-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
trans-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes 0.25	Yes 0.25	0.25	NA
1,4-Dioxane (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	2	2	2	2	2
Sampling Location	R02_UW	R02_DW2_D1	R02_DW1	R02_INT1	R02_INT2
Start Date (2022)	Nov 8	Nov 8	Nov 8	Nov 8	Nov 8
Start Time (approx.)	12:40	11:36	10:49	09:43	10:08
Stop Date (2022)	Nov 9	Nov 9	Nov 9	Nov 9	Nov 9
Stop Time (approx.)	11:59	11:14	10:33	09:34	09:59
Sampling Parameters					
SC# Summa Can No.	1657	2000	2229	1298	1216
FC# Flow Controller No.	3733	3483	3734	3717	3718
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-28.0	-29.0	-30.0	-29.0	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	-6.0	-8.0	-8.0	.0	-7.0

Results

	BDL?	BDL?	BDL?	BDL?	BDL?
Ethanol (µg/m3)	No 6.1	No 7.1	No 7	No 6.8	No 7
Ethyl Acetate (µg/m3)	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3
Ethylbenzene (µg/m3)	Yes 0.15	Yes 0.15	Yes 0.15	No 0.5	No 0.15
4-Ethyltoluene (µg/m3)	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17
Heptane (µg/m3)	Yes 0.14	No 0.2	Yes 0.15	No 0.44	No 0.17
Hexachlorobutadiene (µg/m3)	Yes 0.37	Yes 0.37	Yes 0.37	Yes 0.37	Yes 0.37
Hexane (µg/m3)	Yes 4.9	Yes 4.9	Yes 4.9	Yes 4.9	Yes 4.9
2-Hexanone (MBK) (µg/m3)	Yes 0.14	No 0.4	No 0.42	No 0.29	No 0.43
Isopropanol (µg/m3)	Yes 3.4	Yes 3.4	Yes 3.4	Yes 3.4	Yes 3.4
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes 0.13	Yes 0.13	Yes 0.13	Yes 0.13	Yes 0.13
Methylene Chloride (µg/m3)	Yes 1.2	Yes 1.2	Yes 1.2	Yes 1.2	Yes 1.2
4-Methyl-2-pentanone (MIBK) (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
Naphthalene (µg/m3)	Yes 0.18	Yes 0.18	No 0.66	No 150	No 16
Propene (µg/m3)	Yes 2.4	Yes 2.4	Yes 2.4	No 14	Yes 2.4
Styrene (µg/m3)	Yes 0.15	Yes 0.15	Yes 0.15	No 7.1	No 1.4
1,1,2,2-Tetrachloroethane (µg/m3)	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24
Tetrachloroethylene (µg/m3)	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24	No 0.59
Tetrahydrofuran (µg/m3)	Yes 1.0	Yes 1.0	Yes 1.0	Yes 1.0	Yes 1.0
Toluene (µg/m3)	No 0.25	No 0.25	No 0.64	No 40	No 8.2
1,2,4-Trichlorobenzene (µg/m3)	Yes 0.26	Yes 0.26	Yes 0.26	Yes 0.26	Yes 0.26
1,1,1-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19
1,1,2-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19
Trichloroethylene (µg/m3)	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19	Yes 0.19
Trichlorofluoromethane (Freon 11) (µg/m3)	No 1.3	No 1.2	No 1.2	No 1.4	No 1.2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes 1.1	Yes 1.1	Yes 1.1	Yes 1.1	Yes 1.1
1,2,4-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	Yes 0.17	No 2.9	No 0.49
1,3,5-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	Yes 0.17	No 1.8	No 0.25
Vinyl Acetate (µg/m3)	Yes 2.5	Yes 2.5	Yes 2.5	Yes 2.5	Yes 2.5
Vinyl Chloride (µg/m3)	Yes 0.090	Yes 0.090	Yes 0.090	Yes 0.090	Yes 0.090
m&p-Xylene (µg/m3)	Yes 0.30	Yes 0.30	Yes 0.30	No 15	No 2.6
o-Xylene (µg/m3)	Yes 0.15	Yes 0.15	Yes 0.15	No 3.3	No 0.56

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	2	2	2	2	2
Sampling Location	R02_UW	R02_DW2_D1	R02_DW1	R02_INT1	R02_INT2
Start Date (2022)	Nov 8	Nov 8	Nov 8	Nov 8	Nov 8
Start Time (approx.)	12:40	11:36	10:49	09:43	10:08
Stop Date (2022)	Nov 9	Nov 9	Nov 9	Nov 9	Nov 9
Stop Time (approx.)	11:59	11:14	10:33	09:34	09:59
Sampling Parameters					
SC# Summa Can No.	1657	2000	2229	1298	1216
FC# Flow Controller No.	3733	3483	3734	3717	3718
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-28.0	-29.0	-30.0	-29.0	-29.0
VAC _{FINA} Final Vacuum (in Hg)	-6.0	-8.0	-8.0	.0	-7.0

Results

	BDL?	BDL?	BDL?	BDL?	BDL?
Acetone (µg/m3)	No 5.8	No 12	No 15	No 15	No 11
Benzene (µg/m3)	No 0.29	No 0.31	No 2.8	No 160	No 35
Benzyl chloride (µg/m3)	Yes 0.18	Yes 0.18	Yes 0.18	Yes 0.18	Yes 0.18
Bromodichloromethane (µg/m3)	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24
Bromoform (µg/m3)	Yes 0.36	Yes 0.36	Yes 0.36	Yes 0.36	Yes 0.36
Bromomethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,3-Butadiene (µg/m3)	Yes 0.078	Yes 0.078	No 0.081	No 2.2	No 0.25
2-Butanone (MEK) (µg/m3)	Yes 4.1	Yes 4.1	Yes 4.1	Yes 4.1	Yes 4.1
Carbon Disulfide (µg/m3)	Yes 1.1	Yes 1.1	Yes 1.1	Yes 1.1	Yes 1.1
Carbon Tetrachloride (µg/m3)	No 0.39	No 0.4	No 0.41	No 0.43	No 0.41
Chlorobenzene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
Chloroethane (µg/m3)	Yes 0.093	Yes 0.093	Yes 0.093	Yes 0.093	Yes 0.093
Chloroform (µg/m3)	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17
Chloromethane (µg/m3)	No 0.92	No 0.89	No 0.85	No 0.85	No 0.87
Cyclohexane (µg/m3)	Yes 0.12	Yes 0.12	Yes 0.12	No 0.31	Yes 0.12
Dibromochloromethane (µg/m3)	Yes 0.30	Yes 0.30	Yes 0.30	Yes 0.30	Yes 0.30
1,2-Dibromoethane (EDB) (µg/m3)	Yes 0.27	Yes 0.27	Yes 0.27	Yes 0.27	Yes 0.27
1,2-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
1,3-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
1,4-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
Dichlorodifluoromethane (Freon 12) (µg/m3)	No 1.3	No 1.1	No 1.2	No 1.5	No 1.3
1,1-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,2-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,1-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
cis-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
trans-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,2-Dichloropropane (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
cis-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
trans-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes 0.25	Yes 0.25	Yes 0.25	Yes 0.25	Yes 0.25
1,4-Dioxane (µg/m3)	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	3	3
Sampling Location	R03_DW2_D2	R03_DW2_D1
Start Date (2022)	Nov 22	Nov 22
Start Time (approx.)	14:13	14:13
Stop Date (2022)	Nov 23	Nov 23
Stop Time (approx.)	12:06	12:06
Sampling Parameters		
SC# Summa Can No.	1128	2010
FC# Flow Controller No.	3604	3605
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-29	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-7.0	-10.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	BDL?	BDL?	Average	Precision (%)
Acetone (µg/m3)	No 10	No 12	11	18.2
Benzene (µg/m3)	No 2.3	No 2.4	2.35	4.3
Benzyl chloride (µg/m3)	Yes 0.18	Yes 0.18	0.18	NA
Bromodichloromethane (µg/m3)	Yes 0.23	Yes 0.23	0.23	NA
Bromoform (µg/m3)	Yes 0.36	Yes 0.36	0.36	NA
Bromomethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,3-Butadiene (µg/m3)	Yes 0.077	Yes 0.077	0.077	NA
2-Butanone (MEK) (µg/m3)	Yes 4.1	Yes 4.1	4.1	NA
Carbon Disulfide (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
Carbon Tetrachloride (µg/m3)	No 0.42	No 0.28	0.35	40.0
Chlorobenzene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
Chloroethane (µg/m3)	Yes 0.092	Yes 0.092	0.092	NA
Chloroform (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Chloromethane (µg/m3)	No 1	No 1.1	1.05	9.5
Cyclohexane (µg/m3)	No 0.22	No 0.19	0.205	14.6
Dibromochloromethane (µg/m3)	Yes 0.30	Yes 0.30	0.30	NA
1,2-Dibromoethane (EDB) (µg/m3)	Yes 0.27	Yes 0.27	0.27	NA
1,2-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,3-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
1,4-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	0.21	NA
Dichlorodifluoromethane (Freon 12) (µg/m3)	No 2.8	No 2.8	2.8	0.0
1,1-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,1-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
cis-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
trans-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	0.14	NA
1,2-Dichloropropane (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
cis-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
trans-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	0.16	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
1,4-Dioxane (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	3	3
Sampling Location	R03_DW2_D2	R03_DW2_D1
Start Date (2022)	Nov 22	Nov 22
Start Time (approx.)	14:13	14:13
Stop Date (2022)	Nov 23	Nov 23
Stop Time (approx.)	12:06	12:06
B _w Relative Humidity (%)		
Sampling Parameters		
SC# Summa Can No.	1128	2010
FC# Flow Controller No.	3604	3605
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-29	-28.0
VAC _{FINA} Final Vacuum (in Hg)	-7.0	-10.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	BDL?	BDL?	Average	Precision (%)
Ethanol (µg/m3)	No 9.7	No 9.7	9.7	NA
Ethyl Acetate (µg/m3)	Yes 1.3	Yes 1.3	1.3	NA
Ethylbenzene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA
4-Ethyltoluene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Heptane (µg/m3)	No 0.33	No 0.34	0.335	3.0
Hexachlorobutadiene (µg/m3)	Yes 0.37	Yes 0.37	0.37	NA
Hexane (µg/m3)	Yes 4.9	Yes 4.9	4.9	NA
2-Hexanone (MBK) (µg/m3)	Yes 0.29	No 0.38	0.38	NA
Isopropanol (µg/m3)	Yes 3.4	Yes 3.4	3.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes 0.13	Yes 0.13	0.13	NA
Methylene Chloride (µg/m3)	Yes 1.2	Yes 1.2	1.2	NA
4-Methyl-2-pentanone (MIBK) (µg/m3)	Yes 0.14	No 0.28	0.28	NA
Naphthalene (µg/m3)	No 1.2	No 2.1	1.65	54.5
Propene (µg/m3)	Yes 2.4	Yes 2.4	2.4	NA
Styrene (µg/m3)	Yes 0.15	Yes 0.15	0.15	NA
1,1,2,2-Tetrachloroethane (µg/m3)	Yes 0.24	Yes 0.24	0.24	NA
Tetrachloroethylene (µg/m3)	Yes 0.24	No 0.3	0.3	NA
Tetrahydrofuran (µg/m3)	Yes 1.0	Yes 1.0	1.0	NA
Toluene (µg/m3)	No 0.83	No 0.85	0.84	2.4
1,2,4-Trichlorobenzene (µg/m3)	Yes 0.26	Yes 0.26	0.26	NA
1,1,1-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
1,1,2-Trichloroethane (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichloroethylene (µg/m3)	Yes 0.19	Yes 0.19	0.19	NA
Trichlorofluoromethane (Freon 11) (µg/m3)	No 1.4	No 1.4	1.4	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes 1.1	Yes 1.1	1.1	NA
1,2,4-Trimethylbenzene (µg/m3)	No 0.21	No 0.21	0.21	NA
1,3,5-Trimethylbenzene (µg/m3)	Yes 0.17	Yes 0.17	0.17	NA
Vinyl Acetate (µg/m3)	Yes 2.5	Yes 2.5	2.5	NA
Vinyl Chloride (µg/m3)	Yes 0.089	Yes 0.089	0.089	NA
m&p-Xylene (µg/m3)	No 0.35	No 0.36	0.355	2.8
o-Xylene (µg/m3)	Yes 0.15	No 0.15	0.15	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	3	3	3	3	3
Sampling Location	R03_UW	R03_DW2_D1	R03_DW1	R03_INT1	R03_INT2
Start Date (2022)	Nov 22	Nov 22	Nov 22	Nov 22	Nov 22
Start Time (approx.)	14:51	14:13	13:40	12:58	12:18
Stop Date (2022)	Nov 23	Nov 23	Nov 23	Nov 23	Nov 23
Stop Time (approx.)	12:42	12:06	11:32	11:09	10:46
Sampling Parameters					
SC# Summa Can No.	1118	2010	2016	2175	2184
FC# Flow Controller No.	3355	3605	3462	3327	3523
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-29.0	-30.0	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-9.0	-10.0	-7.0	-8.0	-8.0

Results

	BDL?	BDL?	BDL?	BDL?	BDL?
Acetone (µg/m3)	No 11	No 12	No 15	No 15	No 15
Benzene (µg/m3)	No 0.92	No 2.4	No 0.84	No 910	No 100
Benzyl chloride (µg/m3)	Yes 0.18	Yes 0.18	Yes 0.18	Yes 0.18	Yes 0.18
Bromodichloromethane (µg/m3)	Yes 0.23	Yes 0.23	Yes 0.23	Yes 0.23	Yes 0.23
Bromoform (µg/m3)	Yes 0.36	Yes 0.36	Yes 0.36	Yes 0.36	Yes 0.36
Bromomethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,3-Butadiene (µg/m3)	Yes 0.077	Yes 0.077	Yes 0.077	No 4.8	Yes 0.077
2-Butanone (MEK) (µg/m3)	Yes 4.1	Yes 4.1	Yes 4.1	Yes 4.1	No 4.2
Carbon Disulfide (µg/m3)	Yes 1.1	Yes 1.1	Yes 1.1	No 2.9	Yes 1.1
Carbon Tetrachloride (µg/m3)	No 0.43	No 0.28	No 0.47	No 0.39	No 0.46
Chlorobenzene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
Chloroethane (µg/m3)	Yes 0.092	Yes 0.092	Yes 0.092	Yes 0.092	Yes 0.092
Chloroform (µg/m3)	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17	Yes 0.17
Chloromethane (µg/m3)	No 0.97	No 1.1	No 1	No 1	No 1
Cyclohexane (µg/m3)	No 0.18	No 0.19	No 0.24	No 0.78	No 0.41
Dibromochloromethane (µg/m3)	Yes 0.30	Yes 0.30	Yes 0.30	Yes 0.30	Yes 0.30
1,2-Dibromoethane (EDB) (µg/m3)	Yes 0.27	Yes 0.27	Yes 0.27	Yes 0.27	Yes 0.27
1,2-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
1,3-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
1,4-Dichlorobenzene (µg/m3)	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21	Yes 0.21
Dichlorodifluoromethane (Freon 12) (µg/m3)	No 2.8	No 2.8	No 3	No 2.7	No 3.1
1,1-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,2-Dichloroethane (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,1-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
cis-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
trans-1,2-Dichloroethylene (µg/m3)	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14	Yes 0.14
1,2-Dichloropropane (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
cis-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
trans-1,3-Dichloropropene (µg/m3)	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16	Yes 0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/m3)	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24	Yes 0.24
1,4-Dioxane (µg/m3)	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3	Yes 1.3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	3	3	3	3	3
Sampling Location	R03_UW	R03_DW2_D1	R03_DW1	R03_INT1	R03_INT2
Start Date (2022)	Nov 22	Nov 22	Nov 22	Nov 22	Nov 22
Start Time (approx.)	14:51	14:13	13:40	12:58	12:18
Stop Date (2022)	Nov 23	Nov 23	Nov 23	Nov 23	Nov 23
Stop Time (approx.)	12:42	12:06	11:32	11:09	10:46
Sampling Parameters					
SC# Summa Can No.	1118	2010	2016	2175	2184
FC# Flow Controller No.	3355	3605	3462	3327	3523
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-29.0	-30.0	-28.0
VAC _{FINA} Final Vacuum (in Hg)	-9.0	-10.0	-7.0	-8.0	-8.0

Results

	BDL?		BDL?		BDL?		BDL?		BDL?	
Ethanol (µg/m3)	No	10	No	9.7	No	10	No	12	No	13
Ethyl Acetate (µg/m3)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3
Ethylbenzene (µg/m3)	No	0.15	Yes	0.15	No	0.16	No	1.9	No	0.4
4-Ethyltoluene (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	No	0.4	Yes	0.17
Heptane (µg/m3)	No	0.37	No	0.34	No	0.36	No	0.69	No	0.42
Hexachlorobutadiene (µg/m3)	Yes	0.37	Yes	0.37	Yes	0.37	No	1.3	Yes	0.37
Hexane (µg/m3)	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9
2-Hexanone (MBK) (µg/m3)	Yes	0.29	No	0.38	Yes	0.29	Yes	0.29	No	0.69
Isopropanol (µg/m3)	Yes	3.4	Yes	3.4	Yes	3.4	Yes	3.4	Yes	3.4
Methyl tert-Butyl Ether (MTBE) (µg/m3)	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13
Methylene Chloride (µg/m3)	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2
4-Methyl-2-pentanone (MIBK) (µg/m3)	Yes	0.14	No	0.28	Yes	0.14	No	0.15	No	0.16
Naphthalene (µg/m3)	No	0.5	No	2.1	No	4.6	No	480	No	30
Propene (µg/m3)	Yes	2.4	Yes	2.4	Yes	2.4	No	24	Yes	2.4
Styrene (µg/m3)	Yes	0.15	Yes	0.15	Yes	0.15	No	46	No	3.8
1,1,2,2-Tetrachloroethane (µg/m3)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrachloroethylene (µg/m3)	Yes	0.24	No	0.3	Yes	0.24	Yes	0.24	Yes	0.24
Tetrahydrofuran (µg/m3)	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0
Toluene (µg/m3)	No	0.8	No	0.85	No	0.87	No	160	No	21
1,2,4-Trichlorobenzene (µg/m3)	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26
1,1,1-Trichloroethane (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
1,1,2-Trichloroethane (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichloroethylene (µg/m3)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichlorofluoromethane (Freon 11) (µg/m3)	No	1.3	No	1.4	No	1.4	No	1.4	No	1.5
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/m3)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
1,2,4-Trimethylbenzene (µg/m3)	No	0.18	No	0.21	No	0.22	No	13	No	1.2
1,3,5-Trimethylbenzene (µg/m3)	Yes	0.17	Yes	0.17	Yes	0.17	No	9.6	No	0.89
Vinyl Acetate (µg/m3)	Yes	2.5	Yes	2.5	No	2.5	Yes	2.5	Yes	2.5
Vinyl Chloride (µg/m3)	Yes	0.089	Yes	0.089	Yes	0.089	Yes	0.089	Yes	0.089
m&p-Xylene (µg/m3)	No	0.34	No	0.36	No	0.4	No	66	No	7.1
o-Xylene (µg/m3)	Yes	0.15	No	0.15	No	0.17	No	15	No	1.7

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	4	4
Sampling Location	R04_DW2_D2	R04_DW2_D1
Start Date (2022)	Dec 6	Dec 6
Start Time (approx.)	13:39	13:39
Stop Date (2022)	Dec 7	Dec 7
Stop Time (approx.)	12:48	12:48
Sampling Parameters		
SC# Summa Can No.	1866	1448
FC# Flow Controller No.	3715	3254
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-29	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-7.0	-7.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

				Average	Precision (%)
Ethanol (µg/scm)	No	5.3	No	4	4.65 28.0
Ethyl Acetate (µg/scm)	Yes	1.3	Yes	1.3	NA
Ethylbenzene (µg/scm)	Yes	0.15	Yes	0.15	NA
4-Ethyltoluene (µg/scm)	Yes	0.17	Yes	0.17	NA
Heptane (µg/scm)	Yes	0.14	No	0.17	NA
Hexachlorobutadiene (µg/scm)	Yes	0.37	Yes	0.37	NA
Hexane (µg/scm)	Yes	4.9	Yes	4.9	NA
2-Hexanone (MBK) (µg/scm)	No	0.2	Yes	0.14	NA
Isopropanol (µg/scm)	Yes	3.4	Yes	3.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.13	Yes	0.13	NA
Methylene Chloride (µg/scm)	Yes	1.2	Yes	1.2	NA
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.14	Yes	0.14	NA
Naphthalene (µg/scm)	Yes	0.18	Yes	0.18	NA
Propene (µg/scm)	Yes	2.4	Yes	2.4	NA
Styrene (µg/scm)	Yes	0.15	Yes	0.15	NA
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.24	Yes	0.24	NA
Tetrachloroethylene (µg/scm)	Yes	0.24	Yes	0.24	NA
Tetrahydrofuran (µg/scm)	Yes	1.0	Yes	1.0	NA
Toluene (µg/scm)	No	0.45	No	0.42	0.435 6.9
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.26	Yes	0.26	NA
1,1,1-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	NA
1,1,2-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	NA
Trichloroethylene (µg/scm)	Yes	0.19	Yes	0.19	NA
Trichlorofluoromethane (Freon 11) (µg/scm)	No	1.4	No	1.4	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	1.1	Yes	1.1	NA
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	NA
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	NA
Vinyl Acetate (µg/scm)	Yes	2.5	Yes	2.5	NA
Vinyl Chloride (µg/scm)	Yes	0.090	Yes	0.090	0.090 NA
m&p-Xylene (µg/scm)	Yes	0.30	Yes	0.30	NA
o-Xylene (µg/scm)	Yes	0.15	Yes	0.15	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	4	4
Sampling Location	R04_DW2_D2	R04_DW2_D1
Start Date (2022)	Dec 6	Dec 6
Start Time (approx.)	13:39	13:39
Stop Date (2022)	Dec 7	Dec 7
Stop Time (approx.)	12:48	12:48
Sampling Parameters		
SC# Summa Can No.	1866	1448
FC# Flow Controller No.	3715	3254
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-29	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	-7.0	-7.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

					Average	Precision (%)
Acetone (µg/scm)	No	8.6	No	6.7	7.65	24.8
Benzene (µg/scm)	No	0.5	No	0.49	0.495	2.0
Benzyl chloride (µg/scm)	Yes	0.18	Yes	0.18	0.18	NA
Bromodichloromethane (µg/scm)	Yes	0.24	Yes	0.24	0.24	NA
Bromoform (µg/scm)	Yes	0.36	Yes	0.36	0.36	NA
Bromomethane (µg/scm)	Yes	0.14	No	0.19	0.19	NA
1,3-Butadiene (µg/scm)	Yes	0.078	Yes	0.078	0.078	NA
2-Butanone (MEK) (µg/scm)	Yes	4.1	Yes	4.1	4.1	NA
Carbon Disulfide (µg/scm)	Yes	1.1	Yes	1.1	1.1	NA
Carbon Tetrachloride (µg/scm)	No	0.45	No	0.45	0.45	0.0
Chlorobenzene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
Chloroethane (µg/scm)	Yes	0.093	Yes	0.093	0.093	NA
Chloroform (µg/scm)	Yes	0.17	Yes	0.17	0.17	NA
Chloromethane (µg/scm)	No	0.97	No	0.93	0.95	4.2
Cyclohexane (µg/scm)	Yes	0.12	Yes	0.12	0.12	NA
Dibromochloromethane (µg/scm)	Yes	0.30	Yes	0.30	0.30	NA
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.27	Yes	0.27	0.27	NA
1,2-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
1,3-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
1,4-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	1.3	No	1.3	1.3	0.0
1,1-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,2-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,1-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,2-Dichloropropane (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
cis-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
trans-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/scm)	Yes	0.25	Yes	0.25	0.25	NA
1,4-Dioxane (µg/scm)	Yes	1.3	Yes	1.3	1.3	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	4	4	4	4	4
Sampling Location	R04_UW	R04_DW2_D1	R04_DW1	R04_INT1	R04_INT2
Start Date (2022)	Dec 6	Dec 6	Dec 6	Dec 6	Dec 6
Start Time (approx.)	14:09	13:39	13:09	13:34	12:18
Stop Date (2022)	Dec 7	Dec 7	Dec 7	Dec 7	Dec 7
Stop Time (approx.)	13:35	12:48	12:17	11:53	11:33
Sampling Parameters					
SC# Summa Can No.	1319	1448	1992	1043	2570
FC# Flow Controller No.	3716	3254	3075	3534	3532
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-28.0	-28.0	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	-6.0	-7.0	-5.0	-8.0	-8.0

Results

Ethanol (µg/scm)	No	11	No	4	No	6.1	No	6.4	No	9.4
Ethyl Acetate (µg/scm)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3
Ethylbenzene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	0.18	No	0.35
4-Ethyltoluene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Heptane (µg/scm)	Yes	0.14	No	0.17	Yes	0.14	No	0.22	No	0.22
Hexachlorobutadiene (µg/scm)	Yes	0.37	Yes	0.37	Yes	0.37	Yes	0.37	Yes	0.37
Hexane (µg/scm)	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9
2-Hexanone (MBK) (µg/scm)	Yes	0.14	Yes	0.14	No	0.28	No	0.18	No	0.28
Isopropanol (µg/scm)	Yes	3.4	Yes	3.4	Yes	3.4	Yes	3.4	Yes	3.4
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13
Methylene Chloride (µg/scm)	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
Naphthalene (µg/scm)	No	0.23	Yes	0.18	No	0.5	No	40	No	240
Propene (µg/scm)	Yes	2.4	Yes	2.4	Yes	2.4	No	2.8	No	8.1
Styrene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	1.9	No	9
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrachloroethylene (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrahydrofuran (µg/scm)	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0
Toluene (µg/scm)	No	0.57	No	0.42	No	0.56	No	11	No	37
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26
1,1,1-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
1,1,2-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichloroethylene (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichlorofluoromethane (Freon 11) (µg/scm)	No	1.5	No	1.4	No	1.4	No	1.4	No	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	No	0.67	No	3.3
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	No	0.33	No	1.8
Vinyl Acetate (µg/scm)	Yes	2.5	Yes	2.5	Yes	2.5	Yes	2.5	Yes	2.5
Vinyl Chloride (µg/scm)	Yes	0.090	Yes	0.090	Yes	0.090	Yes	0.090	Yes	0.090
m&p-Xylene (µg/scm)	Yes	0.30	Yes	0.30	Yes	0.30	No	3.4	No	15
o-Xylene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	0.72	No	3.1

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	4	4	4	4	4
	R04_UW	R04_DW2_D1	R04_DW1	R04_INT1	R04_INT2
Sampling Location					
Start Date (2022)	Dec 6	Dec 6	Dec 6	Dec 6	Dec 6
Start Time (approx.)	14:09	13:39	13:09	13:34	12:18
Stop Date (2022)	Dec 7	Dec 7	Dec 7	Dec 7	Dec 7
Stop Time (approx.)	13:35	12:48	12:17	11:53	11:33
Sampling Parameters					
SC# Summa Can No.	1319	1448	1992	1043	2570
FC# Flow Controller No.	3716	3254	3075	3534	3532
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-28.0	-28.0	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	-6.0	-7.0	-5.0	-8.0	-8.0

Results

Acetone (µg/scm)	No	5.8	No	6.7	No	14	No	9.5	No	12
Benzene (µg/scm)	No	0.91	No	0.49	No	0.83	No	42	No	130
Benzyl chloride (µg/scm)	Yes	0.18	Yes	0.18	Yes	0.18	Yes	0.18	Yes	0.18
Bromodichloromethane (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Bromoform (µg/scm)	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36
Bromomethane (µg/scm)	Yes	0.14	No	0.19	Yes	0.14	Yes	0.14	Yes	0.14
1,3-Butadiene (µg/scm)	Yes	0.078	Yes	0.078	Yes	0.078	No	0.45	No	1.4
2-Butanone (MEK) (µg/scm)	Yes	4.1	Yes	4.1	Yes	4.1	Yes	4.1	Yes	4.1
Carbon Disulfide (µg/scm)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
Carbon Tetrachloride (µg/scm)	No	0.45	No	0.45	No	0.44	No	0.44	No	0.45
Chlorobenzene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
Chloroethane (µg/scm)	Yes	0.093	Yes	0.093	Yes	0.093	Yes	0.093	Yes	0.093
Chloroform (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Chloromethane (µg/scm)	No	1	No	0.93	No	0.83	No	0.83	No	0.9
Cyclohexane (µg/scm)	Yes	0.12	Yes	0.12	Yes	0.12	No	0.23	No	0.25
Dibromochloromethane (µg/scm)	Yes	0.30	Yes	0.30	Yes	0.30	Yes	0.30	Yes	0.30
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.27	Yes	0.27	Yes	0.27	Yes	0.27	Yes	0.27
1,2-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,3-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,4-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	1.5	No	1.3	No	1.4	No	1.2	No	1.5
1,1-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,1-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloropropane (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
cis-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
trans-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/scm)	Yes	0.25	Yes	0.25	Yes	0.25	Yes	0.25	Yes	0.25
1,4-Dioxane (µg/scm)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	5	5
Sampling Location	R05_DW2_D2	R05_DW2_D1
Start Date (2022)	Dec 20	Dec 20
Start Time (approx.)	12:43	12:43
Stop Date (2022)	Dec 21	Dec 21
Stop Time (approx.)	11:30	11:30
B _w Relative Humidity (%)		
Sampling Parameters		
SC# Summa Can No.	2017	2013
FC# Flow Controller No.	3435	3435
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-9.0	-9.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

					Average	Precision (%)
Acetone (µg/scm)	No	8.5	No	8.1	8.3	4.8
Benzene (µg/scm)	No	0.4	No	0.39	0.395	2.5
Benzyl chloride (µg/scm)	Yes	0.18	Yes	0.18	0.18	NA
Bromodichloromethane (µg/scm)	Yes	0.24	Yes	0.24	0.24	NA
Bromoform (µg/scm)	Yes	0.36	Yes	0.36	0.36	NA
Bromomethane (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,3-Butadiene (µg/scm)	No	0.082	Yes	0.078	0.082	NA
2-Butanone (MEK) (µg/scm)	Yes	4.1	Yes	4.1	4.1	NA
Carbon Disulfide (µg/scm)	Yes	1.1	Yes	1.1	1.1	NA
Carbon Tetrachloride (µg/scm)	No	0.35	No	0.35	0.35	0.0
Chlorobenzene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
Chloroethane (µg/scm)	Yes	0.093	Yes	0.093	0.093	NA
Chloroform (µg/scm)	Yes	0.17	Yes	0.17	0.17	NA
Chloromethane (µg/scm)	No	1.1	No	1.1	1.1	0.0
Cyclohexane (µg/scm)	Yes	0.12	Yes	0.12	0.12	NA
Dibromochloromethane (µg/scm)	Yes	0.30	Yes	0.30	0.30	NA
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.27	Yes	0.27	0.27	NA
1,2-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
1,3-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
1,4-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	0.21	NA
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	1.2	No	1.3	1.25	8.0
1,1-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,2-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,1-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,2-Dichloropropane (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
cis-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
trans-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	0.16	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 11)	Yes	0.25	Yes	0.25	0.25	NA
1,4-Dioxane (µg/scm)	Yes	1.3	Yes	1.3	1.3	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	5	5
Sampling Location	R05_DW2_D2	R05_DW2_D1
Start Date (2022)	Dec 20	Dec 20
Start Time (approx.)	12:43	12:43
Stop Date (2022)	Dec 21	Dec 21
Stop Time (approx.)	11:30	11:30
Sampling Parameters		
SC# Summa Can No.	2017	2013
FC# Flow Controller No.	3435	3435
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-9.0	-9.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

	Average Precision (%)	
Ethanol (µg/scm)	No 10	No 7.4
Ethyl Acetate (µg/scm)	Yes 1.3	No 2.3
Ethylbenzene (µg/scm)	Yes 0.15	Yes 0.15
4-Ethyltoluene (µg/scm)	Yes 0.17	Yes 0.17
Heptane (µg/scm)	No 0.17	No 0.2
Hexachlorobutadiene (µg/scm)	Yes 0.37	Yes 0.37
Hexane (µg/scm)	Yes 4.9	Yes 4.9
2-Hexanone (MBK) (µg/scm)	No 0.21	No 0.22
Isopropanol (µg/scm)	Yes 3.4	No 3.9
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes 0.13	Yes 0.13
Methylene Chloride (µg/scm)	Yes 1.2	Yes 1.2
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes 0.14	Yes 0.14
Naphthalene (µg/scm)	No 0.22	No 0.44
Propene (µg/scm)	Yes 2.4	Yes 2.4
Styrene (µg/scm)	Yes 0.15	Yes 0.15
1,1,2,2-Tetrachloroethane (µg/scm)	Yes 0.24	Yes 0.24
Tetrachloroethylene (µg/scm)	Yes 0.24	Yes 0.24
Tetrahydrofuran (µg/scm)	Yes 1.0	Yes 1.0
Toluene (µg/scm)	No 0.48	No 0.51
1,2,4-Trichlorobenzene (µg/scm)	Yes 0.26	Yes 0.26
1,1,1-Trichloroethane (µg/scm)	Yes 0.19	Yes 0.19
1,1,2-Trichloroethane (µg/scm)	Yes 0.19	Yes 0.19
Trichloroethylene (µg/scm)	Yes 0.19	Yes 0.19
Trichlorofluoromethane (Freon 11) (µg/scm)	No 1.4	No 1.4
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes 1.1	Yes 1.1
1,2,4-Trimethylbenzene (µg/scm)	Yes 0.17	Yes 0.17
1,3,5-Trimethylbenzene (µg/scm)	Yes 0.17	Yes 0.17
Vinyl Acetate (µg/scm)	Yes 2.5	Yes 2.5
Vinyl Chloride (µg/scm)	Yes 0.090	Yes 0.090
m&p-Xylene (µg/scm)	Yes 0.30	Yes 0.30
o-Xylene (µg/scm)	Yes 0.15	Yes 0.15

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	5	5	5	5	5
Sampling Location	R05_UW	R05_DW2_D1	R05_DW1	R05_INT1	R05_INT2
Start Date (2022)	Dec 20	Dec 20	Dec 20	Dec 20	Dec 20
Start Time (approx.)	13:43	12:43	11:51	10:43	11:13
Stop Date (2022)	Dec 21	Dec 21	Dec 21	Dec 21	Dec 21
Stop Time (approx.)	12:04	11:30	11:01	10:07	10:37
Sampling Parameters					
SC# Summa Can No.	2194	2013	2176	1336	2161
FC# Flow Controller No.	3729	3435	3730	3715	3716
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-28.0	-29.0	-29.0
VAC _{FINA} Final Vacuum (in Hg)	.0	-9.0	-8.0	-9.0	-10.0

Results

Acetone (µg/scm)	No	6.3	No	8.1	No	8.7	No	9.9	No	14
Benzene (µg/scm)	No	0.61	No	0.39	No	0.46	No	51	No	100
Benzyl chloride (µg/scm)	Yes	0.18	Yes	0.18	Yes	0.18	Yes	0.18	Yes	0.18
Bromodichloromethane (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Bromoform (µg/scm)	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36	Yes	0.36
Bromomethane (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	No	0.14	Yes	0.14
1,3-Butadiene (µg/scm)	Yes	0.078	Yes	0.078	Yes	0.078	No	0.54	No	1.1
2-Butanone (MEK) (µg/scm)	Yes	4.1	Yes	4.1	Yes	4.1	Yes	4.1	Yes	4.1
Carbon Disulfide (µg/scm)	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1	Yes	1.1
Carbon Tetrachloride (µg/scm)	No	0.37	No	0.35	Yes	0.22	No	0.35	No	0.37
Chlorobenzene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
Chloroethane (µg/scm)	Yes	0.093	Yes	0.093	Yes	0.093	Yes	0.093	Yes	0.093
Chloroform (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Chloromethane (µg/scm)	No	1.1	No	1.1	No	1.1	No	1.1	No	1.1
Cyclohexane (µg/scm)	Yes	0.12	Yes	0.12	Yes	0.12	No	0.12	No	0.15
Dibromochloromethane (µg/scm)	Yes	0.30	Yes	0.30	Yes	0.30	Yes	0.30	Yes	0.30
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.27	Yes	0.27	Yes	0.27	Yes	0.27	Yes	0.27
1,2-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,3-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
1,4-Dichlorobenzene (µg/scm)	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21	Yes	0.21
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	1.7	No	1.3	No	1.3	No	1.3	No	1.2
1,1-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloroethane (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,1-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2-Dichloropropane (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
cis-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
trans-1,3-Dichloropropene (µg/scm)	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16	Yes	0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/scm)	Yes	0.25	Yes	0.25	Yes	0.25	Yes	0.25	Yes	0.25
1,4-Dioxane (µg/scm)	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3	Yes	1.3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	5	5	5	5	5
Sampling Location	R05_UW	R05_DW2_D1	R05_DW1	R05_INT1	R05_INT2
Start Date (2022)	Dec 20	Dec 20	Dec 20	Dec 20	Dec 20
Start Time (approx.)	13:43	12:43	11:51	10:43	11:13
Stop Date (2022)	Dec 21	Dec 21	Dec 21	Dec 21	Dec 21
Stop Time (approx.)	12:04	11:30	11:01	10:07	10:37
Sampling Parameters					
SC# Summa Can No.	2194	2013	2176	1336	2161
FC# Flow Controller No.	3729	3435	3730	3715	3716
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-28.0	-29.0	-29.0
VAC _{FINAL} Final Vacuum (in Hg)	.0	-9.0	-8.0	-9.0	-10.0

Results

Ethanol (µg/scm)	No	5.7	No	7.4	No	7.4	No	6.7	No	9.7
Ethyl Acetate (µg/scm)	Yes	1.3	No	2.3	Yes	1.3	Yes	1.3	Yes	1.3
Ethylbenzene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	0.23	No	0.42
4-Ethyltoluene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17	Yes	0.17
Heptane (µg/scm)	No	0.18	No	0.2	No	0.22	No	0.24	No	0.27
Hexachlorobutadiene (µg/scm)	Yes	0.37	Yes	0.37	Yes	0.37	Yes	0.37	Yes	0.37
Hexane (µg/scm)	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9	Yes	4.9
2-Hexanone (MBK) (µg/scm)	Yes	0.14	No	0.22	No	0.18	No	0.22	No	0.61
Isopropanol (µg/scm)	Yes	3.4	No	3.9	Yes	3.4	Yes	3.4	Yes	3.4
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13	Yes	0.13
Methylene Chloride (µg/scm)	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2	Yes	1.2
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	No	0.15
Naphthalene (µg/scm)	No	0.21	No	0.44	No	1.9	No	27	No	200
Propene (µg/scm)	Yes	2.4	Yes	2.4	Yes	2.4	No	2.7	No	4.6
Styrene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	2.1	No	8.3
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24	Yes	0.24
Tetrachloroethylene (µg/scm)	Yes	0.24	Yes	0.24	Yes	0.24	No	0.38	Yes	0.24
Tetrahydrofuran (µg/scm)	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0	Yes	1.0
Toluene (µg/scm)	No	0.57	No	0.51	No	0.55	No	13	No	30
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26	Yes	0.26
1,1,1-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
1,1,2-Trichloroethane (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichloroethylene (µg/scm)	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19	Yes	0.19
Trichlorofluoromethane (Freon 11) (µg/scm)	No	1.5	No	1.4	No	1.4	No	1.6	No	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	1.1	Yes	1.1	Yes	1.1	No	1.2	Yes	1.1
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	No	0.72	No	3
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.17	Yes	0.17	Yes	0.17	No	0.48	No	2.1
Vinyl Acetate (µg/scm)	Yes	2.5	Yes	2.5	Yes	2.5	Yes	2.5	Yes	2.5
Vinyl Chloride (µg/scm)	Yes	0.090	Yes	0.090	Yes	0.090	Yes	0.090	Yes	0.090
m&p-Xylene (µg/scm)	Yes	0.30	Yes	0.30	Yes	0.30	No	4.3	No	13
o-Xylene (µg/scm)	Yes	0.15	Yes	0.15	Yes	0.15	No	0.96	No	3

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	6	6
Sampling Location	R06_DW2_D2	R06_DW2_D1
Start Date (2023)	Jan 4	Jan 4
Start Time (approx.)	12:32	12:32
Stop Date (2023)	Jan 5	Jan 5
Stop Time (approx.)	11:20	11:20
Sampling Parameters		
SC# Summa Can No.	2148	2180
FC# Flow Controller No.	3593	3593
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-4.0	-4.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

					Average	Precision (%)
Ethanol (µg/scm)	No	11	No	2.2	6.6	133.3
Ethyl Acetate (µg/scm)	Yes	0.35	No	0.44	0.44	NA
Ethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
4-Ethyltoluene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Heptane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Hexachlorobutadiene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Hexane (µg/scm)	Yes	1.4	Yes	1.4	1.4	NA
2-Hexanone (MBK) (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Isopropanol (µg/scm)	Yes	1.4	Yes	1.4	1.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Methylene Chloride (µg/scm)	Yes	0.35	Yes	0.35	0.35	NA
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Naphthalene (µg/scm)	No	0.095	No	0.11	0.1025	14.6
Propene (µg/scm)	Yes	1.4	Yes	1.4	1.4	NA
Styrene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Tetrachloroethylene (µg/scm)	No	0.046	No	0.062	0.054	29.6
Tetrahydrofuran (µg/scm)	Yes	0.35	Yes	0.35	0.35	NA
Toluene (µg/scm)	No	0.12	No	0.12	0.12	0.0
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,1,1-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,1,2-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Trichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Trichlorofluoromethane (Freon 11) (µg/scm)	No	0.19	No	0.2	0.195	5.1
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	0.14	Yes	0.14	0.14	NA
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Vinyl Acetate (µg/scm)	Yes	0.70	Yes	0.70	0.70	NA
Vinyl Chloride (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
m&p-Xylene (µg/scm)	Yes	0.070	Yes	0.070	0.070	NA
o-Xylene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	6	6
Sampling Location	R06_DW2_D2	R06_DW2_D1
Start Date (2023)	Jan 4	Jan 4
Start Time (approx.)	12:32	12:32
Stop Date (2023)	Jan 5	Jan 5
Stop Time (approx.)	11:20	11:20
Sampling Parameters		
SC# Summa Can No.	2148	2180
FC# Flow Controller No.	3593	3593
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-28	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-4.0	-4.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

					Average	Precision (%)
Acetone (µg/scm)	No	2	No	1.8	1.9	10.5
Benzene (µg/scm)	No	0.41	No	0.39	0.4	5.0
Benzyl chloride (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Bromodichloromethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Bromoform (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Bromomethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,3-Butadiene (µg/scm)	No	0.036	No	0.039	0.0375	8.0
2-Butanone (MEK) (µg/scm)	Yes	1.4	Yes	1.4	1.4	NA
Carbon Disulfide (µg/scm)	Yes	0.35	Yes	0.35	0.35	NA
Carbon Tetrachloride (µg/scm)	No	0.069	No	0.066	0.0675	4.4
Chlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Chloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Chloroform (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Chloromethane (µg/scm)	No	0.4	No	0.41	0.405	2.5
Cyclohexane (µg/scm)	No	0.06	Yes	0.035	0.06	NA
Dibromochloromethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,2-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,3-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,4-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	0.29	No	0.31	0.3	6.7
1,1-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,2-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,1-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,2-Dichloropropane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
cis-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
trans-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (µg/scm)	Yes	0.035	Yes	0.035	0.035	NA
1,4-Dioxane (µg/scm)	Yes	0.35	Yes	0.35	0.35	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	6	6	6	6	6
Sampling Location	R06_UW	R06_DW2_D1	R06_DW1	R06_INT1	R06_INT2
Start Date (2023)	Jan 4	Jan 4	Jan 4	Jan 4	Jan 4
Start Time (approx.)	13:03	12:32	12:02	11:11	11:36
Stop Date (2023)	Jan 5	Jan 5	Jan 5	Jan 5	Jan 5
Stop Time (approx.)	11:54	11:20	10:50	10:05	10:28
Sampling Parameters					
SC# Summa Can No.	1965	2180	1271	1934	1024
FC# Flow Controller No.	3065	3593	3356	3506	3484
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-29.0	-30.0	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-8.0	-4.0	-9.0	-9.0	-10.0

Results

Ethanol (µg/scm)	No	1.4	No	2.2	No	2.1	No	1.8	No	5.3
Ethyl Acetate (µg/scm)	Yes	0.35	No	0.44	No	5.4	Yes	0.35	No	33
Ethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	0.26	No	0.042
4-Ethyltoluene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	0.058	Yes	0.035
Heptane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.085	No	0.11	No	0.13
Hexachlorobutadiene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Hexane (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
2-Hexanone (MBK) (µg/scm)	No	0.044	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Isopropanol (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Methylene Chloride (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	No	0.39
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	No	0.039
Naphthalene (µg/scm)	Yes	0.035	No	0.11	No	0.2	Yes	0.035	No	1.7
Propene (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	No	18	Yes	1.4
Styrene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	6	No	0.059
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Tetrachloroethylene (µg/scm)	Yes	0.035	No	0.062	No	0.053	Yes	0.035	No	0.2
Tetrahydrofuran (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35
Toluene (µg/scm)	No	0.056	No	0.12	No	0.27	No	29	No	0.9
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1,1-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1,2-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Trichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	No	0.094
Trichlorofluoromethane (Freon 11) (µg/scm)	No	0.19	No	0.2	No	0.19	No	0.19	No	0.18
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	No	0.045	No	1.6	No	0.067
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	1.2	Yes	0.035
Vinyl Acetate (µg/scm)	Yes	0.70	Yes	0.70	Yes	0.70	Yes	0.70	Yes	0.70
Vinyl Chloride (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
m&p-Xylene (µg/scm)	Yes	0.070	Yes	0.070	No	0.082	No	9.8	No	0.17
o-Xylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	2.2	No	0.067

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	6	6	6	6	6
Sampling Location	R06_UW	R06_DW2_D1	R06_DW1	R06_INT1	R06_INT2
Start Date (2023)	Jan 4	Jan 4	Jan 4	Jan 4	Jan 4
Start Time (approx.)	13:03	12:32	12:02	11:11	11:36
Stop Date (2023)	Jan 5	Jan 5	Jan 5	Jan 5	Jan 5
Stop Time (approx.)	11:54	11:20	10:50	10:05	10:28
Sampling Parameters					
SC# Summa Can No.	1965	2180	1271	1934	1024
FC# Flow Controller No.	3065	3593	3356	3506	3484
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-29.0	-28.0	-29.0	-30.0	-28.0
VAC _{FINAL} Final Vacuum (in Hg)	-8.0	-4.0	-9.0	-9.0	-10.0

Results

Acetone (µg/scm)	No	2.1	No	1.8	No	1.9	No	1.7	No	2.6
Benzene (µg/scm)	No	0.13	No	0.39	No	0.36	No	190	No	1.3
Benzyl chloride (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromodichloromethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromoform (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromomethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,3-Butadiene (µg/scm)	Yes	0.035	No	0.039	Yes	0.035	No	2.4	Yes	0.035
2-Butanone (MEK) (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
Carbon Disulfide (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	No	1	Yes	0.35
Carbon Tetrachloride (µg/scm)	No	0.069	No	0.066	No	0.065	No	0.069	No	0.068
Chlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Chloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Chloroform (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	No	0.036
Chloromethane (µg/scm)	No	0.39	No	0.41	No	0.44	No	0.44	No	0.43
Cyclohexane (µg/scm)	Yes	0.035	Yes	0.035	No	0.039	No	0.17	No	0.16
Dibromochloromethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,3-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,4-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	0.28	No	0.31	No	0.26	No	0.26	No	0.27
1,1-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloropropane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
cis-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
trans-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,4-Dioxane (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	7	7	7	7	7
Sampling Location	R07_UW	R07_DW2_D1	R07_DW1	R07_INT1	R07_INT2
Start Date (2023)	Jan 23	Jan 23	Jan 23	Jan 23	Jan 23
Start Time (approx.)	13:17	12:47	12:15	11:24	11:52
Stop Date (2023)	Jan 24	Jan 24	Jan 24	Jan 24	Jan 24
Stop Time (approx.)	12:00	11:26	10:51	10:05	10:24
Sampling Parameters					
SC# Summa Can No.	2934	2950	2995	2948	2960
FC# Flow Controller No.	4865	4857	4848	4868	4846
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _i Initial Vacuum (in Hg)	-30.0	-30.0	-29.0	-30.0	-30.0
VAC _f Final Vacuum (in Hg)	-5.0	-5.0	-5.0	-3.0	-2.0

Results

Ethanol (µg/scm)	Yes	1.4	No	1.6	Yes	1.4	Yes	1.4	Yes	1.4
Ethyl Acetate (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35
Ethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	0.13	Yes	0.035
4-Ethyltoluene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Heptane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.041	No	0.047	No	0.086
Hexachlorobutadiene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Hexane (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
2-Hexanone (MBK) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Isopropanol (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Methylene Chloride (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Naphthalene (µg/scm)	No	0.76	No	0.044	No	0.36	No	35	No	0.76
Propene (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	No	17	Yes	1.4
Styrene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	3.1	Yes	0.035
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Tetrachloroethylene (µg/scm)	Yes	0.035	Yes	0.035	No	0.044	Yes	0.035	Yes	0.035
Tetrahydrofuran (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35
Toluene (µg/scm)	No	0.041	No	0.08	No	0.35	No	21	No	0.23
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1,1-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1,2-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Trichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Trichlorofluoromethane (Freon 11) (µg/scm)	No	0.27	No	0.28	No	0.27	No	0.27	No	0.27
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) (µg/scm)	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14	Yes	0.14
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	1.1	No	0.052
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	0.62	Yes	0.035
Vinyl Acetate (µg/scm)	Yes	0.70	Yes	0.70	Yes	0.70	Yes	0.70	Yes	0.70
Vinyl Chloride (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
m&p-Xylene (µg/scm)	Yes	0.070	Yes	0.070	No	0.082	No	6.5	No	0.12
o-Xylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	1.4	No	0.053

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	7	7	7	7	7
Sampling Location	R07_UW	R07_DW2_D1	R07_DW1	R07_INT1	R07_INT2
Start Date (2023)	Jan 23	Jan 23	Jan 23	Jan 23	Jan 23
Start Time (approx.)	13:17	12:47	12:15	11:24	11:52
Stop Date (2023)	Jan 24	Jan 24	Jan 24	Jan 24	Jan 24
Stop Time (approx.)	12:00	11:26	10:51	10:05	10:24
Sampling Parameters					
SC# Summa Can No.	2934	2950	2995	2948	2960
FC# Flow Controller No.	4865	4857	4848	4868	4846
Dup Duplicate Sample (Y/N)		Y			
θ Total sampling time (min)					
VAC _{IN} Initial Vacuum (in Hg)	-30.0	-30.0	-29.0	-30.0	-30.0
VAC _{FINA} Final Vacuum (in Hg)	-5.0	-5.0	-5.0	-3.0	-2.0

Results

Acetone (µg/scm)	Yes	1.4	Yes	1.4	No	2.3	No	2.1	No	1.5
Benzene (µg/scm)	No	0.099	No	0.28	No	1.5	No	110	No	0.91
Benzyl chloride (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromodichloromethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromoform (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Bromomethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,3-Butadiene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	2.1	Yes	0.035
2-Butanone (MEK) (µg/scm)	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4	Yes	1.4
Carbon Disulfide (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	No	0.83	Yes	0.35
Carbon Tetrachloride (µg/scm)	No	0.074	No	0.075	No	0.071	No	0.068	No	0.072
Chlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Chloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Chloroform (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Chloromethane (µg/scm)	No	0.37	No	0.36	No	0.37	No	0.37	No	0.33
Cyclohexane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	No	0.1	No	0.32
Dibromochloromethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,3-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,4-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	0.3	No	0.3	No	0.28	No	0.31	No	0.3
1,1-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,1-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloropropane (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
cis-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
trans-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035	Yes	0.035
1,4-Dioxane (µg/scm)	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35	Yes	0.35

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	7	7
Sampling Location	R07_DW2_D2	R07_DW2_D1
Start Date (2023)	Jan 23	Jan 23
Start Time (approx.)	12:47	12:47
Stop Date (2023)	Jan 24	Jan 24
Stop Time (approx.)	11:26	11:26
Sampling Parameters		
SC# Summa Can No.	2986	2950
FC# Flow Controller No.	4857	4857
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-30	-30.0
VAC _{FINAL} Final Vacuum (in Hg)	-5.0	-5.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

				Average	Precision (%)
Ethanol (µg/scm)	No	1.8	No	1.7	11.8
Ethyl Acetate (µg/scm)	No	0.51	Yes	0.51	NA
Ethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
4-Ethyltoluene (µg/scm)	Yes	0.035	Yes	0.035	NA
Heptane (µg/scm)	Yes	0.035	Yes	0.035	NA
Hexachlorobutadiene (µg/scm)	Yes	0.035	Yes	0.035	NA
Hexane (µg/scm)	Yes	1.4	Yes	1.4	NA
2-Hexanone (MBK) (µg/scm)	Yes	0.035	Yes	0.035	NA
Isopropanol (µg/scm)	Yes	1.4	Yes	1.4	NA
Methyl tert-Butyl Ether (MTBE) (µg/scm)	Yes	0.035	Yes	0.035	NA
Methylene Chloride (µg/scm)	Yes	0.35	Yes	0.35	NA
4-Methyl-2-pentanone (MIBK) (µg/scm)	Yes	0.035	Yes	0.035	NA
Naphthalene (µg/scm)	No	0.037	No	0.0405	17.3
Propene (µg/scm)	Yes	1.4	Yes	1.4	NA
Styrene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,1,2,2-Tetrachloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
Tetrachloroethylene (µg/scm)	Yes	0.035	Yes	0.035	NA
Tetrahydrofuran (µg/scm)	Yes	0.35	Yes	0.35	NA
Toluene (µg/scm)	No	0.084	No	0.082	4.9
1,2,4-Trichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,1,1-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,1,2-Trichloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
Trichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	NA
Trichlorofluoromethane (Freon 11) (µg/scm)	No	0.27	No	0.275	3.6
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Yes	0.14	Yes	0.14	NA
1,2,4-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,3,5-Trimethylbenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
Vinyl Acetate (µg/scm)	Yes	0.70	Yes	0.70	NA
Vinyl Chloride (µg/scm)	Yes	0.035	Yes	0.035	NA
m&p-Xylene (µg/scm)	Yes	0.070	Yes	0.070	NA
o-Xylene (µg/scm)	Yes	0.035	Yes	0.035	NA

Cleveland Cliffs Burns Harbor LLC
Burns Harbor, IN

TO-15 (VOC) Run Data and Parameters

Run No.	7	7
Sampling Location	R07_DW2_D2	R07_DW2_D1
Start Date (2023)	Jan 23	Jan 23
Start Time (approx.)	12:47	12:47
Stop Date (2023)	Jan 24	Jan 24
Stop Time (approx.)	11:26	11:26
Sampling Parameters		
SC# Summa Can No.	2986	2950
FC# Flow Controller No.	4857	4857
Rep Replicate Sample (Y/N)	Y	
θ Total sampling time (min)		
VAC _{IN} Initial Vacuum (in Hg)	-30	-30.0
VAC _{FINAL} Final Vacuum (in Hg)	-5.0	-5.0
VAC _{LAB} Receipt Vacuum (in Hg)		

Results

			Average		Precision (%)
Acetone (µg/scm)	Yes	1.4	Yes	1.4	NA
Benzene (µg/scm)	No	0.28	No	0.28	NA
Benzyl chloride (µg/scm)	Yes	0.035	Yes	0.035	NA
Bromodichloromethane (µg/scm)	Yes	0.035	Yes	0.035	NA
Bromoform (µg/scm)	Yes	0.035	Yes	0.035	NA
Bromomethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,3-Butadiene (µg/scm)	Yes	0.035	Yes	0.035	NA
2-Butanone (MEK) (µg/scm)	Yes	1.4	Yes	1.4	NA
Carbon Disulfide (µg/scm)	Yes	0.35	Yes	0.35	NA
Carbon Tetrachloride (µg/scm)	No	0.078	No	0.075	0.0765 3.9
Chlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
Chloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
Chloroform (µg/scm)	Yes	0.035	Yes	0.035	NA
Chloromethane (µg/scm)	No	0.39	No	0.36	0.375 8.0
Cyclohexane (µg/scm)	Yes	0.035	Yes	0.035	NA
Dibromochloromethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,2-Dibromoethane (EDB) (µg/scm)	Yes	0.035	Yes	0.035	NA
1,2-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,3-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,4-Dichlorobenzene (µg/scm)	Yes	0.035	Yes	0.035	NA
Dichlorodifluoromethane (Freon 12) (µg/scm)	No	0.29	No	0.3	0.295 3.4
1,1-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,2-Dichloroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,1-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	NA
cis-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	NA
trans-1,2-Dichloroethylene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,2-Dichloropropane (µg/scm)	Yes	0.035	Yes	0.035	NA
cis-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	NA
trans-1,3-Dichloropropene (µg/scm)	Yes	0.035	Yes	0.035	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane (µg/scm)	Yes	0.035	Yes	0.035	NA
1,4-Dioxane (µg/scm)	Yes	0.35	Yes	0.35	NA

APPENDIX C: QA/QC DATA



RECALIBRATION
DUE DATE:
August 30, 2023

Certificate of Calibration

Calibration Certification Information			
Cal. Date: August 30, 2022	Rootsmeter S/N: 438320	Ta: 297	*K
Operator: Jim Tisch		Pa: 748.5	mm Hg
Calibration Model #: TE-5040A	Calibrator S/N: 3G		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	6.239	3.70	2.00
2	3	4	1	3.829	10.10	5.50
3	5	6	1	3.078	15.60	8.50
4	7	8	1	2.622	21.10	11.50
5	9	10	1	2.322	26.60	14.50
6	11	12	1	2.166	30.30	16.50

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
0.9833	0.1576	1.4059	0.9951	0.1595	0.8908
0.9749	0.2546	2.3314	0.9865	0.2576	1.4772
0.9676	0.3144	2.8983	0.9792	0.3181	1.8365
0.9604	0.3663	3.3712	0.9718	0.3706	2.1361
0.9531	0.4105	3.7854	0.9645	0.4154	2.3986
0.9482	0.4378	4.0381	0.9595	0.4430	2.5587
QSTD	m=	9.38394	QA	m=	5.87606
	b=	-0.06421		b=	-0.04069
	r=	0.99997		r=	0.99997

Calculations			
Vstd=	$\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$	Va=	$\Delta Vol((Pa-\Delta P)/Pa)$
Qstd=	Vstd/ΔTime	Qa=	Va/ΔTime
For subsequent flow rate calculations:			
Qstd=	$1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$	Qa=	$1/m \left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} - b \right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg
Key	
ΔH:	calibrator manometer reading (in H2O)
ΔP:	rootsmeter manometer reading (mm Hg)
Ta:	actual absolute temperature (°K)
Pa:	actual barometric pressure (mm Hg)
b:	intercept
m:	slope

RECALIBRATION
US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

CleanAir
This certification corresponds to CleanAir asset #201789

CALIBRATION CERTIFICATE

No: 22900114/001

Datalogger: C4141
Serial number: 22900114

Calibration standards (valid to):

PE133: Thermometer F200 ser.n.: 008408/01+J0295A-1-1 (6.9.2023)
PE140: Humidity meter Testo645 ser.n.: 20145248/801 (1.12.2022)
PE139: Pressure meter PACE1001 (6.1.2023)

All standards are traceable to ČMI (Czech Metrology Institute, a signatory to the arrangement CIPM MRA, see www.bipm.org) or in terms of relative humidity to DKD accredited laboratory Testo Germany.

Process of calibration: Direct comparison

Ambient temperature: $(23 \pm 5)^\circ\text{C}$

Results of measurement:

Input	Standard	Device	Uncertainty	Uses standard	Note
Tex[°C]	23.78	23.6	0.21 °C	PE133	
RH [%]	50.4	50.3	1.8 %	PE140	
Tin[°C]	23.78	23.6	0.21 °C	PE133	
P [hPa]	974.5	974.9	1.1 hPa	PE139	

The expanded uncertainty of measurement corresponding to the measurement results is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$. Usually the true value is located in the corresponding interval with probability of approximately 95%. This was determined in accordance with EA4/02.

Date of calibration: 31.08.2022

Calibrated by: Michal Portuša

Approved: Josef Fabišek

COMET
System, s.r.o.
Bezručova 2901
756 61 Rožnov p. Radhoštěm
CZ60776846



GMW PUF Calibration Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Date: 10/19/2022
Station: DW2	Time (CST): 8:40
SN: 24-11-7	Technician: DP, JD
Rentals Asset: 201763	

TRANSFER STANDARDS

TEMPERATURE + BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 8/31/2022
Calibration Due Date: 8/31/2023

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 8/30/2022	Qa, b = -0.04069
Calibration Due Date: 8/30/2023	

SITE CONDITIONS

Ambient Temperature (F): 43.2	Barometric Pressure (in Hg): 29.4
--------------------------------------	--

CALIBRATION DATA

Setting	Flow	Flow	dP	Qstd	Difference	LINEAR REGRESSION	
#	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(%)	Slope:	30.7237
1	70	8.57	7.1	0.298	-0.8%	Intercept:	-0.6484
2	60	7.93	6.3	0.281	0.6%	Corr Coeff:	0.9988
3	50	7.24	5.3	0.258	0.5%		
4	40	6.47	4.3	0.233	0.6%		
5	30	5.61	3.2	0.202	-0.9%		

Acceptance Criteria: Corr. Coeff > 0.99

RUN SETTINGS

Ambient Temperature (F): 43.2	Flow Set Point (m³/min): 0.224
Barometric Pressure (in Hg): 29.4	Flow Set Point (Magn): 37

ADDITIONAL NOTES



GMW PUF Calibration Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Date: 10/19/2022
Station: DW1	Time (CST): 10:51
SN: 15340	Technician: DP, JD
Rentals Asset: 201756	

TRANSFER STANDARDS

TEMPERATURE + BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 8/31/2022
Calibration Due Date: 8/31/2023

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 8/30/2022	Qa, b = -0.04069
Calibration Due Date: 8/30/2023	

SITE CONDITIONS

Ambient Temperature (F): 51.4	Barometric Pressure (in Hg): 29.4
--------------------------------------	--

CALIBRATION DATA

Setting	Flow	Flow	dP	Qstd	Difference	LINEAR REGRESSION	
#	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(%)	Slope:	33.7423
1	70	8.50	7.0	0.293	-0.1%	Intercept:	-1.4035
2	60	7.87	6.1	0.274	-0.3%	Corr Coeff:	0.9996
3	50	7.18	5.3	0.256	0.7%		
4	40	6.42	4.3	0.231	-0.4%		
5	30	5.56	3.4	0.206	0.0%		

Acceptance Criteria: Corr. Coeff > 0.99

RUN SETTINGS

Ambient Temperature (F): 51.4	Flow Set Point (m³/min): 0.224
Barometric Pressure (in Hg): 29.4	Flow Set Point (Magn): 37

ADDITIONAL NOTES



GMW PUF Calibration Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Date: 10/19/2022
Station: UW	Time (CST): 14:00
SN: N/A	Technician: DP, JD
Rentals Asset: 201753	

TRANSFER STANDARDS

TEMPERATURE + BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 8/31/2022
Calibration Due Date: 8/31/2023

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 8/30/2022	Qa, b = -0.04069
Calibration Due Date: 8/30/2023	

SITE CONDITIONS

Ambient Temperature (F): 52.9	Barometric Pressure (in Hg): 29.3
--------------------------------------	--

CALIBRATION DATA

Setting	Flow	Flow	dP	Qstd	Difference	LINEAR REGRESSION	
#	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(%)	Slope:	29.9151
1	70	8.47	6.5	0.282	-1.3%	Intercept:	-0.0716
2	60	7.84	5.8	0.267	0.8%	Corr Coeff:	0.9968
3	50	7.16	4.9	0.246	1.7%		
4	40	6.40	3.7	0.214	-1.0%		
5	30	5.54	2.8	0.187	-0.2%		

Acceptance Criteria: Corr. Coeff > 0.99

RUN SETTINGS

Ambient Temperature (F): 52.9	Flow Set Point (m³/min): 0.224
Barometric Pressure (in Hg): 29.3	Flow Set Point (Magn): 43

ADDITIONAL NOTES



GMW PUF Calibration Worksheet

STATION INFORMATION

Client: Cleveland Cliffs
Facility: Burns Harbor, IN
Station: INT1
SN: 6221
Rentals Asset: 201757

Project #: 14777
Date: 10/27/2022
Time (CST): 14:00
Technician: JD

TRANSFER STANDARDS

TEMPERATURE + BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 8/31/2022
Calibration Due Date: 8/31/2023

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320
Calibration Date: 8/30/2022
Calibration Due Date: 8/30/2023

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

SITE CONDITIONS

Ambient Temperature (F): 52.9

Barometric Pressure (in Hg): 29.9

CALIBRATION DATA

Setting	Flow	Flow	dP	Qstd	Difference	LINEAR REGRESSION	
#	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(%)	Slope:	33.4998
1	70	8.56	6.8	0.291	0.1%	Intercept:	-1.1868
2	60	7.92	5.9	0.272	-0.1%	Corr Coeff:	0.9978
3	50	7.23	5.1	0.253	0.8%		
4	40	6.47	4.0	0.225	-1.9%		
5	30	5.60	3.3	0.205	1.3%		

Acceptance Criteria: Corr. Coeff > 0.99

RUN SETTINGS

Ambient Temperature (F): 52.9
Barometric Pressure (in Hg): 29.9

Flow Set Point (m³/min): 0.224
Flow Set Point (Magn): 38

ADDITIONAL NOTES



GMW PUF Calibration Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Date: 10/27/2022
Station: INT2	Time (CST): 15:30
SN: N/A	Technician: JD
Rentals Asset: 209326	

TRANSFER STANDARDS

TEMPERATURE + BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 8/31/2022
Calibration Due Date: 8/31/2023

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 8/30/2022	Qa, b = -0.04069
Calibration Due Date: 8/30/2023	

SITE CONDITIONS

Ambient Temperature (F): 52.9	Barometric Pressure (in Hg): 29.3
--------------------------------------	--

CALIBRATION DATA

Setting	Flow	Flow	dP	Qstd	Difference	LINEAR REGRESSION	
#	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(%)	Slope:	32.3871
1	70	8.47	6.8	0.288	-0.4%	Intercept:	-0.8982
2	60	7.84	5.9	0.269	-0.4%	Corr Coeff:	0.9984
3	50	7.16	5.1	0.250	0.8%		
4	40	6.40	4.2	0.228	1.3%		
5	30	5.54	3.1	0.197	-1.3%		

Acceptance Criteria: Corr. Coeff > 0.99

RUN SETTINGS

Ambient Temperature (F): 52.9	Flow Set Point (m³/min): 0.224
Barometric Pressure (in Hg): 29.3	Flow Set Point (Magn): 39

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 1
Station: DW2	PUF ID: 100722-03
SN: 24-11-7	Technician (As-Left): JD
Rentals Asset: 201763	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	18.1	1010.8	38	6.23	4.2	0.224	0.227	-1.6%
As-Found	15.2	1011.9	38	6.26	4.2	0.225	0.229	-1.6%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 38

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 10/27/22	Stop Date: 10/28/22
Start Time (CST): 15:42	Stop Time (CST): 14:49
Elapsed Timer Reading (hrs): 8946.15	Elapsed Timer Reading (hrs): 8969.29
Flow (Magn): 38	Flow (Magn): 38
Cooler Temperature (C): 1.9	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 1
Station: DW1	PUF ID: 100722-02
SN: 15340	Technician (As-Left): JD
Rentals Asset: 201756	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	13.4	1010.8	38	6.28	4.1	0.228	0.227	0.5%
As-Found	16.0	1011.9	38	6.25	4.1	0.227	0.226	0.5%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 10/27/22	Stop Date: 10/28/22
Start Time (CST): 15:00	Stop Time (CST): 14:07
Elapsed Timer Reading (hrs): 10531.13	Elapsed Timer Reading (hrs): 10554.28
Flow (Magn): 38	Flow (Magn): 38
Cooler Temperature (C): 1.9	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 1
Station: UW	PUF ID: 100722-01
SN: N/A	Technician (As-Left): JD
Rentals Asset: 201753	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	18.1	1010.8	37	6.15	3.6	0.208	0.211	-1.6%
As-Found	15.7	1011.9	42	6.58	3.5	0.222	0.209	6.3%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 43

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 10/27/22	Stop Date: 10/28/22
Start Time (CST): 14:17	Stop Time (CST): 12:57
Elapsed Timer Reading (hrs): 11138.76	Elapsed Timer Reading (hrs): 11161.35
Flow (Magn): 37	Flow (Magn): 42
Cooler Temperature (C): 1.9	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 1
Station: INT1	PUF ID: 100722-04
SN: 6221	Technician (As-Left): JD
Rentals Asset: 201757	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	18.1	1010.8	38	6.23	3.6	0.221	0.211	4.8%
As-Found	15.7	1011.9	33	5.83	3.5	0.209	0.209	0.1%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 10/27/22	Stop Date: 10/28/22
Start Time (CST): 16:25	Stop Time (CST): 15:22
Elapsed Timer Reading (hrs): 7776.84	Elapsed Timer Reading (hrs): 7799.81
Flow (Magn): 38	Flow (Magn): 33
Cooler Temperature (C): 1.9	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 1
Station: INT2	PUF ID: 100722-05
SN: N/A	Technician (As-Left): JD
Rentals Asset: 209326	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	18.1	1010.8	36	6.06	3.6	0.215	0.211	1.8%
As-Found	15.7	1011.9	37	6.17	3.5	0.218	0.209	4.4%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 40

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 10/27/22	Stop Date: 10/28/22
Start Time (CST): 16:45	Stop Time (CST): 15:37
Elapsed Timer Reading (hrs): 1189.71	Elapsed Timer Reading (hrs): 1212.54
Flow (Magn): 36	Flow (Magn): 37
Cooler Temperature (C): 1.9	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 2
Station: DW2	PUF ID: 101922B-04
SN: 24-11-7	Technician (As-Left): JD
Rentals Asset: 201763	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	13.2	1014.5	37	6.21	4.1	0.223	0.227	-1.7%
As-Found	18.3	1004.0	35	5.95	3.9	0.215	0.219	-1.7%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/08/22	Stop Date: 11/09/22
Start Time (CST): 11:25	Stop Time (CST): 11:15
Elapsed Timer Reading (hrs): 8969.31	Elapsed Timer Reading (hrs): 8992.99
Flow (Magn): 37	Flow (Magn): 35
Cooler Temperature (C): -0.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 2
Station: DW1	PUF ID: 101922B-03
SN: 15340	Technician (As-Left): JD
Rentals Asset: 201756	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	12.2	1015.9	36	6.14	4.2	0.224	0.230	-2.9%
As-Found	14.5	1004.5	33	5.82	4.0	0.214	0.223	-3.9%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 36

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/08/22	Stop Date: 11/09/22
Start Time (CST): 10:53	Stop Time (CST): 10:35
Elapsed Timer Reading (hrs): 10554.30	Elapsed Timer Reading (hrs): 1057.99
Flow (Magn): 36	Flow (Magn): 33
Cooler Temperature (C): -0.9	Cooler Temperature (C): 0.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 2
Station: UW	PUF ID: 101922B-05
SN: N/A	Technician (As-Left): JD
Rentals Asset: 201753	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	14.6	1013.3	42	6.60	4.1	0.223	0.226	-1.6%
As-Found	17.5	1004.6	40	6.38	4.0	0.216	0.222	-2.8%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 42

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/08/22	Stop Date: 11/09/22
Start Time (CST): 12:32	Stop Time (CST): 12:00
Elapsed Timer Reading (hrs): 11161.39	Elapsed Timer Reading (hrs): 11184.86
Flow (Magn): 42	Flow (Magn): 40
Cooler Temperature (C): -1.0	Cooler Temperature (C): 0.6

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 2
Station: INT1	PUF ID: 101922B-01
SN: 6221	Technician (As-Left): JD
Rentals Asset: 201757	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	10.4	1015.4	38	6.33	4.5	0.224	0.239	-6.1%
As-Found	12.8	1004.2	36	6.10	4.3	0.217	0.231	-6.0%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 38

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/08/22	Stop Date: 11/09/22
Start Time (CST): 9:56	Stop Time (CST): 9:34
Elapsed Timer Reading (hrs): 7800.21	Elapsed Timer Reading (hrs): 7823.84
Flow (Magn): 38	Flow (Magn): 36
Cooler Temperature (C): -0.9	Cooler Temperature (C): 2.5

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 2
Station: INT2	PUF ID: 101922B-02
SN: N/A	Technician (As-Left): JD
Rentals Asset: 209326	Technician (As-Found): JD

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.4	1015.3	38	6.31	4.5	0.223	0.238	-6.6%
As-Found	11.8	1004.5	33	5.85	4.0	0.208	0.224	-6.9%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/08/22	Stop Date: 11/09/22
Start Time (CST): 10:21	Stop Time (CST): 10:00
Elapsed Timer Reading (hrs): 1212.59	Elapsed Timer Reading (hrs): 1236.24
Flow (Magn): 38	Flow (Magn): 33
Cooler Temperature (C): -0.3	Cooler Temperature (C): 1.9

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 3
Station: DW2	PUF ID: 110222-05
SN: 24-11-7	Technician (As-Left): DP
Rentals Asset: 201763	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.4	999.4	38	6.27	4.1	0.225	0.226	-0.5%
As-Found	15.3	999.0	38	6.22	4.0	0.224	0.222	0.7%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 38

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/22/22	Stop Date: 11/23/22
Start Time (CST): 14:09	Stop Time (CST): 12:09
Elapsed Timer Reading (hrs): 8993.05	Elapsed Timer Reading (hrs): 9015.26
Flow (Magn): 38	Flow (Magn): 20
Cooler Temperature (C): -5.0	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 3
Station: DW1	PUF ID: 110222-04
SN: 15340	Technician (As-Left): DP
Rentals Asset: 201756	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.6	999.7	38	6.26	3.9	0.227	0.221	3.0%
As-Found	14.4	999.7	38	6.23	4.0	0.226	0.222	1.8%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/22/22	Stop Date: 11/23/22
Start Time (CST): 13:36	Stop Time (CST): 11:36
Elapsed Timer Reading (hrs): 10578.14	Elapsed Timer Reading (hrs): 10600.16
Flow (Magn): 38	Flow (Magn): 36
Cooler Temperature (C): -5.0	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 3
Station: UW	PUF ID: 110222-06
SN: N/A	Technician (As-Left): DP
Rentals Asset: 201753	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.8	999.7	44	6.74	4.2	0.228	0.229	-0.5%
As-Found	16.7	999.1	44	6.68	4.2	0.226	0.227	-0.5%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 43

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/22/22	Stop Date: 11/23/22
Start Time (CST): 14:42	Stop Time (CST): 12:45
Elapsed Timer Reading (hrs): 11184.93	Elapsed Timer Reading (hrs): 11206.95
Flow (Magn): 42	Flow (Magn): 40
Cooler Temperature (C): -5.0	Cooler Temperature (C): 3.8

ADDITIONAL NOTES

Start Max Flow (Magn) is 42 with sample media installed.



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 3
Station: INT1	PUF ID: 110222-02
SN: 6221	Technician (As-Left): DP
Rentals Asset: 201757	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.0	999.7	40	6.43	4.2	0.227	0.229	-0.7%
As-Found	13.0	999.8	40	6.41	4.3	0.227	0.231	-1.8%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/22/22	Stop Date: 11/23/22
Start Time (CST): 12:56	Stop Time (CST): 11:12
Elapsed Timer Reading (hrs): 7823.89	Elapsed Timer Reading (hrs): 7846.16
Flow (Magn): 40	Flow (Magn): 40
Cooler Temperature (C): -5.0	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 3
Station: INT2	PUF ID: 110222-01
SN: N/A	Technician (As-Left): DP
Rentals Asset: 209326	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	9.2	999.7	40	6.45	4.3	0.227	0.232	-2.3%
As-Found	11.4	1000.1	40	6.43	4.0	0.226	0.224	1.2%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 11/22/22	Stop Date: 11/23/22
Start Time (CST): 12:35	Stop Time (CST): 10:53
Elapsed Timer Reading (hrs): 1236.37	Elapsed Timer Reading (hrs): 1258.67
Flow (Magn): 40	Flow (Magn): 38
Cooler Temperature (C): -5.0	Cooler Temperature (C): 3.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 4
Station: DW2	PUF ID: 112922A-02
SN: 24-11-7	Technician (As-Left): JD / JM
Rentals Asset: 201763	Technician (As-Found): JD/JM

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	10.5	995.5	38	6.26	4.1	0.225	0.226	-0.5%
As-Found	8.9	1003.0	37	6.22	4.2	0.224	0.230	-2.9%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 38

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/06/22	Stop Date: 12/07/22
Start Time (CST): 13:38	Stop Time (CST): 12:48
Elapsed Timer Reading (hrs): 9015.40	Elapsed Timer Reading (hrs): 9038.56
Flow (Magn): 38	Flow (Magn): 37
Cooler Temperature (C): -3.2	Cooler Temperature (C): 1.2

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 4
Station: DW1	PUF ID: 112922A-03
SN: 15340	Technician (As-Left): JD/JM
Rentals Asset: 201756	Technician (As-Found): JD/JM

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	10.3	995.3	38	6.26	4.0	0.227	0.223	1.7%
As-Found	10.3	1003.0	37	6.21	4.2	0.225	0.230	-1.8%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/06/22	Stop Date: 12/07/22
Start Time (CST): 13:08	Stop Time (CST): 12:16
Elapsed Timer Reading (hrs): 10600.22	Elapsed Timer Reading (hrs): 10623.35
Flow (Magn): 38	Flow (Magn): 37
Cooler Temperature (C): -3.2	Cooler Temperature (C): 1.2

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 4
Station: UW	PUF ID: 112922A-01
SN: N/A	Technician (As-Left): JD.JM
Rentals Asset: 201753	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	10.5	995.6	44	6.74	4.3	0.228	0.231	-1.6%
As-Found	10.2	1003.0	42	6.61	4.2	0.223	0.230	-2.7%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 43

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/06/22	Stop Date: 12/07/22
Start Time (CST): 14:09	Stop Time (CST): 13:36
Elapsed Timer Reading (hrs): 11207.01	Elapsed Timer Reading (hrs): 11230.47
Flow (Magn): 44	Flow (Magn): 40
Cooler Temperature (C): -3.2	Cooler Temperature (C): 1.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 4
Station: INT1	PUF ID: 112922-04
SN: 6221	Technician (As-Left): JD/JM
Rentals Asset: 201757	Technician (As-Found): JD/JM

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.0	999.7	40	6.43	4.3	0.227	0.232	-1.8%
As-Found	13.0	999.8	38	6.25	4.2	0.222	0.228	-2.7%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/06/22	Stop Date: 12/07/22
Start Time (CST): 12:30	Stop Time (CST): 11:55
Elapsed Timer Reading (hrs): 7846.24	Elapsed Timer Reading (hrs): 7869.64
Flow (Magn): 40	Flow (Magn): 38
Cooler Temperature (C): -3.2	Cooler Temperature (C): 1.3

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 4
Station: INT2	PUF ID: 112922A-05
SN: N/A	Technician (As-Left): JD/JM
Rentals Asset: 209326	Technician (As-Found): JD/JM

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	11.7	999.4	40	6.42	4.1	0.226	0.226	0.0%
As-Found	8.4	1002.0	42	6.63	4.2	0.232	0.230	0.9%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/06/22	Stop Date: 12/07/22
Start Time (CST): 12:16	Stop Time (CST): 11:33
Elapsed Timer Reading (hrs): 1258.78	Elapsed Timer Reading (hrs): 1282.96
Flow (Magn): 40	Flow (Magn): 42
Cooler Temperature (C): -3.3	Cooler Temperature (C): 1.5

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 5
Station: DW2	PUF ID: 112922C-05
SN: 24-11-7	Technician (As-Left): DP
Rentals Asset: 201763	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	2.2	1008.1	36	6.23	4.2	0.224	0.233	-4.2%
As-Found	-1.1	1006.7	36	6.26	4.0	0.225	0.229	-1.9%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 36

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/20/22	Stop Date: 12/21/22
Start Time (CST): 13:03	Stop Time (CST): 11:35
Elapsed Timer Reading (hrs): 9038.62	Elapsed Timer Reading (hrs): 9061.23
Flow (Magn): 36	Flow (Magn): 36
Cooler Temperature (C): -3.1	Cooler Temperature (C): 0.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 5
Station: DW1	PUF ID: 112922C-03
SN: 15340	Technician (As-Left): DP
Rentals Asset: 201756	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	0.7	1008.8	36	6.25	4.2	0.227	0.234	-3.2%
As-Found	-0.8	1007.7	36	6.26	3.7	0.227	0.221	2.9%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 35

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/20/22	Stop Date: 12/21/22
Start Time (CST): 12:14	Stop Time (CST): 11:05
Elapsed Timer Reading (hrs): 10623.48	Elapsed Timer Reading (hrs): 10646.34
Flow (Magn): 36	Flow (Magn): 34
Cooler Temperature (C): -3.1	Cooler Temperature (C): 0.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 5
Station: UW	PUF ID: 112922C-06
SN: N/A	Technician (As-Left): DP
Rentals Asset: 201753	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	2.3	1008.4	40	6.56	4.0	0.222	0.228	-2.7%
As-Found	0.7	1006.0	40	6.57	3.8	0.222	0.223	-0.3%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 41

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/20/22	Stop Date: 12/21/22
Start Time (CST): 14:00	Stop Time (CST): 12:08
Elapsed Timer Reading (hrs): 11230.55	Elapsed Timer Reading (hrs): 11252.70
Flow (Magn): 40	Flow (Magn): 38
Cooler Temperature (C): -3.1	Cooler Temperature (C): 0.7

ADDITIONAL NOTES

GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 5
Station: INT1	PUF ID: 112922C-01
SN: 6221	Technician (As-Left): DP
Rentals Asset: 201757	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	2.3	1008.3	38	6.40	4.2	0.226	0.233	-3.0%
As-Found	0.7	1008.0	38	6.41	4.2	0.227	0.234	-3.1%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/20/22	Stop Date: 12/21/22
Start Time (CST): 11:06	Stop Time (CST): 10:09
Elapsed Timer Reading (hrs): 7869.69	Elapsed Timer Reading (hrs): 7892.75
Flow (Magn): 38	Flow (Magn): 38
Cooler Temperature (C): -3.1	Cooler Temperature (C): 0.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 5
Station: INT2	PUF ID: 112922C-02
SN: N/A	Technician (As-Left): DP
Rentals Asset: 209326	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	1.9	1008.8	38	6.40	4.2	0.225	0.234	-3.5%
As-Found	0.0	1007.8	38	6.42	4.0	0.226	0.229	-1.2%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 12/20/22	Stop Date: 12/21/22
Start Time (CST): 11:34	Stop Time (CST): 10:43
Elapsed Timer Reading (hrs): 1282.13	Elapsed Timer Reading (hrs): 1305.27
Flow (Magn): 38	Flow (Magn): 35
Cooler Temperature (C): -3.1	Cooler Temperature (C): 0.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 6
Station: DW2	PUF ID: 12122A-04
SN: 24-11-7	Technician (As-Left): DP
Rentals Asset: 201763	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	3.4	984.9	38	6.31	4.2	0.226	0.230	-1.7%
As-Found	1.1	989.5	36	6.18	4.0	0.222	0.226	-1.8%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/04/23	Stop Date: 01/05/23
Start Time (CST): 12:43	Stop Time (CST): 11:22
Elapsed Timer Reading (hrs): 9061.35	Elapsed Timer Reading (hrs): 9084.07
Flow (Magn): 38	Flow (Magn): 36
Cooler Temperature (C): 3.5	Cooler Temperature (C): 3.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 6
Station: DW1	PUF ID: 12122A-03
SN: 15340	Technician (As-Left): DP
Rentals Asset: 201756	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	5.6	985.0	36	6.12	4.1	0.223	0.227	-1.7%
As-Found	1.1	990.6	36	6.18	3.9	0.225	0.224	0.5%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 36

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/04/23	Stop Date: 01/05/23
Start Time (CST): 12:17	Stop Time (CST): 10:53
Elapsed Timer Reading (hrs): 10646.49	Elapsed Timer Reading (hrs): 10669.10
Flow (Magn): 36	Flow (Magn): 36
Cooler Temperature (C): 3.5	Cooler Temperature (C): 3.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 6
Station: UW	PUF ID: 12122A-05
SN: N/A	Technician (As-Left): DP
Rentals Asset: 201753	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	4.2	985.3	42	6.62	4.2	0.224	0.230	-2.7%
As-Found	3.1	989.4	42	6.65	4.1	0.225	0.228	-1.6%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 42

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/04/23	Stop Date: 01/05/23
Start Time (CST): 13:17	Stop Time (CST): 11:57
Elapsed Timer Reading (hrs): 11252.83	Elapsed Timer Reading (hrs): 11275.51
Flow (Magn): 42	Flow (Magn): 42
Cooler Temperature (C): 3.5	Cooler Temperature (C): 3.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 6
Station: INT1	PUF ID: 12122A-02
SN: 6221	Technician (As-Left): DP
Rentals Asset: 201757	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	6.6	984.9	40	6.44	4.3	0.228	0.232	-1.8%
As-Found	3.2	990.0	42	6.65	4.4	0.234	0.236	-1.0%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/04/23	Stop Date: 01/05/23
Start Time (CST): 11:29	Stop Time (CST): 10:08
Elapsed Timer Reading (hrs): 7892.88	Elapsed Timer Reading (hrs): 7915.54
Flow (Magn): 40	Flow (Magn): 42
Cooler Temperature (C): 3.5	Cooler Temperature (C): 3.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 6
Station: INT2	PUF ID: 12122A-01
SN: N/A	Technician (As-Left): DP
Rentals Asset: 209326	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	7.0	984.9	40	6.43	4.5	0.226	0.237	-4.4%
As-Found	2.2	989.9	40	6.50	4.2	0.229	0.231	-1.2%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 39

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/04/23	Stop Date: 01/05/23
Start Time (CST): 11:53	Stop Time (CST): 10:32
Elapsed Timer Reading (hrs): 1305.40	Elapsed Timer Reading (hrs): 1328.06
Flow (Magn): 40	Flow (Magn): 40
Cooler Temperature (C): 3.5	Cooler Temperature (C): 3.7

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 7
Station: DW2	PUF ID: 122322A-04
SN: 24-11-7	Technician (As-Left): DP
Rentals Asset: 201763	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	0.7	996.6	36	6.21	3.8	0.223	0.222	0.6%
As-Found	0.7	1001.6	34	6.05	3.6	0.218	0.217	0.6%

LINEAR REGRESSION

Slope: 30.7237 **Intercept:** -0.6484 **Magn SP:** 36

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/23/23	Stop Date: 01/24/23
Start Time (CST): 12:58	Stop Time (CST): 11:29
Elapsed Timer Reading (hrs): 9084.18	Elapsed Timer Reading (hrs): 9106.75
Flow (Magn): 36	Flow (Magn): 34
Cooler Temperature (C): -9.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 7
Station: DW1	PUF ID: 122322A-03
SN: 15340	Technician (As-Left): DP
Rentals Asset: 201756	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	1.7	997.1	36	6.20	4.0	0.225	0.227	-0.8%
As-Found	0.5	1001.4	34	6.05	3.6	0.221	0.217	2.0%

LINEAR REGRESSION

Slope: 33.7423 **Intercept:** -1.4035 **Magn SP:** 36

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/23/23	Stop Date: 01/24/23
Start Time (CST): 12:31	Stop Time (CST): 10:54
Elapsed Timer Reading (hrs): 10669.27	Elapsed Timer Reading (hrs): 10691.67
Flow (Magn): 36	Flow (Magn): 34
Cooler Temperature (C): -9.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 7
Station: UW	PUF ID: 122322A-05
SN: N/A	Technician (As-Left): DP
Rentals Asset: 201753	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	1.2	997.2	42	6.70	4.0	0.226	0.227	-0.4%
As-Found	0.5	1001.7	40	6.56	3.8	0.222	0.222	-0.3%

LINEAR REGRESSION

Slope: 29.9151 **Intercept:** -0.0716 **Magn SP:** 41

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/23/23	Stop Date: 01/24/23
Start Time (CST): 13:31	Stop Time (CST): 12:02
Elapsed Timer Reading (hrs): 11275.63	Elapsed Timer Reading (hrs): 11298.15
Flow (Magn): 42	Flow (Magn): 40
Cooler Temperature (C): -9.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 7
Station: INT1	PUF ID: 122322A-01
SN: 6221	Technician (As-Left): DP
Rentals Asset: 201757	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114
Calibration Date: 08/31/22
Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch	Qstd, m = 9.38394
Model: TE-5040A	Qstd, b = -0.06421
SN: 438320	Qa, m = 5.87606
Calibration Date: 08/30/22	Qa, b = -0.04069
Calibration Due Date: 08/30/23	

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	1.4	997.5	38	6.37	4.0	0.226	0.227	-0.7%
As-Found	1.5	1001.7	36	6.21	3.8	0.221	0.222	-0.5%

LINEAR REGRESSION

Slope: 33.4998 **Intercept:** -1.1868 **Magn SP:** 37

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/23/23	Stop Date: 01/24/23
Start Time (CST): 11:45	Stop Time (CST): 10:07
Elapsed Timer Reading (hrs): 7915.67	Elapsed Timer Reading (hrs): 7938.05
Flow (Magn): 38	Flow (Magn): 36
Cooler Temperature (C): -9.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES



GMW PUF Run Worksheet

STATION INFORMATION

Client: Cleveland Cliffs	Project #: 14777
Facility: Burns Harbor, IN	Run: 7
Station: INT2	PUF ID: 122323A-02
SN: N/A	Technician (As-Left): DP
Rentals Asset: 209326	Technician (As-Found): DP

TRANSFER STANDARDS

TEMPERATURE +BP STANDARD

Manufacturer: COMET
Model: C4141
SN: 22900114

Calibration Date: 08/31/22

Calibration Due Date: 08/31/23

CALIBRATION ORIFICE

Manufacturer: Tisch
Model: TE-5040A
SN: 438320

Calibration Date: 08/30/22

Calibration Due Date: 08/30/23

Qstd, m = 9.38394
Qstd, b = -0.06421
Qa, m = 5.87606
Qa, b = -0.04069

CALIBRATION DATA

Check	Temp	Bar Press	Flow	Flow	dP Meas.	Qstd	Qstd REF	Difference
--	(C)	(hPa)	(Magn)	(Corrected)	(in H2O)	(m ³ /min)	(m3/min)	(%)
As-Left	0.1	997.2	38	6.39	4.1	0.225	0.230	-2.4%
As-Found	-0.1	1001.1	36	6.23	3.9	0.220	0.225	-2.3%

LINEAR REGRESSION

Slope: 32.3871 **Intercept:** -0.8982 **Magn SP:** 38

Acceptance Criteria: < +/- 10.1% of working standard for all settings

START / STOP SETTINGS

Start Date: 01/23/23	Stop Date: 01/24/23
Start Time (CST): 12:06	Stop Time (CST): 10:27
Elapsed Timer Reading (hrs): 1328.19	Elapsed Timer Reading (hrs): 1350.53
Flow (Magn): 38	Flow (Magn): 36
Cooler Temperature (C): -9.9	Cooler Temperature (C): 0.8

ADDITIONAL NOTES

APPENDIX D: LABORATORY DATA

12/8/2022

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2211197

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 11/8/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2211197

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 11/08/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 12/08/2022

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	RO1_24	EPA Method 325B
02A	RO1_23	EPA Method 325B
03A	RO1_22	EPA Method 325B
04A	RO1_21	EPA Method 325B
05A	RO1_01	EPA Method 325B
06A	RO1_01_D	EPA Method 325B
07A	RO2_02	EPA Method 325B
08A	RO1_02_B	EPA Method 325B
09A	RO1_03	EPA Method 325B
10A	RO1_04	EPA Method 325B
11A	RO1_05	EPA Method 325B
12A	RO1_06	EPA Method 325B
13A	RO1_07	EPA Method 325B
14A	RO1_12	EPA Method 325B
15A	RO1_12_B	EPA Method 325B
16A	RO1_11	EPA Method 325B
17A	RO1_10	EPA Method 325B
18A	RO1_13_D	EPA Method 325B
19A	RO1_13.	EPA Method 325B
20A	RO1_14	EPA Method 325B
21A	RO1_15	EPA Method 325B
22A	RO1_16	EPA Method 325B
23A	RO1_18	EPA Method 325B

Continued on next page

WORK ORDER #: 2211197

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 11/08/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 12/08/2022

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
24A	RO1_19	EPA Method 325B
25A	RO1_20	EPA Method 325B
26A	RO1_17	EPA Method 325B
27A	RO1_08	EPA Method 325B
28A	RO1_09	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 12/08/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2211197

Twenty-eight Carbopack X CA samples were received on November 08, 2022. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

The sample kit was received with the latch secured with generic zip ties in lieu of the numbered zip tie included with the kit. The client was notified and analysis proceeded.

Analytical Notes

All samples were collected over a 19-day period with the exception of sample RO1_09, which was collected over a 17-day period.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- Pl - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days
- Fe - Field Error or discrepancy
- Te - Tube Error or discrepancy
- CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified

b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_24

Lab ID#: 2211197-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.60
Toluene	0.36	0.45
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_23

Lab ID#: 2211197-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.94
Toluene	0.36	0.56
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_22

Lab ID#: 2211197-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.82
Toluene	0.36	0.44
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_21

Lab ID#: 2211197-04A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_21

Lab ID#: 2211197-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	1.1
Benzene	0.28	1.8
Toluene	0.36	2.1
Ethyl Benzene	0.40	0.28 J
m,p-Xylene	0.40	1.3
o-Xylene	0.40	0.48

Client Sample ID: RO1_01

Lab ID#: 2211197-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.6
Toluene	0.36	0.82
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.32 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_01_D

Lab ID#: 2211197-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.5
Toluene	0.36	0.71
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.26 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO2_02

Lab ID#: 2211197-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO2_02

Lab ID#: 2211197-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.8
Toluene	0.36	1.8
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.62
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_02_B

Lab ID#: 2211197-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.14 U
Toluene	0.36	0.18 U
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_03

Lab ID#: 2211197-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.2
Toluene	0.36	1.7
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.59
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_04

Lab ID#: 2211197-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_04

Lab ID#: 2211197-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.7
Toluene	0.36	1.8
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.67
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_05

Lab ID#: 2211197-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	2.7
Toluene	0.36	0.96
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.33 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_06

Lab ID#: 2211197-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.4
Toluene	0.36	0.71
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.24 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_07

Lab ID#: 2211197-13A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_07

Lab ID#: 2211197-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.9
Toluene	0.36	0.83
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.30 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_12

Lab ID#: 2211197-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.49
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.35 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_12_B

Lab ID#: 2211197-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.14 U
Toluene	0.36	0.18 U
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_11

Lab ID#: 2211197-16A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_11

Lab ID#: 2211197-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.54
Toluene	0.36	0.49
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_10

Lab ID#: 2211197-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.75
Toluene	0.36	0.54
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.21 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_13_D

Lab ID#: 2211197-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.48
Toluene	0.36	0.51
Ethyl Benzene	0.40	0.72
m,p-Xylene	0.40	3.0
o-Xylene	0.40	1.0

Client Sample ID: RO1_13.

Lab ID#: 2211197-19A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_13.

Lab ID#: 2211197-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.53
Toluene	0.36	0.51
Ethyl Benzene	0.40	0.70
m,p-Xylene	0.40	3.0
o-Xylene	0.40	0.96

Client Sample ID: RO1_14

Lab ID#: 2211197-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.42
Toluene	0.36	0.41
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_15

Lab ID#: 2211197-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.39
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_16

Lab ID#: 2211197-22A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_16

Lab ID#: 2211197-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.47
Toluene	0.36	0.59
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.22 J
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_18

Lab ID#: 2211197-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.42
Toluene	0.36	0.35 J
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_19

Lab ID#: 2211197-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.45
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_20

Lab ID#: 2211197-25A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_20

Lab ID#: 2211197-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.50
Toluene	0.36	0.25 J
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_17

Lab ID#: 2211197-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.40
Toluene	0.36	0.38
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_08

Lab ID#: 2211197-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.64
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

Client Sample ID: RO1_09

Lab ID#: 2211197-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: RO1_09

Lab ID#: 2211197-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.23	0.10 U
Benzene	0.31	0.36
Toluene	0.40	0.32 J
Ethyl Benzene	0.45	0.20 U
m,p-Xylene	0.45	0.20 U
o-Xylene	0.45	0.20 U



Air Toxics

Client Sample ID: RO1_24

Lab ID#: 2211197-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110906	Date of Collection: 11/7/22 11:59:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 12:08 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.60
Toluene	0.36	0.45
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_23

Lab ID#: 2211197-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110907	Date of Collection: 11/7/22 11:53:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 12:37 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.94
Toluene	0.36	0.56
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_22

Lab ID#: 2211197-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110908	Date of Collection: 11/7/22 11:18:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 01:06 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.82
Toluene	0.36	0.44
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_21

Lab ID#: 2211197-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110909	Date of Collection: 11/7/22 11:41:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 01:35 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	1.1
Benzene	0.28	1.8
Toluene	0.36	2.1
Ethyl Benzene	0.40	0.28 J
m,p-Xylene	0.40	1.3
o-Xylene	0.40	0.48

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_01

Lab ID#: 2211197-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110910	Date of Collection: 11/7/22 9:10:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 02:05 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.6
Toluene	0.36	0.82
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.32 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_01_D

Lab ID#: 2211197-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110911	Date of Collection: 11/7/22 9:16:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 02:34 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.5
Toluene	0.36	0.71
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.26 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO2_02

Lab ID#: 2211197-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110912	Date of Collection: 11/7/22 9:33:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 03:03 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.8
Toluene	0.36	1.8
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.62
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_02_B

Lab ID#: 2211197-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110905	Date of Collection: 11/7/22 9:33:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 11:38 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.14 U
Toluene	0.36	0.18 U
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_03

Lab ID#: 2211197-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110913	Date of Collection: 11/7/22 9:40:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 03:32 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.2
Toluene	0.36	1.7
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.59
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_04

Lab ID#: 2211197-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110914	Date of Collection: 11/7/22 9:45:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 04:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	5.7
Toluene	0.36	1.8
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.67
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_05

Lab ID#: 2211197-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110916	Date of Collection: 11/7/22 9:53:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 05:00 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	2.7
Toluene	0.36	0.96
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.33 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_06

Lab ID#: 2211197-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110917	Date of Collection: 11/7/22 10:03:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 05:29 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.4
Toluene	0.36	0.71
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.24 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_07

Lab ID#: 2211197-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110918	Date of Collection: 11/7/22 10:12:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 05:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	1.9
Toluene	0.36	0.83
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.30 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_12

Lab ID#: 2211197-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110919	Date of Collection: 11/7/22 10:25:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 06:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.49
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.35 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_12_B

Lab ID#: 2211197-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110934	Date of Collection: 11/7/22 10:25:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/10/22 01:47 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.14 U
Toluene	0.36	0.18 U
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_11

Lab ID#: 2211197-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110920	Date of Collection: 11/7/22 10:36:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 06:57 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.54
Toluene	0.36	0.49
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_10

Lab ID#: 2211197-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110921	Date of Collection: 11/7/22 10:41:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 07:26 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.75
Toluene	0.36	0.54
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.21 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_13_D

Lab ID#: 2211197-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110922	Date of Collection: 11/7/22 10:53:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 07:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.48
Toluene	0.36	0.51
Ethyl Benzene	0.40	0.72
m,p-Xylene	0.40	3.0
o-Xylene	0.40	1.0

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_13.

Lab ID#: 2211197-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110923	Date of Collection: 11/7/22 10:53:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 08:24 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.53
Toluene	0.36	0.51
Ethyl Benzene	0.40	0.70
m,p-Xylene	0.40	3.0
o-Xylene	0.40	0.96

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_14

Lab ID#: 2211197-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110924	Date of Collection: 11/7/22 11:10:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 08:54 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.42
Toluene	0.36	0.41
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_15

Lab ID#: 2211197-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110925	Date of Collection: 11/7/22 11:15:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 09:23 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.39
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_16

Lab ID#: 2211197-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110927	Date of Collection: 11/7/22 11:18:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 10:21 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.47
Toluene	0.36	0.59
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.22 J
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_18

Lab ID#: 2211197-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110928	Date of Collection: 11/7/22 11:24:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 10:51 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.42
Toluene	0.36	0.35 J
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: RO1_19

Lab ID#: 2211197-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110929	Date of Collection: 11/7/22 11:29:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 11:20 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.45
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_20

Lab ID#: 2211197-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110930	Date of Collection: 11/7/22 11:34:00 AM
Dil. Factor:	1.02	Date of Analysis: 11/9/22 11:50 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.50
Toluene	0.36	0.25 J
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: RO1_17

Lab ID#: 2211197-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110931	Date of Collection: 11/7/22 12:11:00 PM
Dil. Factor:	1.02	Date of Analysis: 11/10/22 12:19 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.40
Toluene	0.36	0.38
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_08

Lab ID#: 2211197-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110932	Date of Collection: 11/7/22 12:22:00 PM
Dil. Factor:	1.02	Date of Analysis: 11/10/22 12:48 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.21	0.10 U
Benzene	0.28	0.64
Toluene	0.36	0.43
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: RO1_09

Lab ID#: 2211197-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110933	Date of Collection: 11/7/22 12:27:00 PM
Dil. Factor:	1.02	Date of Analysis: 11/10/22 01:17 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.23	0.10 U
Benzene	0.31	0.36
Toluene	0.40	0.32 J
Ethyl Benzene	0.45	0.20 U
m,p-Xylene	0.45	0.20 U
o-Xylene	0.45	0.20 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2211197-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/9/22 10:34 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.20	0.097 U
Benzene	0.27	0.14 U
Toluene	0.35	0.18 U
Ethyl Benzene	0.40	0.20 U
m,p-Xylene	0.40	0.20 U
o-Xylene	0.40	0.20 U

U = The analyte was not present above the Method Detection Limit.

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2211197-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110915	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/9/22 04:31 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	96
Benzene	90
Toluene	94
Ethyl Benzene	108
m,p-Xylene	110
o-Xylene	109

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2211197-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110926	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/9/22 09:52 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	95
Benzene	99
Toluene	98
Ethyl Benzene	103
m,p-Xylene	107
o-Xylene	106

Container Type: NA - Not Applicable

Client Sample ID: CCV

Lab ID#: 2211197-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10110937	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/22 03:15 AM
		Date of Extraction: NA

Compound	%Recovery
1,3-Butadiene	94
Benzene	88
Toluene	91
Ethyl Benzene	94
m,p-Xylene	100
o-Xylene	96

Container Type: NA - Not Applicable

Air Toxics
Deploy Tubes by: W/2/2/2
(Date)

Kit ID: A B C D
(Circle One)

Case Seal#: 1875531

Return Seal#: 1875532

WO#: 2211197

Client: Cleveland Cliffs

PID: P.O.#

Project Name: ICK

Project Manager: Rodak

Site Name: Burns Harbor

Collected by: DP, SJD

Sample Type
(check one)

Target List

Turn Around Time:

☒ Normal

☐ Rush

Specify

Sample Comments:

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list
--------	-----------------------	---------	---------------------	-------------------------------	-----------------------------	------------------------------	----------------------------	----------------	----------------	-----------------	-------------	---------	------------------

01A	R01-24	Z4	1188598	10/19/12	9:19 CST	11/7/12	11:59 CST		X				
02A	R01-23	Z3	1188581	10/19/12	9:38 CST	11/7/12	11:53 CST		X				
03A	R01-22	Z2	1188578	10/19/12	9:38 CST	11/7/12	11:48 CST		X				
04A	R01-21	Z1	1188577	10/19/12	10:01 CST	11/7/12	11:41 CST		X				
05A	R01-01	1	1188436	10/19/12	10:11 CST	11/7/12	9:16 CST		X				
06A	R01-01-D	1	1188439	10/19/12	10:11 CST	11/7/12	9:16 CST		X				
07A	R01-02	2	1188448	10/19/12	10:22 CST	11/7/12	9:33 CST		X				
08A	R01-02-B	2	1188447	10/19/12	10:22 CST	11/7/12	9:33 CST			X			
09A	R01-03	3	1188450	10/19/12	10:27 CST	11/7/12	9:40 CST		X				
10A	R01-04	4	1188451	10/19/12	10:30 CST	11/7/12	9:45 CST		X				
11A	R01-05	5	1188452	10/19/12	10:35 CST	11/7/12	9:53 CST		X				
12A	R01-06	6	1188454	10/19/12	11:18 CST	11/7/12	10:03 CST		X				
13A	R01-07	7	1188457	10/19/12	11:30 CST	11/7/12	10:12 CST		X				

Relinquished by: [Signature] Date: 11/7/12 Time: 14:00
Received by: [Signature] Date: 11/8/12 Time: 0847

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name:

FedEx

Lab Use Only

Custody Seals Intact? Yes No None Blue Ice present or insulated cooler used? Yes No

Sample Condition Upon Receipt: SDR-Genetic file wraps

Deploy Tubes by: 10/27/22

(Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875531 Return Seal#: 1875532

WO#: 221197

Client: Cleveland Cl. Hk

PID: _____ P.O.# _____

Project Name: ICU

Project Manager: Reddy

Site Name: Burns Harbor

Collected by: DP SD

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List		Turn Around Time:
									Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list	

14A	R01-12	12	1188 494	10/19/22	12:10 CST	11/7/22	10:25 CST		X					
15A	R01-12-B	12	1188 532	10/19/22	12:10 CST	11/7/22	10:25 CST				X			
16A	R01-11	11	1188 488	10/19/22	12:20 CST	11/7/22	10:36 CST		X					
17A	R01-10	10	1188 484	10/19/22	12:24 CST	11/7/22	10:41 CST		X					
18A	R01-13-D	13	1188 514	10/19/22	12:31 CST	11/7/22	10:53 CST			X				
19A	R01-13	13	1188 513	10/19/22	12:31 CST	11/7/22	10:53 CST		X					
20A	R01-14	14	1188 535	10/19/22	12:37 CST	11/7/22	11:10 CST		X					
21A	R01-15	15	1188 547	10/19/22	12:43 CST	11/7/22	11:15 CST		X					
22A	R01-16	16	1188 549	10/19/22	12:46 CST	11/7/22	11:18 CST		X					
23A	R01-18	18	1188 562	10/19/22	12:50 CST	11/7/22	11:24 CST		X					
24A	R01-19	19	1188 567	10/19/22	12:54 CST	11/7/22	11:29 CST		X					
25A	R01-20	20	1188 574	10/19/22	12:57 CST	11/7/22	11:34 CST		X					
26A	R01-17	17	1188 559	10/19/22	13:28 CST	11/7/22	12:11 CST		X					

Relinquished by: [Signature] Date: 11/7/22 Time: 14:00 Received by: [Signature] Date: 11/8/22 Time: 0947

Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: [Signature] Custody Seals Intact? Yes No None Blue Ice present or insulated cooler used? Yes No

Sample Condition Upon Receipt: SDR - Generic tie wraps

1/3/2023

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2211631

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 11/23/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2211631

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 11/23/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 01/03/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R02_01	EPA Method 325B
02A	R02_01_D	EPA Method 325B
03A	R02_02	EPA Method 325B
04A	R02_02_B	EPA Method 325B
05A	R02_03	EPA Method 325B
06A	R02_04	EPA Method 325B
07A	R02_05	EPA Method 325B
08A	R02_06	EPA Method 325B
09A	R02_07	EPA Method 325B
10A	R02_12	EPA Method 325B
11A	R02_12_B	EPA Method 325B
12A	R02_11	EPA Method 325B
13A	R02_10	EPA Method 325B
14A	R02_13	EPA Method 325B
15A	R02_13_D	EPA Method 325B
16A	R02_14	EPA Method 325B
17A	R02_15	EPA Method 325B
18A	R02_16	EPA Method 325B
19A	R02_18	EPA Method 325B
20A	R02_19	EPA Method 325B
21A	R02_20	EPA Method 325B
22A	R02_21	EPA Method 325B
23A	R02_22	EPA Method 325B

Continued on next page

WORK ORDER #: 2211631

Work Order Summary

CLIENT:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275	BILL TO:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275
PHONE:	724-227-0148	P.O. #	03289-44-14777
FAX:		PROJECT #	ICR
DATE RECEIVED:	11/23/2022	CONTACT:	Kathleen Kaneko
DATE COMPLETED:	01/03/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
24A	R02_23	EPA Method 325B
25A	R02_24	EPA Method 325B
26A	R02_17	EPA Method 325B
27A	R02_08	EPA Method 325B
28A	R02_09	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 01/03/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2211631

Twenty-eight Carbopack X CA samples were received on November 23, 2022. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

Sample R02_22 was received with loose storage caps. Caps were affixed to the sampling end, but not fully tightened. All sample tubes were received securely in their storage vials. After notification to the client, sample analysis proceeded.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the MDL value.

I - Internal Standard recovery outside acceptance limits

P - Field Duplicate(s) exceed 30%RPD

Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

PI - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.

L - Recovery of bracketing CCV(s) exceeded acceptance limits.

H - Sample analyzed outside of method hold time.

D - Sample duration outside 14+/-1 days

Fe - Field Error or discrepancy

Te - Tube Error or discrepancy

CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_01

Lab ID#: 2211631-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.1
Toluene	0.50	0.59
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_01_D

Lab ID#: 2211631-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.3
Toluene	0.50	0.72
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.28 U

Client Sample ID: R02_02

Lab ID#: 2211631-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.0
Toluene	0.50	0.80
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.28 U

Client Sample ID: R02_02_B

Lab ID#: 2211631-04A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_02_B

Lab ID#: 2211631-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_03

Lab ID#: 2211631-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.6
Toluene	0.50	0.66
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_04

Lab ID#: 2211631-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.9
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.31 J
o-Xylene	0.56	0.28 U

Client Sample ID: R02_05

Lab ID#: 2211631-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_05

Lab ID#: 2211631-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.70
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.29 J
o-Xylene	0.56	0.28 U

Client Sample ID: R02_06

Lab ID#: 2211631-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.52
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_07

Lab ID#: 2211631-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.7
Toluene	0.50	0.98
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.35 J
o-Xylene	0.56	0.28 U

Client Sample ID: R02_12

Lab ID#: 2211631-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_12

Lab ID#: 2211631-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.38 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_12_B

Lab ID#: 2211631-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_11

Lab ID#: 2211631-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.60
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_10

Lab ID#: 2211631-13A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_10

Lab ID#: 2211631-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_13

Lab ID#: 2211631-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.39 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_13_D

Lab ID#: 2211631-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.60
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_14

Lab ID#: 2211631-16A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_14

Lab ID#: 2211631-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.50
Toluene	0.50	0.36 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_15

Lab ID#: 2211631-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.52
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_16

Lab ID#: 2211631-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.61
Toluene	0.50	0.52
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_18

Lab ID#: 2211631-19A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_18

Lab ID#: 2211631-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.62
Toluene	0.50	0.33 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_19

Lab ID#: 2211631-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.86
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_20

Lab ID#: 2211631-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_21

Lab ID#: 2211631-22A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_21

Lab ID#: 2211631-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.98
Toluene	0.50	0.47 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_22

Lab ID#: 2211631-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_23

Lab ID#: 2211631-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.1
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_24

Lab ID#: 2211631-25A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_24

Lab ID#: 2211631-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.58
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_17

Lab ID#: 2211631-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.54
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_08

Lab ID#: 2211631-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.59
Toluene	0.50	0.41 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_09

Lab ID#: 2211631-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R02_09

Lab ID#: 2211631-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.37 J
Toluene	0.50	0.27 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R02_01

Lab ID#: 2211631-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112906	Date of Collection: 11/21/22 11:07:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 11:34 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.1
Toluene	0.50	0.59
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_01_D

Lab ID#: 2211631-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112907	Date of Collection: 11/21/22 11:07:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 12:03 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.3
Toluene	0.50	0.72
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_02

Lab ID#: 2211631-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112908	Date of Collection: 11/21/22 11:19:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 12:33 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.0
Toluene	0.50	0.80
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_02_B

Lab ID#: 2211631-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112905	Date of Collection: 11/21/22 11:19:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 11:05 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_03

Lab ID#: 2211631-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112909	Date of Collection: 11/21/22 11:25:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 01:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.6
Toluene	0.50	0.66
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_04

Lab ID#: 2211631-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112910	Date of Collection: 11/21/22 11:28:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 01:31 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.9
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.31 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_05

Lab ID#: 2211631-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112911	Date of Collection: 11/21/22 11:41:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 02:00 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.70
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.29 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_06

Lab ID#: 2211631-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112912	Date of Collection: 11/21/22 11:52:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 02:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.52
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_07

Lab ID#: 2211631-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112913	Date of Collection: 11/21/22 11:59:00 A
Dil. Factor:	1.04	Date of Analysis: 11/29/22 02:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.7
Toluene	0.50	0.98
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.35 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_12

Lab ID#: 2211631-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112914	Date of Collection: 11/21/22 12:09:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 03:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.38 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_12_B

Lab ID#: 2211631-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112934	Date of Collection: 11/21/22 12:09:00 P
Dil. Factor:	1.04	Date of Analysis: 11/30/22 01:13 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_11

Lab ID#: 2211631-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112916	Date of Collection: 11/21/22 12:17:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 04:27 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.60
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_10

Lab ID#: 2211631-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112917	Date of Collection: 11/21/22 12:22:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 04:56 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_13

Lab ID#: 2211631-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112918	Date of Collection: 11/21/22 12:33:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 05:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.39 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_13_D

Lab ID#: 2211631-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112919	Date of Collection: 11/21/22 12:33:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 05:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.60
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_14

Lab ID#: 2211631-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112920	Date of Collection: 11/21/22 12:44:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 06:24 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.50
Toluene	0.50	0.36 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_15

Lab ID#: 2211631-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112921	Date of Collection: 11/21/22 12:48:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 06:53 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.52
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_16

Lab ID#: 2211631-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112922	Date of Collection: 11/21/22 12:51:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 07:22 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.61
Toluene	0.50	0.52
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_18

Lab ID#: 2211631-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112923	Date of Collection: 11/21/22 12:57:00 P
Dil. Factor:	1.04	Date of Analysis: 11/29/22 07:51 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.62
Toluene	0.50	0.33 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R02_19

Lab ID#: 2211631-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112924	Date of Collection: 11/21/22 1:01:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 08:21 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.86
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_20

Lab ID#: 2211631-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112925	Date of Collection: 11/21/22 1:06:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 08:50 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R02_21

Lab ID#: 2211631-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112927	Date of Collection: 11/21/22 1:12:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 09:48 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.98
Toluene	0.50	0.47 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_22

Lab ID#: 2211631-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112928	Date of Collection: 11/21/22 1:17:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 10:17 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_23

Lab ID#: 2211631-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112929	Date of Collection: 11/21/22 1:21:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 10:47 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.1
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_24

Lab ID#: 2211631-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112930	Date of Collection: 11/21/22 1:27:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 11:16 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.58
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_17

Lab ID#: 2211631-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112931	Date of Collection: 11/21/22 1:43:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/29/22 11:45 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.54
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_08

Lab ID#: 2211631-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112932	Date of Collection: 11/21/22 1:54:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/30/22 12:14 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.59
Toluene	0.50	0.41 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R02_09

Lab ID#: 2211631-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112933	Date of Collection: 11/21/22 1:59:00 PM
Dil. Factor:	1.04	Date of Analysis: 11/30/22 12:44 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.37 J
Toluene	0.50	0.27 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2211631-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/29/22 09:42 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.28	0.13 U
Benzene	0.37	0.18 U
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

U = The analyte was not present above the Method Detection Limit.

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2211631-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112915	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/29/22 03:58 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	94
Benzene	88
Toluene	87
Ethyl Benzene	85
m,p-Xylene	85
o-Xylene	84

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2211631-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112926	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/29/22 09:19 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	103
Benzene	93
Toluene	94
Ethyl Benzene	93
m,p-Xylene	94
o-Xylene	93

Container Type: NA - Not Applicable

Client Sample ID: CCV

Lab ID#: 2211631-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10112937	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/30/22 02:41 AM
		Date of Extraction: NA

Compound	%Recovery
1,3-Butadiene	95
Benzene	90
Toluene	94
Ethyl Benzene	100
m,p-Xylene	101
o-Xylene	100

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 11/12/22 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875547 Return Seal#: 1875548

WO#:

2211631

Client: Cleveland CHHS

PID: P.O.#

Project Name: ICR

Project Manager: Rodak

Site Name: Burns Harbor

Collected by: DP

Sample Type (check one)
☒ Routine Sample
☐ Field Duplicate
☐ Field Blank
☐ Benzene
☐ Project VOC list

Turn Around Time:
☒ Normal
☐ Rush
 Specify: _____

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)	Target List	Turn Around Time:
--------	-----------------------	---------	---------------------	-------------------------------	-----------------------------	------------------------------	----------------------------	----------------	-------------------------	-------------	-------------------

01A	R02-01	1	1185837	11/7/22	9:21 CST	11/21/22	11:07 CST		<input checked="" type="checkbox"/> Routine Sample		
02A	R02-01-D	1	1185854	11/7/22	9:41 CST	11/21/22	11:07 CST		<input type="checkbox"/> Field Duplicate		
03A	R02-02	2	1185891	11/7/22	9:35 CST	11/21/22	11:14 CST		<input type="checkbox"/> Field Blank		
04A	R02-02-B	2	1185881	11/7/22	9:35 CST	11/21/22	11:14 CST		<input type="checkbox"/> Benzene		
05A	R02-03	3	1185900	11/7/22	9:41 CST	11/21/22	11:25 CST		<input type="checkbox"/> Project VOC list		
06A	R02-04	4	1185967	11/7/22	9:46 CST	11/21/22	11:28 CST				
07A	R02-05	5	1185944	11/7/22	9:53 CST	11/21/22	11:41 CST				
08A	R02-06	6	1185971	11/7/22	10:03 CST	11/21/22	11:52 CST				
09A	R02-07	7	1186148	11/7/22	10:12 CST	11/21/22	11:59 CST				
10A	R02-12	12	1186340	11/7/22	10:27 CST	11/21/22	12:09 CST				
11A	R02-12-B	12	1186441	11/7/22	10:27 CST	11/21/22	12:09 CST				
12A	R02-11	11	1186341	11/7/22	10:37 CST	11/21/22	12:17 CST				
13A	R02-10	10	1186332	11/7/22	10:43 CST	11/21/22	12:22 CST				

Relinquished by: [Signature] Date: 11/22/22 Time: 9:00
 Received by: [Signature] Date: 11/23/22 Time: 1:22

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: [Signature]

Custody Seals Intact? Yes No None Blue Ice present or insulated cooler used? Yes No No
 Sample Condition Upon Receipt: [Signature]

Avg Ambient Temperature: _____ Units: °F °C
 Avg Barometric Pressure: _____ Units: hPa atm inHg mmHg

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 11/12/22
(Date)

Kit ID: A B C D
(Circle One)

Case Seal#: 1875547 Return Seal#: 1875548

WO#: 2211631

Client: Cleveland-CHHS

PID: P.O.#

Project Name: Fenwick ICK

Project Manager: Roder

Site Name: Burns Harbor

Collected by: DP

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List	Turn Around Time:
									Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list

14A	R02-13	13	1186394	11/17/22	10:55 CST	11/21/22	12:33 CST		X					
5A	R02-13-D	13	1186429	11/17/22	10:55 CST	11/21/22	12:33 CST			X				
16A	R02-14	14	1186459	11/17/22	11:11 CST	11/21/22	12:44 CST		X					
4A	R02-15	15	1186470	11/17/22	11:15 CST	11/21/22	12:48 CST		X					
18A	R02-16	16	1186474	11/17/22	11:19 CST	11/21/22	12:51 CST		X					
19A	R02-18	18	1186560	11/17/22	11:25 CST	11/21/22	12:57 CST		X					
20A	R02-19	19	1186539	11/17/22	11:30 CST	11/21/22	13:01 CST		X					
21A	R02-20	20	1186558	11/17/22	11:35 CST	11/21/22	13:06 CST		X					
22A	R02-21	21	1188099	11/17/22	11:42 CST	11/21/22	13:12 CST		X					
23A	R02-22	22	1188140	11/17/22	11:48 CST	11/21/22	13:17 CST		X					
24A	R02-23	23	1188161	11/17/22	11:53 CST	11/21/22	13:21 CST		X					
25A	R02-24	24	1188210	11/17/22	12:00 CST	11/21/22	13:27 CST		X					
26A	R02-17	17	1186492	11/17/22	12:12 CST	11/21/22	13:43 CST		X					

Relinquished by: [Signature] Date: 11/22/22 Time: 9:00 Received by: [Signature] Date: 11/23/22 Time: 10:20

Relinquished by: [Signature] Date: Time: Received by: Date: Time:

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: [Signature]

Custody Seals Intact? Yes No Sample Condition Upon Receipt: [Signature]

Lab Use Only

Blue Ice present or insulated cooler used? Yes No

Units: hPa atm inHg mmHg

Eurofins Air Toxics, Inc. 180 Blue Ravine Rd. Suite B Folsom, CA 95630 (916) 985-1000 Fax: (916) 351-8279

12/22/2022

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: 325B, Integrated Facility

Project #:

Workorder #: 2212154

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 12/9/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2212154

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # 325B, Integrated Facility

DATE RECEIVED: 12/09/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 12/22/2022

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R03_01	EPA Method 325B
02A	R03_01_D	EPA Method 325B
03A	R03_02	EPA Method 325B
04A	R03_02_B	EPA Method 325B
05A	R03_03	EPA Method 325B
06A	R03_04	EPA Method 325B
07A	R03_05	EPA Method 325B
08A	R03_06	EPA Method 325B
09A	R03_07	EPA Method 325B
10A	R03_12	EPA Method 325B
11A	R03_12_B	EPA Method 325B
12A	R03_11	EPA Method 325B
13A	R03_10	EPA Method 325B
14A	R03_13	EPA Method 325B
15A	R03_13_D	EPA Method 325B
16A	R03_14	EPA Method 325B
17A	R03_15	EPA Method 325B
18A	R03_16	EPA Method 325B
19A	R03_18	EPA Method 325B
20A	R03_19	EPA Method 325B
21A	R03_20	EPA Method 325B
22A	R03_21	EPA Method 325B
23A	R03_22	EPA Method 325B

Continued on next page

WORK ORDER #: 2212154

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # 325B, Integrated Facility

DATE RECEIVED: 12/09/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 12/22/2022

FRACTION #

NAME

TEST

24A	R03_23	EPA Method 325B
25A	R03_24	EPA Method 325B
26A	R03_17	EPA Method 325B
27A	R03_08	EPA Method 325B
28A	R03_09	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 12/22/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2212154

Twenty-eight Carbopack X CA samples were received on December 09, 2022. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

Sample R03_02 was received with loose storage caps. Caps were affixed to the sampling end, but not fully tightened. All sample tubes were received securely in their storage vials. After notification to the client, sample analysis proceeded.

Analytical Notes

All samples were collected over a 15-day period.

The field blank R03_12_B contains greater than one-third of the measured target analyte Benzene in 2 samples. Associated sample results are B-flagged to indicate a likely high bias due to field blank background.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- Pl - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days
- Fe - Field Error or discrepancy
- Te - Tube Error or discrepancy
- CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified

- b-File was quantified by a second column and detector

- r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_01

Lab ID#: 2212154-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	2.7
Toluene	0.50	1.2
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.38 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_01_D

Lab ID#: 2212154-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	2.9
Toluene	0.50	1.4
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.43 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_02

Lab ID#: 2212154-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	4.1
Toluene	0.50	1.6
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.45 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_02_B

Lab ID#: 2212154-04A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_02_B

Lab ID#: 2212154-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.19 J
Toluene	0.50	0.23 U
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_03

Lab ID#: 2212154-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	4.0
Toluene	0.50	1.5
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.46 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_04

Lab ID#: 2212154-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	3.6
Toluene	0.50	1.4
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.46 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_05

Lab ID#: 2212154-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_05

Lab ID#: 2212154-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.9
Toluene	0.50	0.96
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.29 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_06

Lab ID#: 2212154-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.3
Toluene	0.50	0.78
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.27 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_07

Lab ID#: 2212154-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.93
Toluene	0.50	0.72
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_12

Lab ID#: 2212154-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_12

Lab ID#: 2212154-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.92
Toluene	0.50	0.61
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_12_B

Lab ID#: 2212154-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.23 J
Toluene	0.50	0.23 U
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_11

Lab ID#: 2212154-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.68 B
Toluene	0.50	0.62
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_10

Lab ID#: 2212154-13A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_10

Lab ID#: 2212154-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.86
Toluene	0.50	0.62
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_13

Lab ID#: 2212154-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.84
Toluene	0.50	0.61
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.54
o-Xylene	0.56	0.26 U

Client Sample ID: R03_13_D

Lab ID#: 2212154-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.90
Toluene	0.50	0.63
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.52 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_14

Lab ID#: 2212154-16A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_14

Lab ID#: 2212154-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.82
Toluene	0.50	0.59
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_15

Lab ID#: 2212154-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.98
Toluene	0.50	0.68
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.27 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_16

Lab ID#: 2212154-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.86
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_18

Lab ID#: 2212154-19A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_18

Lab ID#: 2212154-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.74
Toluene	0.50	0.51
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_19

Lab ID#: 2212154-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.76
Toluene	0.50	0.58
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_20

Lab ID#: 2212154-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.83
Toluene	0.50	0.67
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_21

Lab ID#: 2212154-22A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_21

Lab ID#: 2212154-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.84
Toluene	0.50	0.56
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_22

Lab ID#: 2212154-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.2
Toluene	0.50	0.69
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_23

Lab ID#: 2212154-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.3
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.34 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_24

Lab ID#: 2212154-25A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_24

Lab ID#: 2212154-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.95
Toluene	0.50	0.56
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_17

Lab ID#: 2212154-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.88
Toluene	0.50	0.81
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.39 J
o-Xylene	0.56	0.26 U

Client Sample ID: R03_08

Lab ID#: 2212154-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.76
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

Client Sample ID: R03_09

Lab ID#: 2212154-28A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R03_09

Lab ID#: 2212154-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.45 B
Toluene	0.50	0.46
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U



Air Toxics

Client Sample ID: R03_01

Lab ID#: 2212154-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120906	Date of Collection: 12/6/22 9:26:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 03:31 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	2.7
Toluene	0.50	1.2
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.38 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_01_D

Lab ID#: 2212154-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120907	Date of Collection: 12/6/22 9:26:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 04:00 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	2.9
Toluene	0.50	1.4
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.43 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_02

Lab ID#: 2212154-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120908	Date of Collection: 12/6/22 9:14:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 04:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	4.1
Toluene	0.50	1.6
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.45 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_02_B

Lab ID#: 2212154-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120905	Date of Collection: 12/6/22 9:14:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 03:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.19 J
Toluene	0.50	0.23 U
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_03

Lab ID#: 2212154-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120909	Date of Collection: 12/6/22 9:09:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 04:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	4.0
Toluene	0.50	1.5
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.46 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_04

Lab ID#: 2212154-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120910	Date of Collection: 12/6/22 9:05:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 05:29 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	3.6
Toluene	0.50	1.4
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.46 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_05

Lab ID#: 2212154-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120911	Date of Collection: 12/6/22 8:59:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 05:58 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.9
Toluene	0.50	0.96
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.29 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_06

Lab ID#: 2212154-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120912	Date of Collection: 12/6/22 8:45:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 06:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.3
Toluene	0.50	0.78
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.27 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_07

Lab ID#: 2212154-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120913	Date of Collection: 12/6/22 8:34:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 06:57 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.93
Toluene	0.50	0.72
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_12

Lab ID#: 2212154-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120914	Date of Collection: 12/6/22 10:44:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 07:27 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.92
Toluene	0.50	0.61
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_12_B

Lab ID#: 2212154-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120934	Date of Collection: 12/6/22 10:44:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 05:23 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.23 J
Toluene	0.50	0.23 U
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_11

Lab ID#: 2212154-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120916	Date of Collection: 12/6/22 10:53:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 08:26 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.68 B
Toluene	0.50	0.62
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_10

Lab ID#: 2212154-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120917	Date of Collection: 12/6/22 10:56:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 08:56 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.86
Toluene	0.50	0.62
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_13

Lab ID#: 2212154-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120918	Date of Collection: 12/6/22 10:37:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 09:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.84
Toluene	0.50	0.61
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.54
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_13_D

Lab ID#: 2212154-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120919	Date of Collection: 12/6/22 10:37:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 09:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.90
Toluene	0.50	0.63
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.52 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_14

Lab ID#: 2212154-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120920	Date of Collection: 12/6/22 10:32:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 10:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.82
Toluene	0.50	0.59
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_15

Lab ID#: 2212154-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120921	Date of Collection: 12/6/22 10:26:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 10:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.98
Toluene	0.50	0.68
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.27 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_16

Lab ID#: 2212154-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120922	Date of Collection: 12/6/22 10:20:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 11:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.86
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_18

Lab ID#: 2212154-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120923	Date of Collection: 12/6/22 10:15:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/9/22 11:54 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.74
Toluene	0.50	0.51
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_19

Lab ID#: 2212154-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120924	Date of Collection: 12/6/22 10:11:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 12:24 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.76
Toluene	0.50	0.58
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R03_20

Lab ID#: 2212154-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120925	Date of Collection: 12/6/22 10:06:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 12:54 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.83
Toluene	0.50	0.67
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_21

Lab ID#: 2212154-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120927	Date of Collection: 12/6/22 10:02:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 01:54 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.84
Toluene	0.50	0.56
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_22

Lab ID#: 2212154-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120928	Date of Collection: 12/6/22 9:57:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 02:24 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.2
Toluene	0.50	0.69
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.30 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_23

Lab ID#: 2212154-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120929	Date of Collection: 12/6/22 9:51:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 02:54 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	1.3
Toluene	0.50	0.75
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.34 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_24

Lab ID#: 2212154-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120930	Date of Collection: 12/6/22 9:40:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 03:24 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.95
Toluene	0.50	0.56
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_17

Lab ID#: 2212154-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120931	Date of Collection: 12/6/22 11:24:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 03:54 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.88
Toluene	0.50	0.81
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.39 J
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

Container Type: Carbopack X CA

Client Sample ID: R03_08

Lab ID#: 2212154-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120932	Date of Collection: 12/6/22 11:06:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 04:24 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.76
Toluene	0.50	0.64
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

Container Type: Carbopack X CA

Client Sample ID: R03_09

Lab ID#: 2212154-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120933	Date of Collection: 12/6/22 11:12:00 AM
Dil. Factor:	1.04	Date of Analysis: 12/10/22 04:53 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.13 U
Benzene	0.38	0.45 B
Toluene	0.50	0.46
Ethyl Benzene	0.56	0.26 U
m,p-Xylene	0.56	0.26 U
o-Xylene	0.56	0.26 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2212154-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/9/22 02:08 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.28	0.12 U
Benzene	0.37	0.17 U
Toluene	0.48	0.22 U
Ethyl Benzene	0.54	0.25 U
m,p-Xylene	0.54	0.25 U
o-Xylene	0.54	0.25 U

U = The analyte was not present above the Method Detection Limit.

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2212154-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120915	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/9/22 07:57 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	88
Benzene	95
Toluene	109
Ethyl Benzene	102
m,p-Xylene	98
o-Xylene	106

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2212154-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120926	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/10/22 01:24 AM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	102
Benzene	99
Toluene	110
Ethyl Benzene	103
m,p-Xylene	103
o-Xylene	108

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2212154-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10120935	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/10/22 05:53 AM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	92
Benzene	99
Toluene	110
Ethyl Benzene	98
m,p-Xylene	98
o-Xylene	106

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 12/3/22 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 18755575

Return Seal#: 1875576

WO#:

2212154

Client: Cleveland CHHS

PID:

P.O.#

Project Name: ICK

Project Manager: Roda K

Site Name: Burns Harbor

Collected by: D. Pearson

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List		Turn Around Time:
									Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list	

AA	R03-01	1	1188072	11/21/22	11:06:57	12/4/22	9:26:00		X						Normal
BA	R03-01-D	1	1188107	11/21/22	11:08:57	12/4/22	9:26:00			X					
CA	R03-02	2	1188122	11/21/22	11:21:57	12/4/22	9:14:00		X						
DA	R03-02-B	2	1188113	11/21/22	11:21:57	12/4/22	9:14:00				X				
EA	R03-03	3	1188127	11/21/22	11:26:57	12/4/22	9:09:00		X						
FA	R03-04	4	1188131	11/21/22	11:29:57	12/4/22	9:05:00		X						
GA	R03-05	5	1188132	11/21/22	11:43:57	12/4/22	8:59:00		X						
HA	R03-06	6	1188136	11/21/22	11:52:57	12/4/22	8:54:00		X						
IA	R03-07	7	1188139	11/21/22	12:00:57	12/4/22	8:54:00		X						
JA	R03-12	12	1188174	11/21/22	12:11:57	12/4/22	10:44:00		X						
KA	R03-12-B	12	1188189	11/21/22	12:11:57	12/4/22	10:44:00				X				
LA	R03-11	11	1188165	11/21/22	12:18:57	12/4/22	10:53:00		X						
MA	R03-10	10	1188164	11/21/22	12:24:57	12/4/22	10:56:00		X						

Relinquished by: [Signature] Date: 12/8/22 Time: 12:00 Received by: [Signature] Date: 12/19/22 Time: 0933

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind.

Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Felts

Custody Seals Intact? (Yes) No None Blue Ice present or insulated cooler used? (Yes) No

Sample Condition Upon Receipt: Good

Avg Barometric Pressure: 998 Units: inPa atm inHg mmHg

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 12/3/22 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875575

WO#: 2212451

Return Seal#: 1875576

Client:

PID: Cleveland C1145

Project Name:

Project Manager:

P.O. # Reckard

Site Name:

Burns Harbor

Collected by:

DP

Sample Type (check one)

Target List

Turn Around Time:

☒ Normal

☐ Rush

Specify

Sample Comments:

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list	Turn Around Time
SA	R03-13	13	1188182	11/21/22	12:34:57	12/6/22	10:37		X					
SA	R03-13-D	13	1188187	11/21/22	12:34:57	12/6/22	10:37			X				
SA	R03-14	14	1188195	11/21/22	12:46:57	12/6/22	10:32		X					
SA	R03-15	15	1188199	11/21/22	12:50:57	12/6/22	10:26		X					
SA	R03-16	16	1188216	11/21/22	12:53:57	12/6/22	10:20		X					
SA	R03-18	17	1188222	11/21/22	12:58:57	12/6/22	10:15		X					
SA	R03-19	18	1188225	11/21/22	13:02:57	12/6/22	10:11		X					
SA	R03-20	19	1188232	11/21/22	13:07:57	12/6/22	10:06		X					
SA	R03-21	20	1188234	11/21/22	13:12:57	12/6/22	10:02		X					
SA	R03-22	22	1188238	11/21/22	13:17:57	12/6/22	9:57		X					
SA	R03-23	23	1188244	11/21/22	13:22:57	12/6/22	9:51A		X					
SA	R03-24	24	1188246	11/21/22	13:28:57	12/6/22	9:40A		X					
SA	R03-17	17	1188219	11/21/22	13:45:57	12/6/22	11:24		X					
Relinquished by:	<u>[Signature]</u>	Date	Time	Received by:	Date	Time								
Relinquished by:	<u>[Signature]</u>	12-8-22	12:00	<u>[Signature]</u>	12/9/22	0933								

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name:

Red 8

Lab Use Only

Custody Seals Intact? (Yes) No

Sample Condition Upon Receipt:

Blue Ice present or insulated cooler used?

Yes No

Avg Ambient Temperature:

Units: °F

Avg Barometric Pressure:

Units: inHg

Units: inHg

WO#:

22454

Eurofins Air Toxics, Inc. 180 Blue Ravine Rd. Suite B Folsom, CA 95630 (916) 985-1000 Fax: (916) 351-8279

1/18/2023

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2212541

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 12/22/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2212541

Work Order Summary

CLIENT:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275	BILL TO:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275
PHONE:	724-227-0148	P.O. #	03289-44-14777
FAX:		PROJECT #	ICR
DATE RECEIVED:	12/22/2022	CONTACT:	Kathleen Kaneko
DATE COMPLETED:	01/17/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R04-1B	EPA Method 325B
02A	R04-06	EPA Method 325B
03A	R04-05	EPA Method 325B
04A	R04-04	EPA Method 325B
05A	R04-03	EPA Method 325B
06A	R04-02	EPA Method 325B
07A	R04-01	EPA Method 325B
08A	R04-24	EPA Method 325B
09A	R04-23	EPA Method 325B
10A	R04-22	EPA Method 325B
11A	R04-21	EPA Method 325B
12A	R04-20	EPA Method 325B
13A	R04-16	EPA Method 325B
14A	R04-15	EPA Method 325B
15A	R04-14	EPA Method 325B
16A	R04-13	EPA Method 325B
17A	R04-12	EPA Method 325B
18A	R04-11	EPA Method 325B
19A	R04-10	EPA Method 325B
20A	R04-17	EPA Method 325B
21A	R04-08	EPA Method 325B
22A	R04-09	EPA Method 325B
23A	R04-07	EPA Method 325B

Continued on next page

WORK ORDER #: 2212541

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 12/22/2022

CONTACT: Kathleen Kaneko

DATE COMPLETED: 01/17/2023

FRACTION #

NAME

TEST

24A	R04-19	EPA Method 325B
25A	R04-1B	EPA Method 325B
26A	R04-2B	EPA Method 325B
27A	R04-12B	EPA Method 325B
28A	R04-13D	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 01/18/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-017, Effective date: 10/18/2022, Expiration date: 10/17/2023.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2212541

Twenty-eight Carbopack X CA samples were received on December 22, 2022. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All samples were collected over a 13-day period.

The field blank sample R04-1B contains greater than one-third of the measured target analyte Benzene in 10 samples. Associated sample results are B-flagged to indicate a likely high bias due to field blank background.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- PI - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days
- Fe - Field Error or discrepancy
- Te - Tube Error or discrepancy
- CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-1B

Lab ID#: 2212541-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.71 B
Toluene	0.53	0.37 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-06

Lab ID#: 2212541-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.8
Toluene	0.53	0.79
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.31 J
o-Xylene	0.60	0.30 U

Client Sample ID: R04-05

Lab ID#: 2212541-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	2.8
Toluene	0.53	1.1
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.32 J
o-Xylene	0.60	0.30 U

Client Sample ID: R04-04

Lab ID#: 2212541-04A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-04

Lab ID#: 2212541-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	0.72
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-03

Lab ID#: 2212541-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.71 B
Toluene	0.53	0.58
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-02

Lab ID#: 2212541-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.82
Toluene	0.53	0.60
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-01

Lab ID#: 2212541-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-01

Lab ID#: 2212541-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.86
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-24

Lab ID#: 2212541-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.80
Toluene	0.53	0.51 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-23

Lab ID#: 2212541-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.1
Toluene	0.53	0.67
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-22

Lab ID#: 2212541-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-22

Lab ID#: 2212541-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.1
Toluene	0.53	0.61
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-21

Lab ID#: 2212541-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	1.1
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.43 J
o-Xylene	0.60	0.30 U

Client Sample ID: R04-20

Lab ID#: 2212541-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	0.86
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.31 J
o-Xylene	0.60	0.30 U

Client Sample ID: R04-16

Lab ID#: 2212541-13A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-16

Lab ID#: 2212541-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.56 B
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-15

Lab ID#: 2212541-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.49 B
Toluene	0.53	0.50 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-14

Lab ID#: 2212541-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.58 B
Toluene	0.53	0.38 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-13

Lab ID#: 2212541-16A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-13

Lab ID#: 2212541-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.58 B
Toluene	0.53	0.57
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-12

Lab ID#: 2212541-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.60 B
Toluene	0.53	0.44 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-11

Lab ID#: 2212541-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.77
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-10

Lab ID#: 2212541-19A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-10

Lab ID#: 2212541-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.75
Toluene	0.53	0.54
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-17

Lab ID#: 2212541-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.59 B
Toluene	0.53	0.49 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-08

Lab ID#: 2212541-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.72
Toluene	0.53	0.59
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-09

Lab ID#: 2212541-22A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-09

Lab ID#: 2212541-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.51 B
Toluene	0.53	0.45 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-07

Lab ID#: 2212541-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	4.9
Toluene	0.53	1.6
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.45 J
o-Xylene	0.60	0.30 U

Client Sample ID: R04-19

Lab ID#: 2212541-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.83
Toluene	0.53	0.57
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-1B

Lab ID#: 2212541-25A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-1B

Lab ID#: 2212541-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.24 J
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-2B

Lab ID#: 2212541-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.21 U
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-12B

Lab ID#: 2212541-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.21 U
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R04-13D

Lab ID#: 2212541-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R04-13D

Lab ID#: 2212541-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.68 B
Toluene	0.53	0.49 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U



Air Toxics

Client Sample ID: R04-1B

Lab ID#: 2212541-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122906	Date of Collection: 12/19/22 2:37:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 12:24 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.71 B
Toluene	0.53	0.37 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-06

Lab ID#: 2212541-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122907	Date of Collection: 12/19/22 1:27:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 12:52 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.8
Toluene	0.53	0.79
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.31 J
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-05

Lab ID#: 2212541-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122908	Date of Collection: 12/19/22 1:17:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 01:21 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	2.8
Toluene	0.53	1.1
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.32 J
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-04

Lab ID#: 2212541-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122909	Date of Collection: 12/19/22 1:10:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 01:50 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	0.72
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-03

Lab ID#: 2212541-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122910	Date of Collection: 12/19/22 1:05:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 02:18 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.71 B
Toluene	0.53	0.58
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-02

Lab ID#: 2212541-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122911	Date of Collection: 12/19/22 12:57:00 P
Dil. Factor:	1.04	Date of Analysis: 12/29/22 02:47 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.82
Toluene	0.53	0.60
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-01

Lab ID#: 2212541-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122912	Date of Collection: 12/19/22 12:42:00 P
Dil. Factor:	1.04	Date of Analysis: 12/29/22 03:16 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.86
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-24

Lab ID#: 2212541-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122913	Date of Collection: 12/19/22 3:11:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 03:45 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.80
Toluene	0.53	0.51 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-23

Lab ID#: 2212541-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122914	Date of Collection: 12/19/22 3:06:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 04:14 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.1
Toluene	0.53	0.67
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-22

Lab ID#: 2212541-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122916	Date of Collection: 12/19/22 3:02:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 05:11 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.1
Toluene	0.53	0.61
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-21

Lab ID#: 2212541-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122917	Date of Collection: 12/19/22 2:55:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 05:40 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	1.1
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.43 J
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R04-20

Lab ID#: 2212541-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122918	Date of Collection: 12/19/22 2:50:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 06:09 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	1.3
Toluene	0.53	0.86
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.31 J
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R04-16

Lab ID#: 2212541-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122919	Date of Collection: 12/19/22 2:31:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 06:38 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.56 B
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-15

Lab ID#: 2212541-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122920	Date of Collection: 12/19/22 2:26:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 07:06 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.49 B
Toluene	0.53	0.50 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-14

Lab ID#: 2212541-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122921	Date of Collection: 12/19/22 2:22:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 07:35 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.58 B
Toluene	0.53	0.38 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-13

Lab ID#: 2212541-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122922	Date of Collection: 12/19/22 2:11:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 08:04 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.58 B
Toluene	0.53	0.57
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-12

Lab ID#: 2212541-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122923	Date of Collection: 12/19/22 1:41:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 08:33 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.60 B
Toluene	0.53	0.44 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-11

Lab ID#: 2212541-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122924	Date of Collection: 12/19/22 1:58:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 09:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.77
Toluene	0.53	0.56
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-10

Lab ID#: 2212541-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122925	Date of Collection: 12/19/22 2:03:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 09:31 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.75
Toluene	0.53	0.54
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-17

Lab ID#: 2212541-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122927	Date of Collection: 12/19/22 3:26:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 10:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.59 B
Toluene	0.53	0.49 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-08

Lab ID#: 2212541-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122928	Date of Collection: 12/20/22 1:31:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 10:57 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.72
Toluene	0.53	0.59
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R04-09

Lab ID#: 2212541-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122929	Date of Collection: 12/20/22 1:38:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 11:26 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.51 B
Toluene	0.53	0.45 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-07

Lab ID#: 2212541-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122930	Date of Collection: 12/19/22 1:36:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/29/22 11:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	4.9
Toluene	0.53	1.6
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.45 J
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-19

Lab ID#: 2212541-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122931	Date of Collection: 12/19/22 2:43:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/30/22 12:24 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.83
Toluene	0.53	0.57
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-1B

Lab ID#: 2212541-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122932	Date of Collection: 12/19/22 12:42:00 P
Dil. Factor:	1.04	Date of Analysis: 12/30/22 12:53 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.24 J
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R04-2B

Lab ID#: 2212541-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122905	Date of Collection: 12/19/22 12:57:00 P
Dil. Factor:	1.04	Date of Analysis: 12/29/22 11:55 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.21 U
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-12B

Lab ID#: 2212541-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122933	Date of Collection: 12/19/22 3:47:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/30/22 01:22 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.21 U
Toluene	0.53	0.27 U
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R04-13D

Lab ID#: 2212541-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122934	Date of Collection: 12/19/22 2:11:00 PM
Dil. Factor:	1.04	Date of Analysis: 12/30/22 01:52 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.68 B
Toluene	0.53	0.49 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2212541-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/29/22 11:06 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.30	0.14 U
Benzene	0.40	0.20 U
Toluene	0.51	0.26 U
Ethyl Benzene	0.58	0.29 U
m,p-Xylene	0.58	0.29 U
o-Xylene	0.58	0.29 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.20 ug/m3

Toluene MDL value = 0.26 ug/m3

Ethyl Benzene MDL value = 0.29 ug/m3

m,p-Xylene MDL value = 0.29 ug/m3

o-Xylene MDL value = 0.29 ug/m3

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2212541-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122915	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/29/22 04:43 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	107
Benzene	98
Toluene	104
Ethyl Benzene	97
m,p-Xylene	94
o-Xylene	99

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2212541-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122926	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/29/22 10:00 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	93
Benzene	96
Toluene	99
Ethyl Benzene	91
m,p-Xylene	88
o-Xylene	90

Container Type: NA - Not Applicable

Client Sample ID: CCV

Lab ID#: 2212541-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10122937	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 12/30/22 03:19 AM
		Date of Extraction: NA

Compound	%Recovery
1,3-Butadiene	108
Benzene	89
Toluene	98
Ethyl Benzene	91
m,p-Xylene	90
o-Xylene	92

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 12/11/22 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875 631 Return Seal#: 1875 632

WO#:

2212541

Client: Cleveland LHS

PID: P.O.#

Project Name: ICR

Project Manager: Fedala

Site Name: Burns Harbor

Collected by: SD/DP

Sample Type (check one)

Target List

Turn Around Time:

☒ Normal

☐ Rush Specify

Sample Comments:

1188449

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list
4A	R04-16	14	1188549	12.6.22	10:20	12/14/22	14:31		X				
4A	R04-15	15	1188547	12.6.22	10:20	12/14/22	14:26		X				
4A	R04-14	14	1188535	12.6.22	10:32	12/14/22	14:22		X				
4A	R04-13	13	1188514	12.6.22	10:37	12/14/22	14:11		X				
4A	R04-12	12	1188494	12.6.22	10:44	12/14/22	13:41		X				
4A	R04-11	11	1188488	12.6.22	10:53	12/14/22	13:58		X				
4A	R04-10	10	1188484	12.6.22	10:56	12/14/22	14:03		X				
4A	R04-17	17	1188559	12.6.22	11:24	12/14/22	15:26		X				
4A	R04-08	8	1188463	12.6.22	11:08	12/14/22	13:31		X				
4A	R04-09	9	1188482	12.6.22	11:12	12/14/22	13:38		X				
4A	R04-07	7	1188457	12.6.22	8:34	12/14/22	13:36		X				
4A	R04-19	19	1188567	12.6.22	10:11	12/14/22	14:43		X				

Relinquished by:

Date: 12/12/22 Time: 16:00

Received by:

Date: 12/22/22 Time: 09:50

Relinquished by:

Date: 12/12/22 Time: 16:00

Received by:

Date: 12/22/22 Time: 09:50

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, state, federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name:

Custody Seals Intact? Yes No None

Blue Ice present or insulated cooler used?

Yes No

Units: hPa atm inHg mmHg

Avg Barometric Pressure:

Units: °F °C

Avg Ambient Temperature:

Deploy Times by: 17:11:17

Kit ID: A B C D Case Seal#: 1575031 Return Seal#: 1575632

WFO-35-

221254

[illegible]

2/10/2023

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2301045

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 1/6/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2301045

Work Order Summary

CLIENT:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275	BILL TO:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275
PHONE:	724-227-0148	P.O. #	03289-44-14777
FAX:		PROJECT #	ICR
DATE RECEIVED:	01/06/2023	CONTACT:	Kathleen Kaneko
DATE COMPLETED:	02/09/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R05_01	EPA Method 325B
02A	R05_01_D	EPA Method 325B
03A	R05_02	EPA Method 325B
04A	R05_02_B	EPA Method 325B
05A	R05_03	EPA Method 325B
06A	R05_04	EPA Method 325B
07A	R05_05	EPA Method 325B
08A	R05_06	EPA Method 325B
09A	R05_07	EPA Method 325B
10A	R05_12	EPA Method 325B
11A	R05_12_B	EPA Method 325B
12A	R05_11	EPA Method 325B
13A	R05_10	EPA Method 325B
14A	R05_13	EPA Method 325B
15A	R05_13_D	EPA Method 325B
16A	R05_14	EPA Method 325B
17A	R05_15	EPA Method 325B
18A	R05_16	EPA Method 325B
19A	R05_18	EPA Method 325B
20A	R05_19	EPA Method 325B
21A	R05_20	EPA Method 325B
22A	R05_21	EPA Method 325B
23A	R05_22	EPA Method 325B

Continued on next page

WORK ORDER #: 2301045

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 01/06/2023

CONTACT: Kathleen Kaneko

DATE COMPLETED: 02/09/2023

FRACTION #

NAME

TEST

24A	R05_23	EPA Method 325B
25A	R05_24	EPA Method 325B
26A	R05_17	EPA Method 325B
27A	R05_8	EPA Method 325B
28A	R05_9	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 02/10/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-017, Effective date: 10/18/2022, Expiration date: 10/17/2023.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2301045

Twenty-eight Carbopack X CA samples were received on January 06, 2023. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All samples were collected over a 15-day period.

The field duplicate pair R05_01 and R05_01_D exceeded the method required 30%RPD criterion for Benzene. As required by the method, associated sample results from the monitoring period are qualified with a "P" flag to indicate method precision was not met.

The field duplicate pair R05_01 and R05_01_D exceeded the method required 30%RPD criterion with a precision of 33 %RPD for Toluene. As required by the method, associated sample results from the monitoring period are qualified to indicate method precision was not met. The data qualifier "Pc" was applied to indicate that the sample concentrations of the sample and/or its duplicate were less than 2 times the reporting limit which likely influenced the measured precision.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- Pl - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days

Fe - Field Error or discrepancy
Te - Tube Error or discrepancy
CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_01

Lab ID#: 2301045-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.1 P
Toluene	0.47	0.93 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.33 J
o-Xylene	0.52	0.26 U

Client Sample ID: R05_01_D

Lab ID#: 2301045-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5 P
Toluene	0.47	0.66 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_02

Lab ID#: 2301045-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.3 P
Toluene	0.47	0.92 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.40 J
o-Xylene	0.52	0.26 U

Client Sample ID: R05_02_B

Lab ID#: 2301045-04A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_02_B

Lab ID#: 2301045-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 UP
Toluene	0.47	0.23 UPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_03

Lab ID#: 2301045-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4 P
Toluene	0.47	0.69 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_04

Lab ID#: 2301045-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.6 P
Toluene	0.47	0.67 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_05

Lab ID#: 2301045-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_05

Lab ID#: 2301045-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4 P
Toluene	0.47	0.83 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.31 J
o-Xylene	0.52	0.26 U

Client Sample ID: R05_06

Lab ID#: 2301045-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5 P
Toluene	0.47	0.77 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_07

Lab ID#: 2301045-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.67 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_12

Lab ID#: 2301045-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_12

Lab ID#: 2301045-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.55 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_12_B

Lab ID#: 2301045-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 UP
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_11

Lab ID#: 2301045-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.99 P
Toluene	0.47	0.65 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_10

Lab ID#: 2301045-13A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_10

Lab ID#: 2301045-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.64 P
Toluene	0.47	0.57 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_13

Lab ID#: 2301045-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2 P
Toluene	0.47	0.54 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_13_D

Lab ID#: 2301045-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.62 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_14

Lab ID#: 2301045-16A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_14

Lab ID#: 2301045-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2 P
Toluene	0.47	0.60 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_15

Lab ID#: 2301045-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.91 P
Toluene	0.47	0.45 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_16

Lab ID#: 2301045-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.56 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_18

Lab ID#: 2301045-19A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_18

Lab ID#: 2301045-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.75 P
Toluene	0.47	0.50 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_19

Lab ID#: 2301045-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.81 P
Toluene	0.47	0.50 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_20

Lab ID#: 2301045-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.0 P
Toluene	0.47	0.73 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_21

Lab ID#: 2301045-22A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_21

Lab ID#: 2301045-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.95 P
Toluene	0.47	0.55 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_22

Lab ID#: 2301045-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.94 P
Toluene	0.47	0.58 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_23

Lab ID#: 2301045-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.92 P
Toluene	0.47	0.53 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_24

Lab ID#: 2301045-25A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_24

Lab ID#: 2301045-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.68 P
Toluene	0.47	0.51 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_17

Lab ID#: 2301045-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.93 P
Toluene	0.47	0.44 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_8

Lab ID#: 2301045-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.57 P
Toluene	0.47	0.51 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_9

Lab ID#: 2301045-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R05_9

Lab ID#: 2301045-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.52 P
Toluene	0.47	0.30 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R05_01

Lab ID#: 2301045-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011106	Date of Collection: 1/3/23 12:04:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 12:04 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.1 P
Toluene	0.47	0.93 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.33 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_01_D

Lab ID#: 2301045-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011107	Date of Collection: 1/3/23 12:04:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 12:33 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5 P
Toluene	0.47	0.66 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R05_02

Lab ID#: 2301045-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011108	Date of Collection: 1/3/23 12:17:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 01:03 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.3 P
Toluene	0.47	0.92 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.40 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_02_B

Lab ID#: 2301045-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011105	Date of Collection: 1/3/23 12:17:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 11:35 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 UP
Toluene	0.47	0.23 UPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_03

Lab ID#: 2301045-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011109	Date of Collection: 1/3/23 12:22:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 01:32 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4 P
Toluene	0.47	0.69 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_04

Lab ID#: 2301045-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011110	Date of Collection: 1/3/23 12:26:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 02:01 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.6 P
Toluene	0.47	0.67 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_05

Lab ID#: 2301045-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011111	Date of Collection: 1/3/23 12:32:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 02:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4 P
Toluene	0.47	0.83 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.31 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_06

Lab ID#: 2301045-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011112	Date of Collection: 1/3/23 12:44:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 02:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5 P
Toluene	0.47	0.77 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R05_07

Lab ID#: 2301045-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011113	Date of Collection: 1/3/23 1:01:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 03:29 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.67 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_12

Lab ID#: 2301045-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011114	Date of Collection: 1/3/23 1:12:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 03:58 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.55 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R05_12_B

Lab ID#: 2301045-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011134	Date of Collection: 1/3/23 1:12:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/12/23 01:42 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 UP
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R05_11

Lab ID#: 2301045-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011116	Date of Collection: 1/3/23 1:20:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 04:56 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.99 P
Toluene	0.47	0.65 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_10

Lab ID#: 2301045-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011117	Date of Collection: 1/3/23 1:34:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 05:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.64 P
Toluene	0.47	0.57 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_13

Lab ID#: 2301045-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011118	Date of Collection: 1/3/23 1:44:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 05:54 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2 P
Toluene	0.47	0.54 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_13_D

Lab ID#: 2301045-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011119	Date of Collection: 1/3/23 1:44:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 06:23 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.62 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_14

Lab ID#: 2301045-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011120	Date of Collection: 1/3/23 1:52:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 06:53 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2 P
Toluene	0.47	0.60 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_15

Lab ID#: 2301045-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011121	Date of Collection: 1/3/23 1:57:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 07:22 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.91 P
Toluene	0.47	0.45 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

J = Estimated value.

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R05_16

Lab ID#: 2301045-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011122	Date of Collection: 1/3/23 2:01:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 07:51 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.1 P
Toluene	0.47	0.56 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_18

Lab ID#: 2301045-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011123	Date of Collection: 1/3/23 2:07:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 08:20 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.75 P
Toluene	0.47	0.50 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_19

Lab ID#: 2301045-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011124	Date of Collection: 1/3/23 2:12:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 08:49 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.81 P
Toluene	0.47	0.50 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_20

Lab ID#: 2301045-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011125	Date of Collection: 1/3/23 2:45:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 09:18 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.0 P
Toluene	0.47	0.73 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_21

Lab ID#: 2301045-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011127	Date of Collection: 1/3/23 2:18:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 10:17 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.95 P
Toluene	0.47	0.55 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_22

Lab ID#: 2301045-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011128	Date of Collection: 1/3/23 2:24:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 10:46 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.94 P
Toluene	0.47	0.58 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_23

Lab ID#: 2301045-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011129	Date of Collection: 1/3/23 2:29:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 11:15 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.92 P
Toluene	0.47	0.53 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_24

Lab ID#: 2301045-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011130	Date of Collection: 1/3/23 2:36:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/11/23 11:44 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.68 P
Toluene	0.47	0.51 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R05_17

Lab ID#: 2301045-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011131	Date of Collection: 1/3/23 2:54:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/12/23 12:14 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.93 P
Toluene	0.47	0.44 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

J = Estimated value.

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R05_8

Lab ID#: 2301045-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011132	Date of Collection: 1/4/23 1:28:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/12/23 12:43 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.57 P
Toluene	0.47	0.51 PC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R05_9

Lab ID#: 2301045-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011133	Date of Collection: 1/4/23 1:21:00 PM
Dil. Factor:	1.05	Date of Analysis: 1/12/23 01:12 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.52 P
Toluene	0.47	0.30 JPC
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

P = Field Duplicate(s) exceed 30%RPD

J = Estimated value.

Pc = Field duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2301045-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011104a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/11/23 10:45 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.26	0.12 U
Benzene	0.35	0.17 U
Toluene	0.45	0.22 U
Ethyl Benzene	0.50	0.25 U
m,p-Xylene	0.50	0.25 U
o-Xylene	0.50	0.25 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.12 ug/m3

Benzene MDL value = 0.17 ug/m3

Toluene MDL value = 0.22 ug/m3

Ethyl Benzene MDL value = 0.25 ug/m3

m,p-Xylene MDL value = 0.25 ug/m3

o-Xylene MDL value = 0.25 ug/m3

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301045-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011115	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/11/23 04:27 PM
		Date of Extraction: NA

Compound	%Recovery
1,3-Butadiene	95
Benzene	96
Toluene	102
Ethyl Benzene	108
m,p-Xylene	109
o-Xylene	110

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301045-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011126	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/11/23 09:48 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	104
Benzene	97
Toluene	105
Ethyl Benzene	115
m,p-Xylene	114
o-Xylene	114

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301045-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011137	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/12/23 03:10 AM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	103
Benzene	92
Toluene	105
Ethyl Benzene	108
m,p-Xylene	113
o-Xylene	114

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 12/30/12 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875675 Return Seal#: 1875676

WO#: 2301045

Client: Cleveland CIBS

PID: P.O.#

Project Name: ECL

Project Manager: Rodak

Site Name: Burns Harbor

Collected by: DP

Turn Around Time:

☒ Normal

☐ Rush

Specify

Sample Comments:

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List	
									Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list

01A	R05-01	1	1185837	12/19/12	12:46	11/3/12	12:04		X				
02A	R05-01-D	1	1185859	12/19/12	12:46	11/3/12	12:04			X			
03A	R05-02	2	1185881	12/19/12	13:02	11/3/12	12:17		X				
04A	R05-02-B	2	1185891	12/19/12	13:02	11/3/12	12:17				X		
05A	R05-03	3	1185900	12/19/12	13:04	11/3/12	12:22		X				
06A	R05-04	4	1185907	12/19/12	13:11	11/3/12	12:26		X				
07A	R05-05	5	1185944	12/19/12	13:17	11/3/12	12:32		X				
08A	R05-06	6	1185971	12/19/12	13:27	11/3/12	12:44		X				
09A	R05-07	7	1186148	12/19/12	13:36	11/3/12	13:01		X				
10A	R05-12	12	1186341	12/19/12	13:50	11/3/12	13:12		X				
11A	R05-12-B	12	1186394	12/19/12	13:50	11/3/12	13:12				X		
12A	R05-11	11	1186340	12/19/12	13:59	11/3/12	13:26		X				
13A	R05-10	10	1186332	12/19/12	14:04	11/3/12	13:34		X				

Relinquished by: [Signature] Date: 11/5/12 Time: 14:00 Received by: Matthew FARR Date: 11/6/12 Time: 11:01

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and International laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Feeler

Lab Use Only

Custody Seals Intact? Yes No None Blue Ice present or insulated cooler used? Yes No

Sample Condition Upon Receipt: good

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 12/30/22
(Date)

Kit ID: A B C D
(Circle One)

Case Seal#: 1875615 Return Seal#: 1875676

WO#: 2301045

Client: Cleveland C/H/S

PID: P.O.#

Project Name: ICK

Project Manager: Rock

Site Name: Burns Harbor

Collected by: DR

Sample Type (check one)

Turn Around Time:

☐ Normal

☐ Rush

Specify

Sample Comments:

☐ Routine Sample
☐ Field Duplicate
☐ Field Blank
☐ Benzene
☐ Project VOC list

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Lab Use Only

Shipper Name: Federal

Custody Seals Intact? Yes

Sample Condition Upon Receipt: good

Blue Ice present or insulated cooler used? Yes

Units: hPa atm inHg mmHg

2/10/2023

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2301268

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 1/18/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2301268

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 01/18/2023

CONTACT: Kathleen Kaneko

DATE COMPLETED: 02/09/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R06_01	EPA Method 325B
02A	R06_01_D	EPA Method 325B
03A	R06_02	EPA Method 325B
04A	R06_02_B	EPA Method 325B
05A	R06_03	EPA Method 325B
06A	R06_04	EPA Method 325B
07A	R06_05	EPA Method 325B
08A	R06_06	EPA Method 325B
09A	R06_07	EPA Method 325B
10A	R06_12	EPA Method 325B
11A	R06_12_B	EPA Method 325B
12A	R06_11	EPA Method 325B
13A	R06_10	EPA Method 325B
14A	R06_13	EPA Method 325B
15A	R06_13_D	EPA Method 325B
16A	R06_14	EPA Method 325B
17A	R06_15	EPA Method 325B
18A	R06_16	EPA Method 325B
19A	R06_18	EPA Method 325B
20A	R06_19	EPA Method 325B
21A	R06_20	EPA Method 325B
22A	R06_21	EPA Method 325B
23A	R06_22	EPA Method 325B

Continued on next page

WORK ORDER #: 2301268

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 01/18/2023

CONTACT: Kathleen Kaneko

DATE COMPLETED: 02/09/2023

FRACTION #

NAME

TEST

24A	R06_23	EPA Method 325B
25A	R06_24	EPA Method 325B
26A	R06_17	EPA Method 325B
27A	R06_08	EPA Method 325B
28A	R06_09	EPA Method 325B
29A	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 02/10/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-017, Effective date: 10/18/2022, Expiration date: 10/17/2023.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2301268

Twenty-eight Carbopack X CA samples were received on January 18, 2023. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Samples R06_08 and R06_09 were collected over a 13-day period.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- Pl - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days
- Fe - Field Error or discrepancy
- Te - Tube Error or discrepancy
- CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_01

Lab ID#: 2301268-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.93
Toluene	0.50	0.47 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_01_D

Lab ID#: 2301268-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.57
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_02

Lab ID#: 2301268-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	3.1
Toluene	0.50	1.0
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.34 J
o-Xylene	0.56	0.28 U

Client Sample ID: R06_02_B

Lab ID#: 2301268-04A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_02_B

Lab ID#: 2301268-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_03

Lab ID#: 2301268-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.6
Toluene	0.50	0.82
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_04

Lab ID#: 2301268-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.2
Toluene	0.50	0.82
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_05

Lab ID#: 2301268-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_05

Lab ID#: 2301268-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	3.4
Toluene	0.50	1.2
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.42 J
o-Xylene	0.56	0.28 U

Client Sample ID: R06_06

Lab ID#: 2301268-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.6
Toluene	0.50	1.1
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_07

Lab ID#: 2301268-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.79
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_12

Lab ID#: 2301268-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_12

Lab ID#: 2301268-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.31 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_12_B

Lab ID#: 2301268-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_11

Lab ID#: 2301268-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.67
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_10

Lab ID#: 2301268-13A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_10

Lab ID#: 2301268-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.95
Toluene	0.50	0.48 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_13

Lab ID#: 2301268-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.39 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_13_D

Lab ID#: 2301268-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.58
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_14

Lab ID#: 2301268-16A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_14

Lab ID#: 2301268-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.50
Toluene	0.50	0.34 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_15

Lab ID#: 2301268-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.46
Toluene	0.50	0.32 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_16

Lab ID#: 2301268-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.55
Toluene	0.50	0.44 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_18

Lab ID#: 2301268-19A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_18

Lab ID#: 2301268-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.61
Toluene	0.50	0.28 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_19

Lab ID#: 2301268-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.67
Toluene	0.50	0.38 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_20

Lab ID#: 2301268-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.53
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_21

Lab ID#: 2301268-22A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_21

Lab ID#: 2301268-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.88
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_22

Lab ID#: 2301268-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_23

Lab ID#: 2301268-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.69
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_24

Lab ID#: 2301268-25A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_24

Lab ID#: 2301268-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.68
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_17

Lab ID#: 2301268-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.55
Toluene	0.50	0.33 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

Client Sample ID: R06_08

Lab ID#: 2301268-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.63
Toluene	0.53	0.46 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R06_09

Lab ID#: 2301268-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R06_09

Lab ID#: 2301268-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.69
Toluene	0.53	0.50 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

Client Sample ID: R06_01

Lab ID#: 2301268-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011906	Date of Collection: 1/17/23 11:50:00 AM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 12:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.93
Toluene	0.50	0.47 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_01_D

Lab ID#: 2301268-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011907	Date of Collection: 1/17/23 11:50:00 AM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 12:58 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.57
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_02

Lab ID#: 2301268-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011908	Date of Collection: 1/17/23 12:03:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 01:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	3.1
Toluene	0.50	1.0
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.34 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_02_B

Lab ID#: 2301268-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011905	Date of Collection: 1/17/23 12:03:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 11:58 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_03

Lab ID#: 2301268-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011909	Date of Collection: 1/17/23 12:09:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 01:58 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.6
Toluene	0.50	0.82
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_04

Lab ID#: 2301268-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011910	Date of Collection: 1/17/23 12:15:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 02:29 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	2.2
Toluene	0.50	0.82
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_05

Lab ID#: 2301268-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011911	Date of Collection: 1/17/23 12:20:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 02:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	3.4
Toluene	0.50	1.2
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.42 J
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_06

Lab ID#: 2301268-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011912	Date of Collection: 1/17/23 12:31:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 03:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.6
Toluene	0.50	1.1
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R06_07

Lab ID#: 2301268-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011913	Date of Collection: 1/17/23 12:43:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 04:01 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.79
Toluene	0.50	0.45 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R06_12

Lab ID#: 2301268-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011914	Date of Collection: 1/17/23 12:55:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 04:32 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.31 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_12_B

Lab ID#: 2301268-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011934	Date of Collection: 1/17/23 12:55:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 02:41 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.19 U
Toluene	0.50	0.25 U
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_11

Lab ID#: 2301268-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011916	Date of Collection: 1/17/23 1:04:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 05:33 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.67
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R06_10

Lab ID#: 2301268-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011917	Date of Collection: 1/17/23 1:06:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 06:03 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.95
Toluene	0.50	0.48 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_13

Lab ID#: 2301268-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011918	Date of Collection: 1/17/23 1:19:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 06:34 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.57
Toluene	0.50	0.39 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_13_D

Lab ID#: 2301268-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011919	Date of Collection: 1/17/23 1:19:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 07:05 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.58
Toluene	0.50	0.35 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_14

Lab ID#: 2301268-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011920	Date of Collection: 1/17/23 1:26:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 07:35 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.50
Toluene	0.50	0.34 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R06_15

Lab ID#: 2301268-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011921	Date of Collection: 1/17/23 1:31:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 08:06 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.46
Toluene	0.50	0.32 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R06_16

Lab ID#: 2301268-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011922	Date of Collection: 1/17/23 1:34:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 08:36 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.55
Toluene	0.50	0.44 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_18

Lab ID#: 2301268-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011923	Date of Collection: 1/17/23 1:40:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 09:07 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.61
Toluene	0.50	0.28 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_19

Lab ID#: 2301268-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011924	Date of Collection: 1/17/23 1:44:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 09:37 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.67
Toluene	0.50	0.38 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_20

Lab ID#: 2301268-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011925	Date of Collection: 1/17/23 1:49:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 10:08 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.0
Toluene	0.50	0.53
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_21

Lab ID#: 2301268-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011927	Date of Collection: 1/17/23 1:54:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 11:09 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.88
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R06_22

Lab ID#: 2301268-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011928	Date of Collection: 1/17/23 1:59:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/19/23 11:39 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.2
Toluene	0.50	0.49 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_23

Lab ID#: 2301268-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011929	Date of Collection: 1/17/23 2:04:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 12:10 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	1.4
Toluene	0.50	0.69
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_24

Lab ID#: 2301268-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011930	Date of Collection: 1/17/23 2:10:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 12:40 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.68
Toluene	0.50	0.40 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_17

Lab ID#: 2301268-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011931	Date of Collection: 1/17/23 2:22:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 01:10 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.29	0.14 U
Benzene	0.38	0.55
Toluene	0.50	0.33 J
Ethyl Benzene	0.56	0.28 U
m,p-Xylene	0.56	0.28 U
o-Xylene	0.56	0.28 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.14 ug/m3

Benzene MDL value = 0.19 ug/m3

Toluene MDL value = 0.25 ug/m3

Ethyl Benzene MDL value = 0.28 ug/m3

m,p-Xylene MDL value = 0.28 ug/m3

o-Xylene MDL value = 0.28 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R06_08

Lab ID#: 2301268-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011932	Date of Collection: 1/17/23 2:43:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 01:41 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.63
Toluene	0.53	0.46 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R06_09

Lab ID#: 2301268-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011933	Date of Collection: 1/17/23 2:38:00 PM
Dil. Factor:	1.04	Date of Analysis: 1/20/23 02:11 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.31	0.15 U
Benzene	0.42	0.69
Toluene	0.53	0.50 J
Ethyl Benzene	0.60	0.30 U
m,p-Xylene	0.60	0.30 U
o-Xylene	0.60	0.30 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.15 ug/m3

Benzene MDL value = 0.21 ug/m3

Toluene MDL value = 0.27 ug/m3

Ethyl Benzene MDL value = 0.30 ug/m3

m,p-Xylene MDL value = 0.30 ug/m3

o-Xylene MDL value = 0.30 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2301268-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/19/23 11:07 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.28	0.13 U
Benzene	0.37	0.18 U
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.24 ug/m3

Ethyl Benzene MDL value = 0.27 ug/m3

m,p-Xylene MDL value = 0.27 ug/m3

o-Xylene MDL value = 0.27 ug/m3

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301268-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011915	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/19/23 05:02 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	92
Benzene	99
Toluene	105
Ethyl Benzene	110
m,p-Xylene	107
o-Xylene	115

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301268-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011926	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/19/23 10:39 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	94
Benzene	100
Toluene	106
Ethyl Benzene	111
m,p-Xylene	109
o-Xylene	113

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2301268-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10011937	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 1/20/23 04:12 AM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	92
Benzene	100
Toluene	106
Ethyl Benzene	115
m,p-Xylene	118
o-Xylene	119

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 01/12/23 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875717 Return Seal#: 1875718

WO#:

2301268

Client: Cleveland C11H5

PID:

P.O.#

Project Name:

TCL

Project Manager:

Kodal

Site Name:

Burns Harbor

Collected by:

DP

Sample Type
(check one)

Target List

Turn Around Time:

☒ Normal

☐ Rush

Specify

Sample Comments:

Project VOC list

Benzene

Field Blank

Field Duplicate

Routine Sample

Location
(gps)

Time of
Retrieval
(hr:min)

Date of
Retrieval
(mm/dd/yy)

Time of
Deployment
(hr:min)

Date of
Deployment
(mm/dd/yy)

Carbopack X
Tube ID

Station

Sample
Identification

Lab
ID

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)	Target List	Turn Around Time:
01A	ROC-01	1	1188072	1/3/23	12:06	1/17/23	11:50		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
02A	ROC-01-D	1	1188107	1/3/23	12:06	1/17/23	11:50		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
03A	ROC-02	2	1188113	1/3/23	12:18	1/17/23	12:03		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
04A	ROC-02-B	2	1188122	1/3/23	12:18	1/17/23	12:03		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
05A	ROC-03	3	1188127	1/3/23	12:23	1/17/23	12:04		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
06A	ROC-04	4	1188131	1/3/23	12:27	1/17/23	12:15		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
07A	ROC-05	5	1188132	1/3/23	12:33	1/17/23	12:20		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
08A	ROC-06	6	1188158	1/3/23	12:45	1/17/23	12:31		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
09A	ROC-07	7	1188139	1/3/23	13:02	1/17/23	12:43		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
10A	ROC-12	12	1188174	1/3/23	13:13	1/17/23	12:55		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
11A	ROC-12-B	12	1188182	1/3/23	13:13	1/17/23	12:55		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
12A	ROC-11	11	1188165	1/3/23	13:21	1/17/23	13:04		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	
13A	ROC-10	10	1188164	1/3/23	13:35	1/17/23	13:06		<input checked="" type="checkbox"/> Routine Sample	<input checked="" type="checkbox"/> Normal	

Relinquished by:

Date

Time

Received by:

Date

Time

Avg Ambient Temperature:

Relinquished by:

Date

Time

Received by:

Date

Time

Units: °F °C

Avg Barometric Pressure:

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Fedex

Custody Seals Intact?

Yes

No

None

Blue Ice Present or insulated cooler used?

Yes

No

Units: hPa atm inHg mmHg

Deploy Tubes by: 01/12/23

(Date)

Kit ID: A B C D

(Circle One)

Case Seal#: 1875717

Return Seal#: 1875718

WO#:

2307260

Client: Cleveland CHHS

PID: P.O.#

Project Name:

ELR

Project Manager:

Rodak

Site Name:

Burns Harbor

Collected by:

DP

Sample Type
(check one)

Target List

Turn Around Time:

☒ Normal

☐ Rush

Specify

Sample Comments:

Routine Sample
Field Duplicate
Field Blank
Benzene
Project VOC list

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list
WA	ROC-13	13	1188187	1/3/23	13:46	1/17/23	13:19		X				
WA	ROC-15-D	13	1188181	1/3/23	13:46	1/17/23	13:19			X			
WA	ROC-14	14	1188195	1/3/23	13:53	1/17/23	13:26		X				
WA	ROC-15	15	1188199	1/3/23	13:58	1/17/23	13:31		X				
WA	ROC-16	16	1188216	1/3/23	14:02	1/17/23	13:34		X				
WA	ROC-18	18	1188222	1/3/23	14:08	1/17/23	13:40		X				
WA	ROC-19	19	1188225	1/3/23	14:13	1/17/23	13:44		X				
WA	ROC-20	20	1188232	1/3/23	14:47	1/17/23	13:49		X				
WA	ROC-Z1	21	1188234	1/3/23	14:19	1/17/23	13:54		X				
WA	ROC-Z2	22	1188238	1/3/23	14:25	1/17/23	13:59		X				
WA	ROC-23	23	1188244	1/3/23	14:30	1/17/23	14:04		X				
WA	ROC-24	24	1188246	1/3/23	14:37	1/17/23	14:10		X				
WA	ROC-17	17	1188219	1/3/23	14:56	1/17/23	14:22		X				

Relinquished by:

Date: 1/17/23 Time: 16:00

Relinquished by:

Date: 1/17/23 Time: 16:00

Relinquished by:

Date: 1/17/23 Time: 16:00

Received by: R. Mitchell

Date: 1/18/23 Time: 0930

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name:

Fedex

Lab Use Only

Custody Seals Intact?

☒ Yes

☐ No

None

Blue Ice present or insulated cooler used?

☒ Yes

☐ No

Sample Condition Upon Receipt:

good

Units: hPa atm inHg mmHg

Avg Barometric Pressure:

Units: °F °C

Avg Ambient Temperature:

2/15/2023

Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive

Pittsburgh PA 15275

Project Name: ICR
Project #:
Workorder #: 2302034

Dear Mr. Volker Schmid

The following report includes the data for the above referenced project for sample(s) received on 2/2/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kathleen Kaneko at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kathleen Kaneko
Project Manager

WORK ORDER #: 2302034

Work Order Summary

CLIENT:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275	BILL TO:	Mr. Volker Schmid Clean Air Engineering 110 Technology Drive Pittsburgh, PA 15275
PHONE:	724-227-0148	P.O. #	03289-44-14777
FAX:		PROJECT #	ICR
DATE RECEIVED:	02/02/2023	CONTACT:	Kathleen Kaneko
DATE COMPLETED:	02/15/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	R07_01	EPA Method 325B
02A	R07_01_D	EPA Method 325B
03A	R07_02	EPA Method 325B
04A	R07_02_B	EPA Method 325B
05A	R07_03	EPA Method 325B
06A	R07_04	EPA Method 325B
07A	R07_05	EPA Method 325B
08A	R07_06	EPA Method 325B
09A	R07_07	EPA Method 325B
10A	R07_12	EPA Method 325B
11A	R07_12B	EPA Method 325B
12A	R07_11	EPA Method 325B
13A	R07_10	EPA Method 325B
14A	R07_13	EPA Method 325B
15A	R07_13_D	EPA Method 325B
16A	R07_14	EPA Method 325B
17A	R07_15	EPA Method 325B
18A	R07_16	EPA Method 325B
19A	R07_18	EPA Method 325B
20A	R07_19	EPA Method 325B
21A	R07_20	EPA Method 325B
22A	R07_21	EPA Method 325B
23A	R07_22	EPA Method 325B

Continued on next page

WORK ORDER #: 2302034

Work Order Summary

CLIENT: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

BILL TO: Mr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburgh, PA 15275

PHONE: 724-227-0148

P.O. # 03289-44-14777

FAX:

PROJECT # ICR

DATE RECEIVED: 02/02/2023

CONTACT: Kathleen Kaneko

DATE COMPLETED: 02/15/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
24A	R07_23	EPA Method 325B
25A	R07_24	EPA Method 325B
26A	R07_17	EPA Method 325B
27A	R07_09	EPA Method 325B
28A	R07_08	EPA Method 325B
29A	Lab Blank	EPA Method 325B
29B	Lab Blank	EPA Method 325B
30A	CCV	EPA Method 325B
30B	CCV	EPA Method 325B
30C	CCV	EPA Method 325B

CERTIFIED BY:



Technical Director

DATE: 02/15/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-017, Effective date: 10/18/2022, Expiration date: 10/17/2023.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
ATM EPA 325B
Clean Air Engineering
Workorder# 2302034

Twenty-eight Carbopack X CA samples were received on February 02, 2023. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

Receiving Notes

The Chain of Custody (COC) information for sample R07_12B did not match the information on the tube with regard to tube identification/barcode. The sample labeled 11881513 on the COC is labeled as 1188513 on the tube. Unless otherwise notified, Eurofins Air Toxics will proceed with the analysis using the information on the tube to process and report the sample.

Analytical Notes

All samples were collected over a 15-day period.

The field blank R07_12B contains greater than one-third of the measured target analyte Benzene in R07_15, R07_18 and R07_09. Associated sample results are B-flagged to indicate a likely high bias due to field blank background.

Definition of Data Qualifying Flags

The following qualifiers may have been used on the data analysis sheets and indicate as follows:

- B - Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
- J - Estimated value - analyte detected between the Method Detection Limit and Reporting Limit.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the MDL value.
- I - Internal Standard recovery outside acceptance limits
- P - Field Duplicate(s) exceed 30%RPD
- Pc- Field Duplicate(s) exceed 30%RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
- PI - Field Duplicate(s) exceed 30%RPD, lab anomaly noted.
- L - Recovery of bracketing CCV(s) exceeded acceptance limits.
- H - Sample analyzed outside of method hold time.
- D - Sample duration outside 14+/-1 days
- Fe - Field Error or discrepancy
- Te - Tube Error or discrepancy
- CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_01

Lab ID#: 2302034-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5
Toluene	0.47	0.76
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_01_D

Lab ID#: 2302034-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.58
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_02

Lab ID#: 2302034-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.8
Toluene	0.47	0.79
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.28 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_02_B

Lab ID#: 2302034-04A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_02_B

Lab ID#: 2302034-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 U
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_03

Lab ID#: 2302034-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4
Toluene	0.47	0.63
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_04

Lab ID#: 2302034-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.0
Toluene	0.47	0.85
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.29 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_05

Lab ID#: 2302034-07A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_05

Lab ID#: 2302034-07A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	7.0
Toluene	0.47	2.9
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.86
o-Xylene	0.52	0.26 U

Client Sample ID: R07_06

Lab ID#: 2302034-08A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.76
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.31 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_07

Lab ID#: 2302034-09A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.64
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_12

Lab ID#: 2302034-10A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_12

Lab ID#: 2302034-10A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.54
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_12B

Lab ID#: 2302034-11A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.27 J
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_11

Lab ID#: 2302034-12A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.62
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_10

Lab ID#: 2302034-13A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_10

Lab ID#: 2302034-13A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5
Toluene	0.47	0.65
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_13

Lab ID#: 2302034-14A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.88
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_13_D

Lab ID#: 2302034-15A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.94
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_14

Lab ID#: 2302034-16A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_14

Lab ID#: 2302034-16A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.89
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_15

Lab ID#: 2302034-17A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.73 B
Toluene	0.47	0.44 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_16

Lab ID#: 2302034-18A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.82
Toluene	0.47	0.59
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.30 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_18

Lab ID#: 2302034-19A

Summary of Detected Compounds

EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_18

Lab ID#: 2302034-19A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.73 B
Toluene	0.47	0.35 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_19

Lab ID#: 2302034-20A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.81
Toluene	0.47	0.46 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_20

Lab ID#: 2302034-21A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4
Toluene	0.47	0.73
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.33 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_21

Lab ID#: 2302034-22A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_21

Lab ID#: 2302034-22A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.14 J
Benzene	0.37	1.7
Toluene	0.47	1.0
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.38 J
o-Xylene	0.52	0.26 U

Client Sample ID: R07_22

Lab ID#: 2302034-23A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.54
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_23

Lab ID#: 2302034-24A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.59
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_24

Lab ID#: 2302034-25A

Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_24

Lab ID#: 2302034-25A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.96
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_17

Lab ID#: 2302034-26A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.0
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_09

Lab ID#: 2302034-27A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.66 B
Toluene	0.47	0.33 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

Client Sample ID: R07_08

Lab ID#: 2302034-28A

Summary of Detected Compounds
EPA METHOD 325B GC/MS FULL SCAN

Client Sample ID: R07_08

Lab ID#: 2302034-28A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.84
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U



Air Toxics

Client Sample ID: RO7_01

Lab ID#: 2302034-01A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020206	Date of Collection: 2/1/23 9:48:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 03:33 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5
Toluene	0.47	0.76
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_01_D

Lab ID#: 2302034-02A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020207	Date of Collection: 2/1/23 9:48:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 04:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.58
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_02

Lab ID#: 2302034-03A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020208	Date of Collection: 2/1/23 10:03:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 04:31 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.8
Toluene	0.47	0.79
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.28 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_02_B

Lab ID#: 2302034-04A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020205	Date of Collection: 2/1/23 10:03:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 03:04 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.18 U
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_03

Lab ID#: 2302034-05A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020209	Date of Collection: 2/1/23 10:08:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 05:01 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4
Toluene	0.47	0.63
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_04

Lab ID#: 2302034-06A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020210	Date of Collection: 2/1/23 10:13:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 05:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	2.0
Toluene	0.47	0.85
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.29 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_05

Lab ID#: 2302034-07A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020211	Date of Collection: 2/1/23 10:19:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 05:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	7.0
Toluene	0.47	2.9
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.86
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_06

Lab ID#: 2302034-08A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020212	Date of Collection: 2/1/23 10:31:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 06:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.76
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.31 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_07

Lab ID#: 2302034-09A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020213	Date of Collection: 2/1/23 10:42:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 06:57 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.64
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_12

Lab ID#: 2302034-10A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020305	Date of Collection: 2/1/23 10:53:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 11:32 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.54
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_12B

Lab ID#: 2302034-11A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020313	Date of Collection: 2/1/23 10:53:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 03:26 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.27 J
Toluene	0.47	0.23 U
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_11

Lab ID#: 2302034-12A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020216	Date of Collection: 2/1/23 11:02:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 08:25 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.62
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_10

Lab ID#: 2302034-13A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020217	Date of Collection: 2/1/23 11:06:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 08:55 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.5
Toluene	0.47	0.65
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_13

Lab ID#: 2302034-14A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020218	Date of Collection: 2/1/23 11:15:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 09:24 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.88
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_13_D

Lab ID#: 2302034-15A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020219	Date of Collection: 2/1/23 11:15:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 09:53 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.94
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_14

Lab ID#: 2302034-16A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020220	Date of Collection: 2/1/23 11:25:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 10:23 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.89
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_15

Lab ID#: 2302034-17A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020221	Date of Collection: 2/1/23 11:30:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 10:52 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.73 B
Toluene	0.47	0.44 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA

Client Sample ID: R07_16

Lab ID#: 2302034-18A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020222	Date of Collection: 2/1/23 11:34:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 11:22 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.82
Toluene	0.47	0.59
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.30 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_18

Lab ID#: 2302034-19A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020223	Date of Collection: 2/1/23 11:39:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/2/23 11:51 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.73 B
Toluene	0.47	0.35 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_19

Lab ID#: 2302034-20A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020224	Date of Collection: 2/1/23 11:44:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 12:21 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.81
Toluene	0.47	0.46 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_20

Lab ID#: 2302034-21A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020225	Date of Collection: 2/1/23 11:49:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 12:50 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.4
Toluene	0.47	0.73
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.33 J
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_21

Lab ID#: 2302034-22A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020306	Date of Collection: 2/1/23 11:54:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 12:02 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.14 J
Benzene	0.37	1.7
Toluene	0.47	1.0
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.38 J
o-Xylene	0.52	0.26 U

J = Estimated value.

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_22

Lab ID#: 2302034-23A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020307	Date of Collection: 2/1/23 11:59:00 AM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 12:31 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.3
Toluene	0.47	0.54
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_23

Lab ID#: 2302034-24A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020308	Date of Collection: 2/1/23 12:03:00 PM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 01:00 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.2
Toluene	0.47	0.59
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: R07_24

Lab ID#: 2302034-25A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020309	Date of Collection: 2/1/23 12:09:00 PM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 01:30 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.96
Toluene	0.47	0.50
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_17

Lab ID#: 2302034-26A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020310	Date of Collection: 2/1/23 12:21:00 PM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 01:59 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	1.0
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA

Client Sample ID: R07_09

Lab ID#: 2302034-27A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020311	Date of Collection: 2/1/23 12:32:00 PM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 02:28 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.66 B
Toluene	0.47	0.33 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

B = Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carbopack X CA



Air Toxics

Client Sample ID: R07_08

Lab ID#: 2302034-28A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020312	Date of Collection: 2/1/23 12:27:00 PM
Dil. Factor:	1.05	Date of Analysis: 2/3/23 02:57 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.27	0.13 U
Benzene	0.37	0.84
Toluene	0.47	0.45 J
Ethyl Benzene	0.52	0.26 U
m,p-Xylene	0.52	0.26 U
o-Xylene	0.52	0.26 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.

1,3-Butadiene MDL value = 0.13 ug/m3

Benzene MDL value = 0.18 ug/m3

Toluene MDL value = 0.23 ug/m3

Ethyl Benzene MDL value = 0.26 ug/m3

m,p-Xylene MDL value = 0.26 ug/m3

o-Xylene MDL value = 0.26 ug/m3

Container Type: Carboxpack X CA



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2302034-29A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/2/23 02:09 PM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.26	0.12 U
Benzene	0.35	0.17 U
Toluene	0.45	0.22 U
Ethyl Benzene	0.50	0.25 U
m,p-Xylene	0.50	0.25 U
o-Xylene	0.50	0.25 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.12 ug/m3

Benzene MDL value = 0.17 ug/m3

Toluene MDL value = 0.22 ug/m3

Ethyl Benzene MDL value = 0.25 ug/m3

m,p-Xylene MDL value = 0.25 ug/m3

o-Xylene MDL value = 0.25 ug/m3

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2302034-29B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/3/23 10:43 AM
		Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.26	0.12 U
Benzene	0.35	0.17 U
Toluene	0.45	0.22 U
Ethyl Benzene	0.50	0.25 U
m,p-Xylene	0.50	0.25 U
o-Xylene	0.50	0.25 U

U = The analyte was not present above the Method Detection Limit.

1,3-Butadiene MDL value = 0.12 ug/m3

Benzene MDL value = 0.17 ug/m3

Toluene MDL value = 0.22 ug/m3

Ethyl Benzene MDL value = 0.25 ug/m3

m,p-Xylene MDL value = 0.25 ug/m3

o-Xylene MDL value = 0.25 ug/m3

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2302034-30A

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020215	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/2/23 07:56 PM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	100
Benzene	98
Toluene	103
Ethyl Benzene	107
m,p-Xylene	111
o-Xylene	108

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2302034-30B

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020226	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/3/23 01:19 AM
		Date of Extraction: NA

Compound	%Recovery
----------	-----------

1,3-Butadiene	97
Benzene	96
Toluene	93
Ethyl Benzene	88
m,p-Xylene	89
o-Xylene	85

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2302034-30C

EPA METHOD 325B GC/MS FULL SCAN

File Name:	10020314	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/3/23 03:56 PM
		Date of Extraction: NA

Compound	%Recovery
1,3-Butadiene	98
Benzene	99
Toluene	100
Ethyl Benzene	98
m,p-Xylene	98
o-Xylene	96

Container Type: NA - Not Applicable

EPA Method 325 Chain of Custody (Passive)

Deploy Tubes by: 1/30/23 (Date)

Kit ID: A B C D (Circle One)

Case Seal#: 1875831 Return Seal#: 1875832

WO#:

2302034

Client: Cleveland CILHS

PID: _____ P.O.# _____

Project Name: ICL

Project Manager: Rodak

Site Name: Burns Harbor

Collected by: DP

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List		Turn Around Time:
									Routine Sample	Field Duplicate	Field Blank	Benzene	Project VOC list	
0A	R07-01	1	1188436	1/17/23	11:52	2/1/23	9:48		X					<input checked="" type="checkbox"/> Normal
0A	R07-01-D	1	1188439	1/17/23	11:52	2/1/23	9:48			X				<input type="checkbox"/> Rush
0A	R07-02	2	1188447	1/17/23	12:05	2/1/23	10:03		X					<input type="checkbox"/> Specify
0A	R07-02-B	2	1188448	1/17/23	12:05	2/1/23	10:03				X			Sample Comments:
0A	R07-03	3	1188450	1/17/23	12:10	2/1/23	10:08		X					
0A	R07-04	4	1188451	1/17/23	12:16	2/1/23	10:13		X					
0A	R07-05	5	1188452	1/17/23	12:21	2/1/23	10:14		X					
0A	R07-06	6	1188454	1/17/23	12:33	2/1/23	10:31		X					
0A	R07-07	7	1188457	1/17/23	12:44	2/1/23	10:42		X					
0A	R07-12	12	1188494	1/17/23	12:56	2/1/23	10:53		X					
0A	R07-12B	12	1188513	1/17/23	12:56	2/1/23	10:53				X			
0A	R07-11	11	1188488	1/17/23	13:05	2/1/23	11:02		X					
0A	R07-10	10	1188484	1/17/23	13:10	2/1/23	11:06		X					

Relinquished by: [Signature] Date: 2/1/23 Time: 15:00 Received by: [Signature] Date: 2/2/23 Time: 10:45

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Fed Ex Custody Seals Intact? (Yes) No None Blue Ice present or insulated cooler used? (Yes) No No

Sample Condition Upon Receipt: Good Units: hPa atm inHg mmHg

Deploy Tubes by: 1/30/23 (Date)

Kit ID: A B C D (Circle One)

 Case Seal#: 1885531 Return Seal#: 1875532

WO#:

2302034

 Client: Cleveland Mills

PID: _____ P.O.# _____

 Project Name: ECCL

 Project Manager: Rodex

 Site Name: Burns Harbor

 Collected by: DP

Lab ID	Sample Identification	Station	Carbopack X Tube ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Location (gps)	Sample Type (check one)			Target List	Turn Around Time:
									Routine Sample	Field Duplicate	Field Blank		
WA	RO7-13	13	1188514	1/17/23	13:26	2/1/23	11:15		X				<input checked="" type="checkbox"/> Normal
KA	RO7-13-D	13	1188532	1/17/23	13:20	2/1/23	11:15			X			<input type="checkbox"/> Rush
WA	RO7-14	14	1188535	1/17/23	13:27	2/1/23	11:25		X				Specify
CA	RO7-15	15	1188547	1/17/23	13:32	2/1/23	11:30		X				Sample Comments:
WA	RO7-16	16	1188549	1/17/23	13:35	2/1/23	11:34		X				
WA	RO7-18	18	1188562	1/17/23	13:41	2/1/23	11:39		X				
WA	RO7-19	19	1188567	1/17/23	13:45	2/1/23	11:44		X				
WA	RO7-20	20	1188574	1/17/23	13:50	2/1/23	11:49		X				
WA	RO7-21	21	1188577	1/17/23	13:55	2/1/23	11:54		X				
WA	RO7-22	22	1188578	1/17/23	14:00	2/1/23	11:59		X				
WA	RO7-23	23	1188581	1/17/23	14:05	2/1/23	12:03		X				
WA	RO7-24	24	1188598	1/17/23	14:11	2/1/23	12:09		X				
WA	RO7-17	17	1188559	1/17/23	14:23	2/1/23	12:21		X				

Relinquished by: _____ Date: 2/1/23 Time: 15:00 Received by: [Signature] Date: 2/2/23 Time: 10:45

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Fuel City Custody Seals Intact? ☒ Yes ☐ No None Blue Ice present or insulated cooler used? ☒ Yes ☐ No

Sample Condition Upon Receipt: Good Units: hPa atm inHg mmHg

December 2, 2022

Dan Pearson
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: Burns Harbor, IN
Client Job Number:
Project Number: 14777
Laboratory Work Order Number: 22K0646

Enclosed are results of analyses for samples as received by the laboratory on November 2, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alexandra M Gooch
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Dan Pearson

REPORT DATE: 12/2/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 14777

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22K0646

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Burns Harbor, IN

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
UW-1	22K0646-01	Air		EPA TO-13A Modified	
DW1-1	22K0646-02	Air		EPA TO-13A Modified	
DW2-1	22K0646-03	Air		EPA TO-13A Modified	
INT N-1	22K0646-04	Air		EPA TO-13A Modified	
INT S-1	22K0646-05	Air		EPA TO-13A Modified	
DW1-1-BLANK	22K0646-06	Air		EPA TO-13A Modified	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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EPA TO-13A Modified**Qualifications:****B**

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:**Naphthalene**

22K0646-01[UW-1], 22K0646-02RE1[DW1-1], 22K0646-03[DW2-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1], 22K0646-06[DW1-1-BLANK], B322108-BLK1, B322108-BS1, B322108-BSD1

B-07

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Naphthalene**

22K0646-02RE1[DW1-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1]

I-02

Result not attainable due to sample matrix interferences (a chemical or physical interference which could not be eliminated).

Analyte & Samples(s) Qualified:**Naphthalene-d8**

22K0646-05[INT S-1]

L-05

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Naphthalene**

22K0646-01[UW-1], 22K0646-02RE1[DW1-1], 22K0646-03[DW2-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1], 22K0646-06[DW1-1-BLANK], B322108-BS1, B322108-BSD1

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

22K0646-04[INT N-1], 22K0646-04RE1[INT N-1], 22K0646-04RE2[INT N-1], 22K0646-05[INT S-1], 22K0646-05RE1[INT S-1]

Acenaphthene-d10

22K0646-05RE2[INT S-1]

Benzo(a)pyrene-d12

22K0646-05RE2[INT S-1]

Chrysene-d12

22K0646-05RE2[INT S-1]

Fluoranthene-d10

22K0646-05RE2[INT S-1]

Fluorene-d10

22K0646-05RE2[INT S-1]

Naphthalene

22K0646-05RE2[INT S-1]

Naphthalene-d8

22K0646-05RE2[INT S-1]

Perylene-d12

22K0646-05RE2[INT S-1]

Phenanthrene-d10

22K0646-05RE2[INT S-1]

Pyrene-d10

22K0646-05RE2[INT S-1]

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S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Benzo(a)pyrene-d12

22K0646-04RE1[INT N-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1]

Fluoranthene-d10

22K0646-04RE1[INT N-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1]

Fluorene-d10

22K0646-04RE1[INT N-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1]

Pyrene-d10

22K0646-04RE1[INT N-1], 22K0646-04RE2[INT N-1], 22K0646-05RE2[INT S-1]

S-03

Surrogate recovery outside of control limits due to suspected sample matrix interference.

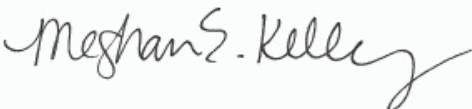
Analyte & Samples(s) Qualified:

Benzo(a)pyrene-d12

22K0646-04[INT N-1]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: UW-1

Sample ID: 22K0646-01

Sample Matrix: Air

Sampled: 10/28/2022 12:57

Sample Description/Location:

Sub Description/Location:

Flow Controller ID:

Sample Type:

Work Order: 22K0646
EPA TO-13A Modified

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.5	0.20		1	11/9/22 16:12		SPF
Acenaphthylene	ND	0.20		1	11/9/22 16:12		SPF
Anthracene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(a)anthracene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(a)pyrene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(e)pyrene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/9/22 16:12		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/9/22 16:12		SPF
Chrysene	ND	0.20		1	11/9/22 16:12		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/9/22 16:12		SPF
Fluoranthene	ND	0.20		1	11/9/22 16:12		SPF
Fluorene	1.1	0.20		1	11/9/22 16:12		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/9/22 16:12		SPF
1-Methylnaphthalene	0.76	0.20		1	11/9/22 16:12		SPF
2-Methylnaphthalene	1.4	0.20		1	11/9/22 16:12		SPF
Naphthalene	4.5	0.50	B, L-05	1	11/9/22 16:12		SPF
Perylene	ND	0.20		1	11/9/22 16:12		SPF
Phenanthrene	1.8	0.20		1	11/9/22 16:12		SPF
Pyrene	ND	0.20		1	11/9/22 16:12		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	89.4	40-120	11/9/22 16:12
Fluoranthene-d10	80.2	40-120	11/9/22 16:12
Fluorene-d10	77.3	40-120	11/9/22 16:12
Pyrene-d10	112	40-120	11/9/22 16:12

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: DW1-1
Sample ID: 22K0646-02

Sample Matrix: Air

Sampled: 10/28/2022 14:07

Sample Description/Location:

Sub Description/Location:

Work Order: 22K0646

Flow Controller ID:

Sample Type:

EPA TO-13A Modified

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	2.2	0.20		1	11/9/22 16:40		SPF
Acenaphthylene	0.32	0.20		1	11/9/22 16:40		SPF
Anthracene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(a)anthracene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(a)pyrene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(e)pyrene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/9/22 16:40		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/9/22 16:40		SPF
Chrysene	ND	0.20		1	11/9/22 16:40		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/9/22 16:40		SPF
Fluoranthene	0.33	0.20		1	11/9/22 16:40		SPF
Fluorene	1.5	0.20		1	11/9/22 16:40		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/9/22 16:40		SPF
1-Methylnaphthalene	2.6	0.20		1	11/9/22 16:40		SPF
2-Methylnaphthalene	4.8	0.20		1	11/9/22 16:40		SPF
Naphthalene	30	2.5	B-07, L-05, B	5	11/10/22 12:29		SPF
Perylene	ND	0.20		1	11/9/22 16:40		SPF
Phenanthrene	2.2	0.20		1	11/9/22 16:40		SPF
Pyrene	0.23	0.20		1	11/9/22 16:40		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	79.5	40-120	11/10/22 12:29
Benzo(a)pyrene-d12	81.2	40-120	11/9/22 16:40
Fluoranthene-d10	77.0	40-120	11/9/22 16:40
Fluoranthene-d10	75.0	40-120	11/10/22 12:29
Fluorene-d10	83.0	40-120	11/9/22 16:40
Fluorene-d10	85.0	40-120	11/10/22 12:29
Pyrene-d10	92.4	40-120	11/9/22 16:40
Pyrene-d10	89.5	40-120	11/10/22 12:29

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: DW2-1
Sample ID: 22K0646-03

Sample Matrix: Air

Sampled: 10/28/2022 14:49

Sample Description/Location:

Sub Description/Location:

Work Order: 22K0646

Flow Controller ID:

Sample Type:

EPA TO-13A Modified

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.8	0.20		1	11/9/22 17:09		SPF
Acenaphthylene	ND	0.20		1	11/9/22 17:09		SPF
Anthracene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(a)anthracene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(a)pyrene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(e)pyrene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/9/22 17:09		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/9/22 17:09		SPF
Chrysene	ND	0.20		1	11/9/22 17:09		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/9/22 17:09		SPF
Fluoranthene	ND	0.20		1	11/9/22 17:09		SPF
Fluorene	1.1	0.20		1	11/9/22 17:09		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/9/22 17:09		SPF
1-Methylnaphthalene	1.1	0.20		1	11/9/22 17:09		SPF
2-Methylnaphthalene	1.9	0.20		1	11/9/22 17:09		SPF
Naphthalene	4.4	0.50	B, L-05	1	11/9/22 17:09		SPF
Perylene	ND	0.20		1	11/9/22 17:09		SPF
Phenanthrene	1.4	0.20		1	11/9/22 17:09		SPF
Pyrene	ND	0.20		1	11/9/22 17:09		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	74.3	40-120	11/9/22 17:09
Fluoranthene-d10	65.4	40-120	11/9/22 17:09
Fluorene-d10	72.5	40-120	11/9/22 17:09
Pyrene-d10	89.0	40-120	11/9/22 17:09

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: INT N-1

Sample ID: 22K0646-04

Sample Matrix: Air

Sampled: 10/28/2022 15:22

Sample Description/Location:

Sub Description/Location:

Work Order: 22K0646

Flow Controller ID:

Sample Type:

EPA TO-13A Modified

Sample Flags: RL-12

Sample Flags: RL-12		Total µg		Date/Time		
Analyte	Results	RL	Flag/Qual	Dilution	Analyzed	Analyst
Acenaphthene	77	4.0	B-07, L-05, B	20	11/9/22 17:38	SPF
Acenaphthylene	480	20		100	11/10/22 12:57	SPF
Anthracene	170	4.0		20	11/9/22 17:38	SPF
Benzo(a)anthracene	98	4.0		20	11/9/22 17:38	SPF
Benzo(a)pyrene	64	4.0		20	11/9/22 17:38	SPF
Benzo(b)fluoranthene	130	4.0		20	11/9/22 17:38	SPF
Benzo(e)pyrene	66	4.0		20	11/9/22 17:38	SPF
Benzo(g,h,i)perylene	52	4.0		20	11/9/22 17:38	SPF
Benzo(k)fluoranthene	36	4.0		20	11/9/22 17:38	SPF
Chrysene	110	4.0		20	11/9/22 17:38	SPF
Dibenz(a,h)anthracene	10	4.0		20	11/9/22 17:38	SPF
Fluoranthene	440	20		100	11/10/22 12:57	SPF
Fluorene	210	20		100	11/10/22 12:57	SPF
Indeno(1,2,3-cd)pyrene	66	4.0		20	11/9/22 17:38	SPF
1-Methylnaphthalene	250	20		100	11/10/22 12:57	SPF
2-Methylnaphthalene	660	20		100	11/10/22 12:57	SPF
Naphthalene	8800	500		1000	11/10/22 13:25	SPF
Perylene	24	4.0		20	11/9/22 17:38	SPF
Phenanthrene	880	20		100	11/10/22 12:57	SPF
Pyrene	310	20		100	11/10/22 12:57	SPF

Surrogates	% Recovery	% REC Limits		
Benzo(a)pyrene-d12	142*	S-03	40-120	11/9/22 17:38
Benzo(a)pyrene-d12	*	S-01	40-120	11/10/22 12:57
Benzo(a)pyrene-d12	*	S-01	40-120	11/10/22 13:25
Fluoranthene-d10	86.0		40-120	11/9/22 17:38
Fluoranthene-d10	*	S-01	40-120	11/10/22 13:25
Fluoranthene-d10	*	S-01	40-120	11/10/22 12:57
Fluorene-d10	*	S-01	40-120	11/10/22 13:25
Fluorene-d10	94.0		40-120	11/9/22 17:38
Fluorene-d10	*	S-01	40-120	11/10/22 12:57
Pyrene-d10	*	S-01	40-120	11/10/22 12:57
Pyrene-d10	*	S-01	40-120	11/10/22 13:25
Pyrene-d10	104		40-120	11/9/22 17:38

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: INT S-1
Sample ID: 22K0646-05

Sample Matrix: Air

Sampled: 10/28/2022 15:37

Sample Description/Location:

Sub Description/Location:

Work Order: 22K0646

Flow Controller ID:

Sample Type:

EPA TO-13A Modified

Sample Flags: RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	45	1.0		5	11/9/22 18:06		SPF
Acenaphthylene	580	20		100	11/10/22 13:54		SPF
Anthracene	100	20		100	11/10/22 13:54		SPF
Benzo(a)anthracene	41	1.0		5	11/9/22 18:06		SPF
Benzo(a)pyrene	22	1.0		5	11/9/22 18:06		SPF
Benzo(b)fluoranthene	51	20		100	11/10/22 13:54		SPF
Benzo(e)pyrene	27	1.0		5	11/9/22 18:06		SPF
Benzo(g,h,i)perylene	19	1.0		5	11/9/22 18:06		SPF
Benzo(k)fluoranthene	15	1.0		5	11/9/22 18:06		SPF
Chrysene	49	1.0		5	11/9/22 18:06		SPF
Dibenz(a,h)anthracene	4.2	1.0		5	11/9/22 18:06		SPF
Fluoranthene	210	20		100	11/10/22 13:54		SPF
Fluorene	200	20		100	11/10/22 13:54		SPF
Indeno(1,2,3-cd)pyrene	23	1.0		5	11/9/22 18:06		SPF
1-Methylnaphthalene	300	20		100	11/10/22 13:54		SPF
2-Methylnaphthalene	900	20		100	11/10/22 13:54		SPF
Naphthalene	14000	1000	B-07, L-05, RL-12, B	2000	11/14/22 11:44		SPF
Perylene	7.8	1.0		5	11/9/22 18:06		SPF
Phenanthrene	510	20		100	11/10/22 13:54		SPF
Pyrene	150	20		100	11/10/22 13:54		SPF

Surrogates	% Recovery		% REC Limits	
Benzo(a)pyrene-d12	100		40-120	11/10/22 13:54
Benzo(a)pyrene-d12	91.5		40-120	11/9/22 18:06
Benzo(a)pyrene-d12	*	RL-12, S-01	40-120	11/14/22 11:44
Fluoranthene-d10	80.0		40-120	11/10/22 13:54
Fluoranthene-d10	*	RL-12, S-01	40-120	11/14/22 11:44
Fluoranthene-d10	96.0		40-120	11/9/22 18:06
Fluorene-d10	79.5		40-120	11/9/22 18:06
Fluorene-d10	*	RL-12, S-01	40-120	11/14/22 11:44
Fluorene-d10	100		40-120	11/10/22 13:54
Pyrene-d10	*	RL-12, S-01	40-120	11/14/22 11:44
Pyrene-d10	93.5		40-120	11/9/22 18:06
Pyrene-d10	90.0		40-120	11/10/22 13:54

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN

Date Received: 11/2/2022

Field Sample #: DW1-1-BLANK
Sample ID: 22K0646-06

Sample Matrix: Air

Sampled: 10/28/2022 00:00

Sample Description/Location:

Sub Description/Location:

Work Order: 22K0646

Flow Controller ID:

Sample Type:

EPA TO-13A Modified

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	11/9/22 18:35		SPF
Acenaphthylene	ND	0.20		1	11/9/22 18:35		SPF
Anthracene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(a)anthracene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(a)pyrene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(e)pyrene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/9/22 18:35		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/9/22 18:35		SPF
Chrysene	ND	0.20		1	11/9/22 18:35		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/9/22 18:35		SPF
Fluoranthene	ND	0.20		1	11/9/22 18:35		SPF
Fluorene	ND	0.20		1	11/9/22 18:35		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/9/22 18:35		SPF
1-Methylnaphthalene	ND	0.20		1	11/9/22 18:35		SPF
2-Methylnaphthalene	ND	0.20		1	11/9/22 18:35		SPF
Naphthalene	2.5	0.50	B, L-05	1	11/9/22 18:35		SPF
Perylene	ND	0.20		1	11/9/22 18:35		SPF
Phenanthrene	ND	0.20		1	11/9/22 18:35		SPF
Pyrene	ND	0.20		1	11/9/22 18:35		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	73.1	40-120	11/9/22 18:35
Fluoranthene-d10	77.4	40-120	11/9/22 18:35
Fluorene-d10	73.3	40-120	11/9/22 18:35
Pyrene-d10	93.5	40-120	11/9/22 18:35

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method: SW-846 3540C Analytical Method: EPA TO-13A Modified**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
22K0646-01 [UW-1]	B322108	1.00	1.00	11/04/22
22K0646-02 [DW1-1]	B322108	1.00	1.00	11/04/22
22K0646-02RE1 [DW1-1]	B322108	1.00	1.00	11/04/22
22K0646-03 [DW2-1]	B322108	1.00	1.00	11/04/22
22K0646-04 [INT N-1]	B322108	1.00	1.00	11/04/22
22K0646-04RE1 [INT N-1]	B322108	1.00	1.00	11/04/22
22K0646-04RE2 [INT N-1]	B322108	1.00	1.00	11/04/22
22K0646-05 [INT S-1]	B322108	1.00	1.00	11/04/22
22K0646-05RE1 [INT S-1]	B322108	1.00	1.00	11/04/22
22K0646-05RE2 [INT S-1]	B322108	1.00	1.00	11/04/22
22K0646-06 [DW1-1-BLANK]	B322108	1.00	1.00	11/04/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B322108 - SW-846 3540C
Blank (B322108-BLK1)

Prepared: 11/04/22 Analyzed: 11/09/22

Acenaphthene	ND	0.20									
Acenaphthylene	ND	0.20									
Anthracene	ND	0.20									
Benzo(a)anthracene	ND	0.20									
Benzo(a)pyrene	ND	0.20									
Benzo(b)fluoranthene	ND	0.20									
Benzo(e)pyrene	ND	0.20									
Benzo(g,h,i)perylene	ND	0.20									
Benzo(k)fluoranthene	ND	0.20									
Chrysene	ND	0.20									
Dibenz(a,h)anthracene	ND	0.20									
Fluoranthene	ND	0.20									
Fluorene	ND	0.20									
Indeno(1,2,3-cd)pyrene	ND	0.20									
1-Methylnaphthalene	ND	0.20									
2-Methylnaphthalene	ND	0.20									
Naphthalene	0.66	0.50									B
Perylene	ND	0.20									
Phenanthrene	ND	0.20									
Pyrene	ND	0.20									
<hr/>											
Surrogate: Fluorene-d10	0.726				1.00		72.6	40-120			
Surrogate: Pyrene-d10	0.845				1.00		84.5	40-120			

LCS (B322108-BS1)

Prepared: 11/04/22 Analyzed: 11/09/22

Acenaphthene	0.309	0.20	1.3	0.500		61.8	40-114				
Acenaphthylene	0.343	0.20	1.2	0.500		68.6	40-120				
Anthracene	0.313	0.20	1.5	0.500		62.6	40-120				
Benzo(a)anthracene	0.345	0.20	1.9	0.500		69.0	40-117				
Benzo(a)pyrene	0.346	0.20	2.1	0.500		69.2	40-120				
Benzo(b)fluoranthene	0.381	0.20	2.1	0.500		76.2	40-120				
Benzo(e)pyrene	0.397	0.20	2.1	0.500		79.4	40-120				
Benzo(g,h,i)perylene	0.327	0.20	2.3	0.500		65.4	40-120				
Benzo(k)fluoranthene	0.366	0.20	2.1	0.500		73.2	40-120				
Chrysene	0.343	0.20	1.9	0.500		68.6	40-114				
Dibenz(a,h)anthracene	0.318	0.20	2.3	0.500		63.6	40-120				
Fluoranthene	0.320	0.20	1.7	0.500		64.0	40-120				
Fluorene	0.343	0.20	1.4	0.500		68.6	40-118				
Indeno(1,2,3-cd)pyrene	0.341	0.20	2.3	0.500		68.2	40-120				
1-Methylnaphthalene	0.322	0.20	1.2	0.500		64.4	40-110				
2-Methylnaphthalene	0.350	0.20	1.2	0.500		70.0	40-110				
Naphthalene	1.09	0.50	2.6	0.500		219 *	40-120				L-05, B
Perylene	0.361	0.20	2.1	0.500		72.2	40-114				
Phenanthrene	0.392	0.20	1.5	0.500		78.4	40-120				
Pyrene	0.362	0.20	1.7	0.500		72.4	40-115				
<hr/>											
Surrogate: Fluorene-d10	0.884			1.00		88.4	40-120				
Surrogate: Pyrene-d10	1.06			1.00		106	40-120				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	
Batch B322108 - SW-846 3540C											
LCS Dup (B322108-BSD1)					Prepared: 11/04/22 Analyzed: 11/09/22						
Acenaphthene	0.310	0.20		1.3	0.500		62.0	40-114	0.323	25.8	
Acenaphthylene	0.344	0.20		1.2	0.500		68.8	40-120	0.291	50	
Anthracene	0.304	0.20		1.5	0.500		60.8	40-120	2.92	46	
Benzo(a)anthracene	0.330	0.20		1.9	0.500		66.0	40-117	4.44	22	
Benzo(a)pyrene	0.324	0.20		2.1	0.500		64.8	40-120	6.57	40.6	
Benzo(b)fluoranthene	0.359	0.20		2.1	0.500		71.8	40-120	5.95	18.8	
Benzo(e)pyrene	0.370	0.20		2.1	0.500		74.0	40-120	7.04	18.5	
Benzo(g,h,i)perylene	0.292	0.20		2.3	0.500		58.4	40-120	11.3	25	
Benzo(k)fluoranthene	0.343	0.20		2.1	0.500		68.6	40-120	6.49	24.5	
Chrysene	0.319	0.20		1.9	0.500		63.8	40-114	7.25	20.5	
Dibenz(a,h)anthracene	0.282	0.20		2.3	0.500		56.4	40-120	12.0	31.7	
Fluoranthene	0.288	0.20		1.7	0.500		57.6	40-120	10.5	21.5	
Fluorene	0.317	0.20		1.4	0.500		63.4	40-118	7.88	24.1	
Indeno(1,2,3-cd)pyrene	0.305	0.20		2.3	0.500		61.0	40-120	11.1	31.8	
1-Methylnaphthalene	0.330	0.20		1.2	0.500		66.0	40-110	2.45	29.1	
2-Methylnaphthalene	0.365	0.20		1.2	0.500		73.0	40-110	4.20	29.3	
Naphthalene	1.32	0.50		2.6	0.500		265	* 40-120	18.9	30.4	L-05, B
Perylene	0.342	0.20		2.1	0.500		68.4	40-114	5.41	27.7	
Phenanthrene	0.398	0.20		1.5	0.500		79.6	40-120	1.52	32	
Pyrene	0.385	0.20		1.7	0.500		77.0	40-115	6.16	20.9	
Surrogate: Fluorene-d10	0.719				1.00		71.9	40-120			
Surrogate: Pvrene-d10	0.968				1.00		96.8	40-120			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
I-02	Result not attainable due to sample matrix interferences (a chemical or physical interference which could not be eliminated).
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-03	Surrogate recovery outside of control limits due to suspected sample matrix interference.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B322108-BLK1)									
Lab File ID: E22S313013.D					Analyzed: 11/09/22 14:18				
Naphthalene-d8	121079	7.874	141756	7.882	85	50 - 200	-0.0080	+/-0.50	
Acenaphthene-d10	66323	9.601	82725	9.605	80	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	115380	11.066	150397	11.07	77	50 - 200	-0.0040	+/-0.50	
Chrysene-d12	99591	14.787	109047	14.791	91	50 - 200	-0.0040	+/-0.50	
Perylene-d12	94772	18.162	117015	18.166	81	50 - 200	-0.0040	+/-0.50	
LCS (B322108-BS1)									
Lab File ID: E22S313015.D					Analyzed: 11/09/22 15:14				
Naphthalene-d8	132259	7.878	141756	7.882	93	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	75139	9.605	82725	9.605	91	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	126196	11.066	150397	11.07	84	50 - 200	-0.0040	+/-0.50	
Chrysene-d12	97665	14.787	109047	14.791	90	50 - 200	-0.0040	+/-0.50	
Perylene-d12	94970	18.166	117015	18.166	81	50 - 200	0.0000	+/-0.50	
LCS Dup (B322108-BSD1)									
Lab File ID: E22S313016.D					Analyzed: 11/09/22 15:43				
Naphthalene-d8	132043	7.882	141756	7.882	93	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	74708	9.605	82725	9.605	90	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	97272	11.066	150397	11.07	65	50 - 200	-0.0040	+/-0.50	
Chrysene-d12	65032	14.787	109047	14.791	60	50 - 200	-0.0040	+/-0.50	
Perylene-d12	61116	18.162	117015	18.166	52	50 - 200	-0.0040	+/-0.50	
UW-1 (22K0646-01)									
Lab File ID: E22S313017.D					Analyzed: 11/09/22 16:12				
Naphthalene-d8	140285	7.877	141756	7.882	99	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10	85842	9.604	82725	9.605	104	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	134928	11.07	150397	11.07	90	50 - 200	0.0000	+/-0.50	
Chrysene-d12	107325	14.795	109047	14.791	98	50 - 200	0.0040	+/-0.50	
Perylene-d12	104077	18.17	117015	18.166	89	50 - 200	0.0040	+/-0.50	
DW1-1 (22K0646-02)									
Lab File ID: E22S313018.D					Analyzed: 11/09/22 16:40				
Naphthalene-d8	140333	7.882	141756	7.882	99	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	89165	9.609	82725	9.605	108	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	150228	11.075	150397	11.07	100	50 - 200	0.0050	+/-0.50	
Chrysene-d12	123215	14.795	109047	14.791	113	50 - 200	0.0040	+/-0.50	
Perylene-d12	126327	18.174	117015	18.166	108	50 - 200	0.0080	+/-0.50	
DW2-1 (22K0646-03)									
Lab File ID: E22S313019.D					Analyzed: 11/09/22 17:09				
Naphthalene-d8	139218	7.882	141756	7.882	98	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	81717	9.608	82725	9.605	99	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	105739	11.07	150397	11.07	70	50 - 200	0.0000	+/-0.50	
Chrysene-d12	78091	14.795	109047	14.791	72	50 - 200	0.0040	+/-0.50	
Perylene-d12	79377	18.17	117015	18.166	68	50 - 200	0.0040	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
INT N-1 (22K0646-04) Lab File ID: E22S313020.D Analyzed: 11/09/22 17:38									
Naphthalene-d8	149403	7.918	141756	7.882	105	50 - 200	0.0360	+/-0.50	
Acenaphthene-d10	98807	9.608	82725	9.605	119	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	182467	11.075	150397	11.07	121	50 - 200	0.0050	+/-0.50	
Chrysene-d12	168977	14.799	109047	14.791	155	50 - 200	0.0080	+/-0.50	
Perylene-d12	176110	18.174	117015	18.166	151	50 - 200	0.0080	+/-0.50	
INT S-1 (22K0646-05) Lab File ID: E22S313021.D Analyzed: 11/09/22 18:06									
Naphthalene-d8	1655	7.857	141756	7.882	1	50 - 200	-0.0250	+/-0.50	*
Acenaphthene-d10	119725	9.617	82725	9.605	145	50 - 200	0.0120	+/-0.50	
Phenanthrene-d10	191451	11.085	150397	11.07	127	50 - 200	0.0150	+/-0.50	
Chrysene-d12	165467	14.807	109047	14.791	152	50 - 200	0.0160	+/-0.50	
Perylene-d12	185935	18.182	117015	18.166	159	50 - 200	0.0160	+/-0.50	
DW1-1-BLANK (22K0646-06) Lab File ID: E22S313022.D Analyzed: 11/09/22 18:35									
Naphthalene-d8	149501	7.878	141756	7.882	105	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	89602	9.605	82725	9.605	108	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	143084	11.071	150397	11.07	95	50 - 200	0.0010	+/-0.50	
Chrysene-d12	119091	14.799	109047	14.791	109	50 - 200	0.0080	+/-0.50	
Perylene-d12	125343	18.178	117015	18.166	107	50 - 200	0.0120	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
DW1-1 (22K0646-02RE1) Lab File ID: E22S314006.D Analyzed: 11/10/22 12:29									
Naphthalene-d8	126546	7.878	133935	7.882	94	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	72050	9.605	79119	9.605	91	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	127884	11.066	140728	11.071	91	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	101206	14.787	110184	14.787	92	50 - 200	0.0000	+/-0.50	
Perylene-d12	100715	18.158	112821	18.162	89	50 - 200	-0.0040	+/-0.50	
INT N-1 (22K0646-04RE1) Lab File ID: E22S314007.D Analyzed: 11/10/22 12:57									
Naphthalene-d8	143205	7.886	133935	7.882	107	50 - 200	0.0040	+/-0.50	
Acenaphthene-d10	78096	9.6	79119	9.605	99	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10	138343	11.066	140728	11.071	98	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	108551	14.779	110184	14.787	99	50 - 200	-0.0080	+/-0.50	
Perylene-d12	107589	18.15	112821	18.162	95	50 - 200	-0.0120	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
INT N-1 (22K0646-04RE2) Lab File ID: E22S314008.D Analyzed: 11/10/22 13:25									
Naphthalene-d8	120740	7.877	133935	7.882	90	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10	68961	9.6	79119	9.605	87	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10	121185	11.066	140728	11.071	86	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	85052	14.779	110184	14.787	77	50 - 200	-0.0080	+/-0.50	
Perylene-d12	84789	18.154	112821	18.162	75	50 - 200	-0.0080	+/-0.50	
INT S-1 (22K0646-05RE1) Lab File ID: E22S314009.D Analyzed: 11/10/22 13:54									
Naphthalene-d8	138716	7.89	133935	7.882	104	50 - 200	0.0080	+/-0.50	
Acenaphthene-d10	70476	9.601	79119	9.605	89	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	126933	11.066	140728	11.071	90	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	96464	14.779	110184	14.787	88	50 - 200	-0.0080	+/-0.50	
Perylene-d12	95384	18.151	112821	18.162	85	50 - 200	-0.0110	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
INT S-1 (22K0646-05RE2) Lab File ID: E22S318004.D Analyzed: 11/14/22 11:44									
Naphthalene-d8	79592	7.881	156579	7.886	51	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10	96755	9.616	95813	9.613	101	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	178745	11.08	197554	11.075	90	50 - 200	0.0050	+/-0.50	
Chrysene-d12	126222	14.799	170110	14.799	74	50 - 200	0.0000	+/-0.50	
Perylene-d12	127058	18.181	175394	18.181	72	50 - 200	0.0000	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
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No certified Analyses included in this Report

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
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Phone: 413-525-2332
Fax: 413-525-6405
www.pacelabs.com

CHAIN OF CUSTODY RECORD (AIR)

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Pace Analytical
22 KOWLE
Crew Ave

Address: 500 W Wood St. Peddler IL 60067
Phone: 1800 553 5511

Project Name: Cleveland Cliffs
Project Location: Burns Harbor, IN

Project Number: 14777

Project Manager: Roxanne

Pace Quote Name/Number:

Invoice Recipient:

Sampled By: JD

7-Day	<input type="checkbox"/>	10-Day	<input checked="" type="checkbox"/>
Due Date:			
1-Day	<input type="checkbox"/>	3-Day	<input type="checkbox"/>
2-Day	<input type="checkbox"/>	4-Day	<input type="checkbox"/>
Format: PDF <input type="checkbox"/> EXCEL <input type="checkbox"/>			
Other:			
CLP Like Data Pkg Required: <input type="checkbox"/>			
Email To:			
Fax To #:			

ANALYSIS REQUESTED		" Hg	Lab Receipt Pressure	Flow Controller ID
Initial Pressure				
Final Pressure				
Volume				
Matrix				
Flow Rate				
Duration				
Beginning Date/Time				
Ending Date/Time				
Client Sample ID / Description				
Lab Use				

Please use the following codes to indicate possible sample concentration within the Conc Code column above: H - High; M - Medium; L - Low; C - Clean; U - Unknown		Matrix Codes: SG = SOIL GAS IA = INDOOR AIR AMB = AMBIENT SS = SUB SLAB D = DUP BL = BLANK O = Other	
<p>Retinquished by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p> <p>Received by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p> <p>Retinquished by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p> <p>Received by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p> <p>Retinquished by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p> <p>Received by: (signature) <u>[Signature]</u> Date/Time: <u>11-1-22</u></p>		<p>Special Requirements:</p> <p>MA MCP Required <input type="checkbox"/></p> <p>ACP Certification Form Required <input type="checkbox"/></p> <p>CT RCP Required <input type="checkbox"/></p> <p>RCP Certification Form Required <input type="checkbox"/></p> <p>Other: <input type="checkbox"/></p>	
<p>Project Entity</p> <p><input type="checkbox"/> Government <input type="checkbox"/> Municipality <input type="checkbox"/> MWRA <input type="checkbox"/> WRTA <input type="checkbox"/> Other</p> <p><input type="checkbox"/> Federal <input type="checkbox"/> 21 J <input type="checkbox"/> School <input type="checkbox"/> Chromatogram</p> <p><input type="checkbox"/> City <input type="checkbox"/> Brownfield <input type="checkbox"/> MBTA <input type="checkbox"/> AIHA-LAP, LLC</p>		<p>PCB ONLY</p> <p><input type="checkbox"/> Soxhlet <input type="checkbox"/> Non Soxhlet</p>	

(https://www.fedex.com/en-us/home.html)



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11/2/2022 8:11 AM

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Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By <u>JS</u>	Date <u>11/2</u>	Time <u>940</u>
How Were the samples received?	In Cooler <u>T</u>	On Ice <u>T</u>
	In Box	Ambient
Were samples within Temperature Compliance?	Within 2-6°C <u>T</u>	By Gun # <u>3</u> Actual Temp - <u>2.7</u>
		By Blank # Actual Temp -
Was Custody Seal In tact?	<u>NA</u>	Were Samples Tampered with? <u>NA</u>
Was COC Relinquished?	<u>T</u>	Does Chain Agree With Samples? <u>T</u>
Are there any loose caps/valves on any samples?	<u>F</u>	
Is COC in ink/ Legible?	<u>T</u>	Were samples received within holding time? <u>T</u>
Did COC Include all Pertinent Information?	Client? <u>T</u>	Analysis? <u>T</u>
	Project? <u>T</u>	ID's? <u>T</u>
Are Sample Labels filled out and legible?		Sampler Name? <u>T</u>
Are there Rushes?	<u>F</u>	Collection Dates/Times? <u>T</u>
Samples are received within holding time?	<u>T</u>	
Proper Media Used?	<u>T</u>	Who was notified?
Are there Trip Blanks?	<u>F</u>	Individually Certified Cans? <u>F</u>
		Is there enough Volume? <u>T</u>

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans					Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s	<u>6</u>	<u>WV</u>			Tedlar		

Can #'s					Reg #'s			
Unused Media					Pufs/TO-17's			
					100722-01	-06		
					-02			
					-03			
					-04			
					-05			

Comments:

*Analysis taken from project

December 6, 2022

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CCBH
Client Job Number:
Project Number: 14777
Laboratory Work Order Number: 22K1963

Enclosed are results of analyses for samples as received by the laboratory on November 11, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 12/6/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 14777

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22K1963

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CCBH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO2-INT1	22K1963-01	Air		EPA TO-13A	
RO2-INT2	22K1963-02	Air		EPA TO-13A	
RO2-DW1	22K1963-03	Air		EPA TO-13A	
RO2-DW2	22K1963-04	Air		EPA TO-13A	
RO2-VW	22K1963-05	Air		EPA TO-13A	
RO2-BLANK	22K1963-06	Air		EPA TO-13A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-13A**Qualifications:**

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**1-Methylnaphthalene**

B322974-BS1

AcenaphtheneB322974-BS1

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:22K1963-01[RO2-INT1], 22K1963-02[RO2-INT2], 22K1963-02RE1[RO2-INT2]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

22K1963-01[RO2-INT1], 22K1963-01RE1[RO2-INT1], 22K1963-02RE1[RO2-INT2]

Fluoranthene-d10

22K1963-01[RO2-INT1], 22K1963-01RE1[RO2-INT1], 22K1963-02RE1[RO2-INT2]

Fluorene-d10

22K1963-01[RO2-INT1], 22K1963-01RE1[RO2-INT1], 22K1963-02RE1[RO2-INT2]

Pyrene-d10

22K1963-01[RO2-INT1], 22K1963-01RE1[RO2-INT1], 22K1963-02RE1[RO2-INT2]

EPA TO-13A

Reported results for air samples are calculated based on client sampling and sampling information provided by the laboratory.

Blank is not subtracted unless otherwise specified.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-INT1
Sample ID: 22K1963-01
Sample Matrix: Air
Sampled: 11/9/2022 09:34

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22K1963

EPA TO-13A						
Sample Flags: RL-12						
Analyte	Total µg		Flag/Qual	Dilution	Date/Time	
	Results	RL			Analyzed	Analyst
Acenaphthene	62	20		100	12/1/22 18:00	SPF
Acenaphthylene	710	20		100	12/1/22 18:00	SPF
Anthracene	220	20		100	12/1/22 18:00	SPF
Benzo(a)anthracene	100	20		100	12/1/22 18:00	SPF
Benzo(a)pyrene	60	20		100	12/1/22 18:00	SPF
Benzo(b)fluoranthene	120	20		100	12/1/22 18:00	SPF
Benzo(e)pyrene	54	20		100	12/1/22 18:00	SPF
Benzo(g,h,i)perylene	37	20		100	12/1/22 18:00	SPF
Benzo(k)fluoranthene	41	20		100	12/1/22 18:00	SPF
Chrysene	110	20		100	12/1/22 18:00	SPF
Dibenz(a,h)anthracene	ND	20		100	12/1/22 18:00	SPF
Fluoranthene	450	20		100	12/1/22 18:00	SPF
Fluorene	370	20		100	12/1/22 18:00	SPF
Indeno(1,2,3-cd)pyrene	43	20		100	12/1/22 18:00	SPF
1-Methylnaphthalene	270	20		100	12/1/22 18:00	SPF
2-Methylnaphthalene	770	20		100	12/1/22 18:00	SPF
Naphthalene	7300	500		1000	12/2/22 12:04	SPF
Perylene	ND	20		100	12/1/22 18:00	SPF
Phenanthrene	950	20		100	12/1/22 18:00	SPF
Pyrene	270	20		100	12/1/22 18:00	SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120		12/1/22 18:00
Benzo(a)pyrene-d12	*	S-01	60-120		12/2/22 12:04
Fluoranthene-d10	*	S-01	60-120		12/1/22 18:00
Fluoranthene-d10	*	S-01	60-120		12/2/22 12:04
Fluorene-d10	*	S-01	60-120		12/1/22 18:00
Fluorene-d10	*	S-01	60-120		12/2/22 12:04
Pyrene-d10	*	S-01	60-120		12/1/22 18:00
Pyrene-d10	*	S-01	60-120		12/2/22 12:04

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-INT2
Sample ID: 22K1963-02
Sample Matrix: Air
Sampled: 11/9/2022 10:00

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22K1963
EPA TO-13A

Sample Flags: RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	20	10		50	12/1/22 18:56		SPF
Acenaphthylene	85	10		50	12/1/22 18:56		SPF
Anthracene	83	10		50	12/1/22 18:56		SPF
Benzo(a)anthracene	44	10		50	12/1/22 18:56		SPF
Benzo(a)pyrene	26	10		50	12/1/22 18:56		SPF
Benzo(b)fluoranthene	54	10		50	12/1/22 18:56		SPF
Benzo(e)pyrene	26	10		50	12/1/22 18:56		SPF
Benzo(g,h,i)perylene	17	10		50	12/1/22 18:56		SPF
Benzo(k)fluoranthene	20	10		50	12/1/22 18:56		SPF
Chrysene	53	10		50	12/1/22 18:56		SPF
Dibenz(a,h)anthracene	ND	10		50	12/1/22 18:56		SPF
Fluoranthene	220	10		50	12/1/22 18:56		SPF
Fluorene	88	10		50	12/1/22 18:56		SPF
Indeno(1,2,3-cd)pyrene	21	10		50	12/1/22 18:56		SPF
1-Methylnaphthalene	45	10		50	12/1/22 18:56		SPF
2-Methylnaphthalene	120	10		50	12/1/22 18:56		SPF
Naphthalene	980	50		100	12/1/22 19:25		SPF
Perylene	ND	10		50	12/1/22 18:56		SPF
Phenanthrene	380	10		50	12/1/22 18:56		SPF
Pyrene	130	10		50	12/1/22 18:56		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120		12/1/22 19:25
Benzo(a)pyrene-d12	95.0		60-120		12/1/22 18:56
Fluoranthene-d10	*	S-01	60-120		12/1/22 19:25
Fluoranthene-d10	105		60-120		12/1/22 18:56
Fluorene-d10	*	S-01	60-120		12/1/22 19:25
Fluorene-d10	110		60-120		12/1/22 18:56
Pyrene-d10	*	S-01	60-120		12/1/22 19:25
Pyrene-d10	100		60-120		12/1/22 18:56

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-DW1
Sample ID: 22K1963-03
Sample Matrix: Air
Sampled: 11/9/2022 10:35

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22K1963
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	2.3	0.20		1	11/28/22 17:51		SPF
Acenaphthylene	2.8	0.20		1	11/28/22 17:51		SPF
Anthracene	2.0	0.20		1	11/28/22 17:51		SPF
Benzo(a)anthracene	0.92	0.20		1	11/28/22 17:51		SPF
Benzo(a)pyrene	0.69	0.20		1	11/28/22 17:51		SPF
Benzo(b)fluoranthene	1.4	0.20		1	11/28/22 17:51		SPF
Benzo(e)pyrene	0.72	0.20		1	11/28/22 17:51		SPF
Benzo(g,h,i)perylene	0.52	0.20		1	11/28/22 17:51		SPF
Benzo(k)fluoranthene	0.45	0.20		1	11/28/22 17:51		SPF
Chrysene	1.1	0.20		1	11/28/22 17:51		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/28/22 17:51		SPF
Fluoranthene	4.4	0.20		1	11/28/22 17:51		SPF
Fluorene	4.4	0.20		1	11/28/22 17:51		SPF
Indeno(1,2,3-cd)pyrene	0.63	0.20		1	11/28/22 17:51		SPF
1-Methylnaphthalene	2.9	0.20		1	11/28/22 17:51		SPF
2-Methylnaphthalene	7.5	0.20		1	11/28/22 17:51		SPF
Naphthalene	58	5.0		10	12/1/22 15:38		SPF
Perylene	ND	0.20		1	11/28/22 17:51		SPF
Phenanthrene	9.6	0.20		1	11/28/22 17:51		SPF
Pyrene	2.4	0.20		1	11/28/22 17:51		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	92.0	60-120	11/28/22 17:51
Benzo(a)pyrene-d12	88.0	60-120	12/1/22 15:38
Fluoranthene-d10	89.3	60-120	11/28/22 17:51
Fluoranthene-d10	91.0	60-120	12/1/22 15:38
Fluorene-d10	89.0	60-120	11/28/22 17:51
Fluorene-d10	95.0	60-120	12/1/22 15:38
Pyrene-d10	82.7	60-120	11/28/22 17:51
Pyrene-d10	99.0	60-120	12/1/22 15:38

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-DW2
Sample ID: 22K1963-04
Sample Matrix: Air
Sampled: 11/9/2022 11:15

Sample Description/Location:
Sub Description/Location:

Work Order: 22K1963

Flow Controller ID:
Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.74	0.20		1	11/28/22 18:19		SPF
Acenaphthylene	ND	0.20		1	11/28/22 18:19		SPF
Anthracene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(a)anthracene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(a)pyrene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(e)pyrene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/28/22 18:19		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/28/22 18:19		SPF
Chrysene	ND	0.20		1	11/28/22 18:19		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/28/22 18:19		SPF
Fluoranthene	0.27	0.20		1	11/28/22 18:19		SPF
Fluorene	0.73	0.20		1	11/28/22 18:19		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/28/22 18:19		SPF
1-Methylnaphthalene	0.68	0.20		1	11/28/22 18:19		SPF
2-Methylnaphthalene	1.3	0.20		1	11/28/22 18:19		SPF
Naphthalene	1.6	0.50		1	11/28/22 18:19		SPF
Perylene	ND	0.20		1	11/28/22 18:19		SPF
Phenanthrene	1.0	0.20		1	11/28/22 18:19		SPF
Pyrene	ND	0.20		1	11/28/22 18:19		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	92.6	60-120	11/28/22 18:19
Fluoranthene-d10	89.1	60-120	11/28/22 18:19
Fluorene-d10	110	60-120	11/28/22 18:19
Pyrene-d10	86.3	60-120	11/28/22 18:19

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-VW
Sample ID: 22K1963-05
Sample Matrix: Air
Sampled: 11/9/2022 12:00

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22K1963
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.2	0.20		1	11/28/22 18:48		SPF
Acenaphthylene	ND	0.20		1	11/28/22 18:48		SPF
Anthracene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(a)anthracene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(a)pyrene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(b)fluoranthene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(e)pyrene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/28/22 18:48		SPF
Benzo(k)fluoranthene	ND	0.20		1	11/28/22 18:48		SPF
Chrysene	ND	0.20		1	11/28/22 18:48		SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/28/22 18:48		SPF
Fluoranthene	ND	0.20		1	11/28/22 18:48		SPF
Fluorene	0.83	0.20		1	11/28/22 18:48		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/28/22 18:48		SPF
1-Methylnaphthalene	0.88	0.20		1	11/28/22 18:48		SPF
2-Methylnaphthalene	1.7	0.20		1	11/28/22 18:48		SPF
Naphthalene	1.4	0.50		1	11/28/22 18:48		SPF
Perylene	ND	0.20		1	11/28/22 18:48		SPF
Phenanthrene	1.2	0.20		1	11/28/22 18:48		SPF
Pyrene	ND	0.20		1	11/28/22 18:48		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	87.7	60-120	11/28/22 18:48
Fluoranthene-d10	89.1	60-120	11/28/22 18:48
Fluorene-d10	110	60-120	11/28/22 18:48
Pyrene-d10	84.8	60-120	11/28/22 18:48

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 11/11/2022
Field Sample #: RO2-BLANK
Sample ID: 22K1963-06
Sample Matrix: Air
Sampled: 11/9/2022 00:00

Sample Description/Location:
Sub Description/Location:

Work Order: 22K1963

Flow Controller ID:
Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Date/Time		
	Results	RL		Dilution	Analyzed	Analyst
Acenaphthene	ND	0.20		1	11/28/22 19:17	SPF
Acenaphthylene	ND	0.20		1	11/28/22 19:17	SPF
Anthracene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(a)anthracene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(a)pyrene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(b)fluoranthene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(e)pyrene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(g,h,i)perylene	ND	0.20		1	11/28/22 19:17	SPF
Benzo(k)fluoranthene	ND	0.20		1	11/28/22 19:17	SPF
Chrysene	ND	0.20		1	11/28/22 19:17	SPF
Dibenz(a,h)anthracene	ND	0.20		1	11/28/22 19:17	SPF
Fluoranthene	ND	0.20		1	11/28/22 19:17	SPF
Fluorene	ND	0.20		1	11/28/22 19:17	SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	11/28/22 19:17	SPF
1-Methylnaphthalene	ND	0.20		1	11/28/22 19:17	SPF
2-Methylnaphthalene	ND	0.20		1	11/28/22 19:17	SPF
Naphthalene	ND	0.50		1	11/28/22 19:17	SPF
Perylene	ND	0.20		1	11/28/22 19:17	SPF
Phenanthrene	ND	0.20		1	11/28/22 19:17	SPF
Pyrene	ND	0.20		1	11/28/22 19:17	SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	84.4	60-120	11/28/22 19:17
Fluoranthene-d10	89.6	60-120	11/28/22 19:17
Fluorene-d10	84.0	60-120	11/28/22 19:17
Pyrene-d10	83.4	60-120	11/28/22 19:17

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data**Prep Method: SW-846 3540C Analytical Method: EPA TO-13A**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
22K1963-01 [RO2-INT1]	B322974	1.00	1.00	11/14/22
22K1963-01RE1 [RO2-INT1]	B322974	1.00	1.00	11/14/22
22K1963-02 [RO2-INT2]	B322974	1.00	1.00	11/14/22
22K1963-02RE1 [RO2-INT2]	B322974	1.00	1.00	11/14/22
22K1963-03 [RO2-DW1]	B322974	1.00	1.00	11/14/22
22K1963-03RE1 [RO2-DW1]	B322974	1.00	1.00	11/14/22
22K1963-04 [RO2-DW2]	B322974	1.00	1.00	11/14/22
22K1963-05 [RO2-VW]	B322974	1.00	1.00	11/14/22
22K1963-06 [RO2-BLANK]	B322974	1.00	1.00	11/14/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B322974 - SW-846 3540C
Blank (B322974-BLK1)

Prepared: 11/14/22 Analyzed: 11/28/22

Acenaphthene	ND	0.20									
Acenaphthylene	ND	0.20									
Anthracene	ND	0.20									
Benzo(a)anthracene	ND	0.20									
Benzo(a)pyrene	ND	0.20									
Benzo(b)fluoranthene	ND	0.20									
Benzo(e)pyrene	ND	0.20									
Benzo(g,h,i)perylene	ND	0.20									
Benzo(k)fluoranthene	ND	0.20									
Chrysene	ND	0.20									
Dibenz(a,h)anthracene	ND	0.20									
Fluoranthene	ND	0.20									
Fluorene	ND	0.20									
Indeno(1,2,3-cd)pyrene	ND	0.20									
1-Methylnaphthalene	ND	0.20									
2-Methylnaphthalene	ND	0.20									
Naphthalene	ND	0.50									
Perylene	ND	0.20									
Phenanthrene	ND	0.20									
Pyrene	ND	0.20									
<hr/>											
Surrogate: Fluorene-d10	0.752				1.00		75.2	60-120			
Surrogate: Pyrene-d10	0.758				1.00		75.8	60-120			

LCS (B322974-BS1)

Prepared: 11/14/22 Analyzed: 11/28/22

Acenaphthene	0.271	0.20	1.3	0.500	54.2	*	60-110				L-07
Acenaphthylene	0.312	0.20	1.2	0.500	62.4		60-110				
Anthracene	0.307	0.20	1.5	0.500	61.4		60-110				
Benzo(a)anthracene	0.331	0.20	1.9	0.500	66.2		60-110				
Benzo(a)pyrene	0.342	0.20	2.1	0.500	68.4		60-110				
Benzo(b)fluoranthene	0.375	0.20	2.1	0.500	75.0		60-111				
Benzo(e)pyrene	0.401	0.20	2.1	0.500	80.2		60-118				
Benzo(g,h,i)perylene	0.350	0.20	2.3	0.500	70.0		60-111				
Benzo(k)fluoranthene	0.356	0.20	2.1	0.500	71.2		60-114				
Chrysene	0.331	0.20	1.9	0.500	66.2		60-110				
Dibenz(a,h)anthracene	0.337	0.20	2.3	0.500	67.4		60-113				
Fluoranthene	0.357	0.20	1.7	0.500	71.4		60-110				
Fluorene	0.323	0.20	1.4	0.500	64.6		60-110				
Indeno(1,2,3-cd)pyrene	0.365	0.20	2.3	0.500	73.0		60-110				
1-Methylnaphthalene	0.288	0.20	1.2	0.500	57.6	*	60-110				L-07
2-Methylnaphthalene	0.300	0.20	1.2	0.500	60.0		60-110				
Naphthalene	0.464	0.50	2.6	0.500	92.8		60-118				
Perylene	0.361	0.20	2.1	0.500	72.2		60-110				
Phenanthrene	0.318	0.20	1.5	0.500	63.6		60-110				
Pyrene	0.318	0.20	1.7	0.500	63.6		60-110				
<hr/>											
Surrogate: Fluorene-d10	1.01			1.00	101		60-120				
Surrogate: Pyrene-d10	0.949			1.00	94.9		60-120				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC		RPD		Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B322974 - SW-846 3540C
LCS Dup (B322974-BSD1)

Prepared: 11/14/22 Analyzed: 11/28/22

Acenaphthene	0.303	0.20		1.3	0.500		60.6	60-110	11.1	29.8
Acenaphthylene	0.341	0.20		1.2	0.500		68.2	60-110	8.88	50
Anthracene	0.325	0.20		1.5	0.500		65.0	60-110	5.70	35.8
Benzo(a)anthracene	0.424	0.20		1.9	0.500		84.8	60-110	24.6	27.3
Benzo(a)pyrene	0.391	0.20		2.1	0.500		78.2	60-110	13.4	27.3
Benzo(b)fluoranthene	0.445	0.20		2.1	0.500		89.0	60-111	17.1	32.7
Benzo(e)pyrene	0.445	0.20		2.1	0.500		89.0	60-118	10.4	33.6
Benzo(g,h,i)perylene	0.381	0.20		2.3	0.500		76.2	60-111	8.48	36
Benzo(k)fluoranthene	0.398	0.20		2.1	0.500		79.6	60-114	11.1	32.5
Chrysene	0.420	0.20		1.9	0.500		84.0	60-110	23.7	28
Dibenz(a,h)anthracene	0.363	0.20		2.3	0.500		72.6	60-113	7.43	37.1
Fluoranthene	0.424	0.20		1.7	0.500		84.8	60-110	17.2	29.5
Fluorene	0.345	0.20		1.4	0.500		69.0	60-110	6.59	31.1
Indeno(1,2,3-cd)pyrene	0.406	0.20		2.3	0.500		81.2	60-110	10.6	34
1-Methylnaphthalene	0.329	0.20		1.2	0.500		65.8	60-110	13.3	28.9
2-Methylnaphthalene	0.337	0.20		1.2	0.500		67.4	60-110	11.6	28.3
Naphthalene	0.451	0.50		2.6	0.500		90.2	60-118	2.84	28.3
Perylene	0.394	0.20		2.1	0.500		78.8	60-110	8.74	25.9
Phenanthrene	0.332	0.20		1.5	0.500		66.4	60-110	4.31	27.4
Pyrene	0.379	0.20		1.7	0.500		75.8	60-110	17.5	30.7
Surrogate: Fluorene-d10	0.866				1.00		86.6	60-120		
Surrogate: Pyrene-d10	0.848				1.00		84.8	60-120		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B322974-BLK1)									
Lab File ID: E22S331006.D					Analyzed: 11/28/22 15:00				
Naphthalene-d8	110945	7.721	97007	7.725	114	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	70344	9.434	63450	9.434	111	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	140791	10.887	129115	10.887	109	50 - 200	0.0000	+/-0.50	
Chrysene-d12	133539	14.433	115505	14.433	116	50 - 200	0.0000	+/-0.50	
Perylene-d12	127179	17.689	119079	17.689	107	50 - 200	0.0000	+/-0.50	
LCS (B322974-BS1)									
Lab File ID: E22S331008.D					Analyzed: 11/28/22 15:57				
Naphthalene-d8	99001	7.725	97007	7.725	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	64367	9.434	63450	9.434	101	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	137951	10.892	129115	10.887	107	50 - 200	0.0050	+/-0.50	
Chrysene-d12	137727	14.441	115505	14.433	119	50 - 200	0.0080	+/-0.50	
Perylene-d12	140470	17.7	119079	17.689	118	50 - 200	0.0110	+/-0.50	
LCS Dup (B322974-BSD1)									
Lab File ID: E22S331009.D					Analyzed: 11/28/22 16:26				
Naphthalene-d8	108689	7.721	97007	7.725	112	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	69062	9.434	63450	9.434	109	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	143333	10.887	129115	10.887	111	50 - 200	0.0000	+/-0.50	
Chrysene-d12	140995	14.437	115505	14.433	122	50 - 200	0.0040	+/-0.50	
Perylene-d12	143146	17.697	119079	17.689	120	50 - 200	0.0080	+/-0.50	
RO2-DW1 (22K1963-03)									
Lab File ID: E22S331012.D					Analyzed: 11/28/22 17:51				
Naphthalene-d8	111830	7.733	97007	7.725	115	50 - 200	0.0080	+/-0.50	
Acenaphthene-d10	74599	9.442	63450	9.434	118	50 - 200	0.0080	+/-0.50	
Phenanthrene-d10	150234	10.892	129115	10.887	116	50 - 200	0.0050	+/-0.50	
Chrysene-d12	147488	14.445	115505	14.433	128	50 - 200	0.0120	+/-0.50	
Perylene-d12	156366	17.708	119079	17.689	131	50 - 200	0.0190	+/-0.50	
RO2-DW2 (22K1963-04)									
Lab File ID: E22S331013.D					Analyzed: 11/28/22 18:19				
Naphthalene-d8	115207	7.729	97007	7.725	119	50 - 200	0.0040	+/-0.50	
Acenaphthene-d10	77711	9.442	63450	9.434	122	50 - 200	0.0080	+/-0.50	
Phenanthrene-d10	153648	10.892	129115	10.887	119	50 - 200	0.0050	+/-0.50	
Chrysene-d12	144474	14.445	115505	14.433	125	50 - 200	0.0120	+/-0.50	
Perylene-d12	150647	17.712	119079	17.689	127	50 - 200	0.0230	+/-0.50	
RO2-VW (22K1963-05)									
Lab File ID: E22S331014.D					Analyzed: 11/28/22 18:48				
Naphthalene-d8	110343	7.725	97007	7.725	114	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	73776	9.442	63450	9.434	116	50 - 200	0.0080	+/-0.50	
Phenanthrene-d10	149990	10.896	129115	10.887	116	50 - 200	0.0090	+/-0.50	
Chrysene-d12	142731	14.454	115505	14.433	124	50 - 200	0.0210	+/-0.50	
Perylene-d12	146432	17.716	119079	17.689	123	50 - 200	0.0270	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO2-BLANK (22K1963-06)			Lab File ID: E22S331015.D			Analyzed: 11/28/22 19:17			
Naphthalene-d8	111035	7.729	97007	7.725	114	50 - 200	0.0040	+/-0.50	
Acenaphthene-d10	71697	9.438	63450	9.434	113	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	143215	10.896	129115	10.887	111	50 - 200	0.0090	+/-0.50	
Chrysene-d12	136864	14.45	115505	14.433	118	50 - 200	0.0170	+/-0.50	
Perylene-d12	143058	17.716	119079	17.689	120	50 - 200	0.0270	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO2-DW1 (22K1963-03RE1)			Lab File ID: E22S335013.D			Analyzed: 12/01/22 15:38			
Naphthalene-d8	75527	7.729	99999	7.729	76	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	53783	9.438	68509	9.442	79	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	110710	10.892	142575	10.892	78	50 - 200	0.0000	+/-0.50	
Chrysene-d12	99514	14.437	125909	14.441	79	50 - 200	-0.0040	+/-0.50	
Perylene-d12	102303	17.7	128110	17.708	80	50 - 200	-0.0080	+/-0.50	
RO2-INT1 (22K1963-01)			Lab File ID: E22S335018.D			Analyzed: 12/01/22 18:00			
Naphthalene-d8	123481	7.737	99999	7.729	123	50 - 200	0.0080	+/-0.50	
Acenaphthene-d10	76605	9.438	68509	9.442	112	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	150579	10.892	142575	10.892	106	50 - 200	0.0000	+/-0.50	
Chrysene-d12	145258	14.441	125909	14.441	115	50 - 200	0.0000	+/-0.50	
Perylene-d12	155786	17.712	128110	17.708	122	50 - 200	0.0040	+/-0.50	
RO2-INT2 (22K1963-02)			Lab File ID: E22S335020.D			Analyzed: 12/01/22 18:56			
Naphthalene-d8	106395	7.729	99999	7.729	106	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	75878	9.438	68509	9.442	111	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	153863	10.892	142575	10.892	108	50 - 200	0.0000	+/-0.50	
Chrysene-d12	144257	14.441	125909	14.441	115	50 - 200	0.0000	+/-0.50	
Perylene-d12	152407	17.708	128110	17.708	119	50 - 200	0.0000	+/-0.50	
RO2-INT2 (22K1963-02RE1)			Lab File ID: E22S335021.D			Analyzed: 12/01/22 19:25			
Naphthalene-d8	85932	7.729	99999	7.729	86	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	71653	9.438	68509	9.442	105	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	143417	10.892	142575	10.892	101	50 - 200	0.0000	+/-0.50	
Chrysene-d12	126906	14.441	125909	14.441	101	50 - 200	0.0000	+/-0.50	
Perylene-d12	128498	17.704	128110	17.708	100	50 - 200	-0.0040	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO2-INT1 (22K1963-01RE1) Lab File ID: E22S336008.D Analyzed: 12/02/22 12:04									
Naphthalene-d8	77647	7.729	124359	7.729	62	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	66589	9.438	83306	9.442	80	50 - 200	-0.0040	+/-0.50	
Phenanthrene-d10	128347	10.887	175961	10.892	73	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	103067	14.437	157775	14.441	65	50 - 200	-0.0040	+/-0.50	
Perylene-d12	101161	17.7	157453	17.704	64	50 - 200	-0.0040	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-13A in Air</i>	
Acenaphthene	AIHA,NJ,NY,NH
Acenaphthylene	AIHA,NJ,NY,NH
Anthracene	AIHA,NJ,NY,NH
Benzo(a)anthracene	AIHA,NJ,NY,NH
Benzo(a)pyrene	AIHA,NJ,NY,FL,NH
Benzo(b)fluoranthene	AIHA,NJ,NY,NH
Benzo(e)pyrene	AIHA,NJ
Benzo(g,h,i)perylene	AIHA,NJ,NY,NH
Benzo(k)fluoranthene	AIHA,NJ,NY,NH
Chrysene	AIHA,NJ,NY,NH
Dibenz(a,h)anthracene	AIHA,NJ,NY,NH
Fluoranthene	AIHA,NJ,NY,NH
Fluorene	AIHA,NJ,NY,NH
Indeno(1,2,3-cd)pyrene	AIHA,NJ,NY,NH
1-Methylnaphthalene	AIHA
2-Methylnaphthalene	AIHA
Naphthalene	AIHA,NJ,NY,FL,NH
Perylene	AIHA,NJ
Phenanthrene	AIHA,NJ,NY,NH
Pyrene	AIHA,NJ,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023

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Friday

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Signed for by: L.RIOS

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DELIVERY STATUS

Delivered

↓ Shipment is 1 of 3 pieces

TRACKING ID

538089136944

FROM

CLEAN AIR ENGINEERING

DAN PEARSON

500 W WOOD

PALATINE, IL US 60067

8479913300

Label Created

11/10/2022 12:28 PM

PACKAGE RECEIVED BY FEDEX

SCHAUMBURG, IL

11/10/2022 7:52 PM

IN TRANSIT

WINDSOR LOCKS, CT

11/11/2022 7:53 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

11/11/2022 8:00 AM

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SAMPLE RECEIVING DEPT.

CON-TEST ANALYTICAL LAB.

39 SPRUCE STREET

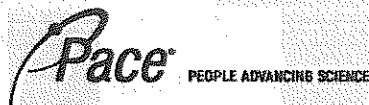
EAST LONGMEADOW, MA US 01028

2625731223

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11/11/2022 at 9:20 AM

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.pacelabs.com



Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By <u>U</u>	Date <u>11/11</u>	Time <u>920</u>
How Were the samples received?	In Cooler <u>T</u>	On Ice <u>T</u>
	In Box	Ambient
Were samples within Temperature Compliance?	Within 2-6°C <u>T</u>	By Gun # <u>3</u>
		Actual Temp <u>-4.4</u>
Was Custody Seal In tact?	<u>MA</u>	By Blank #
Was COC Relinquished ?	<u>T</u>	Actual Temp -
Are there any loose caps/valves on any samples?	<u>F</u>	Were Samples Tampered with? <u>MA</u>
Is COC in ink/ Legible?	<u>T</u>	Does Chain Agree With Samples? <u>T</u>
Did COC Include all Pertinent Information?	Client? <u>T</u>	Analysis? <u>T</u>
	Project? <u>T</u>	ID's? <u>T</u>
Are Sample Labels filled out and legible?		Sampler Name? <u>T</u>
Are there Rushes?	<u>F</u>	Collection Dates/Times? <u>T</u>
Samples are received within holding time?	<u>T</u>	
Proper Media Used?	<u>T</u>	Who was notified?
Are there Trip Blanks?	<u>F</u>	Individually Certified Cans? <u>F</u>
		Is there enough Volume? <u>T</u>

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans					Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s	<u>6</u>	<u>WV</u>			Tedlar		

Can #'s					Reg #'s				
Unused Media					Pufs/TO-17's				
					<u>W4122B-01</u>	<u>W6</u>			
					<u>-02</u>				
					<u>-03</u>				
					<u>-04</u>				
					<u>-05</u>				

Comments:

December 13, 2022

Dan Pearson
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: -
Client Job Number:
Project Number: 14449
Laboratory Work Order Number: 22L0469

Enclosed are results of analyses for samples as received by the laboratory on November 28, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Dan Pearson

REPORT DATE: 12/13/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 14449

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L0469

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: -

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
R03-INT2	22L0469-01	Air		EPA TO-13A Modified	
R03-INT1	22L0469-02	Air		EPA TO-13A Modified	
R03-DW1	22L0469-03	Air		EPA TO-13A Modified	
R03-DW2	22L0469-04	Air		EPA TO-13A Modified	
R03-UW	22L0469-05	Air		EPA TO-13A Modified	
R03-BLANK	22L0469-06	Air		EPA TO-13A Modified	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-13A Modified**Qualifications:****H-06**

Sample was extracted past the recommended holding time.

Analyte & Samples(s) Qualified:

22L0469-01[R03-INT2], 22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02[R03-INT1], 22L0469-02RE1[R03-INT1], 22L0469-03[R03-DW1], 22L0469-04[R03-DW2], 22L0469-04RE1[R03-DW2], 22L0469-05[R03-UW], 22L0469-06[R03-BLANK]

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

22L0469-01[R03-INT2], 22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02[R03-INT1], 22L0469-02RE1[R03-INT1], 22L0469-03[R03-DW1], 22L0469-04[R03-DW2], 22L0469-04RE1[R03-DW2]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02RE1[R03-INT1], 22L0469-04RE1[R03-DW2]

Fluoranthene-d10

22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02RE1[R03-INT1], 22L0469-04RE1[R03-DW2]

Fluorene-d10

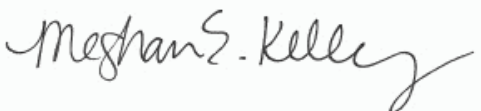
22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02RE1[R03-INT1], 22L0469-04RE1[R03-DW2]

Pyrene-d10

22L0469-01RE1[R03-INT2], 22L0469-01RE2[R03-INT2], 22L0469-02RE1[R03-INT1], 22L0469-04RE1[R03-DW2]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

ANALYTICAL RESULTS

Project Location: -
Date Received: 11/28/2022
Field Sample #: R03-INT2
Sample ID: 22L0469-01
Sample Matrix: Air
Sampled: 11/23/2022 10:53

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22L0469

EPA TO-13A Modified

Sample Flags: H-06, RL-12

Sample Flags: H-06, RL-12		Total µg		Date/Time		
Analyte	Results	RL	Flag/Qual	Dilution	Analyzed	Analyst
Acenaphthene	49	5.0		25	12/9/22 12:03	SPF
Acenaphthylene	1300	80		400	12/12/22 10:21	SPF
Anthracene	62	5.0		25	12/9/22 12:03	SPF
Benzo(a)anthracene	ND	5.0		25	12/9/22 12:03	SPF
Benzo(a)pyrene	ND	5.0		25	12/9/22 12:03	SPF
Benzo(b)fluoranthene	ND	5.0		25	12/9/22 12:03	SPF
Benzo(e)pyrene	ND	5.0		25	12/9/22 12:03	SPF
Benzo(g,h,i)perylene	ND	5.0		25	12/9/22 12:03	SPF
Benzo(k)fluoranthene	ND	5.0		25	12/9/22 12:03	SPF
Chrysene	ND	5.0		25	12/9/22 12:03	SPF
Dibenz(a,h)anthracene	ND	5.0		25	12/9/22 12:03	SPF
Fluoranthene	36	5.0		25	12/9/22 12:03	SPF
Fluorene	440	80		400	12/12/22 10:21	SPF
Indeno(1,2,3-cd)pyrene	ND	5.0		25	12/9/22 12:03	SPF
1-Methylnaphthalene	770	80		400	12/12/22 10:21	SPF
2-Methylnaphthalene	2300	80		400	12/12/22 10:21	SPF
Naphthalene	20000	1200		2500	12/12/22 15:13	SPF
Perylene	ND	5.0		25	12/9/22 12:03	SPF
Phenanthrene	310	80		400	12/12/22 10:21	SPF
Pyrene	19	5.0		25	12/9/22 12:03	SPF

Surrogates	% Recovery		% REC Limits	
Benzo(a)pyrene-d12	*	S-01	40-120	12/12/22 10:21
Benzo(a)pyrene-d12	90.0		40-120	12/9/22 12:03
Benzo(a)pyrene-d12	*	S-01	40-120	12/12/22 15:13
Fluoranthene-d10	*	S-01	40-120	12/12/22 10:21
Fluoranthene-d10	92.5		40-120	12/9/22 12:03
Fluoranthene-d10	*	S-01	40-120	12/12/22 15:13
Fluorene-d10	105		40-120	12/9/22 12:03
Fluorene-d10	*	S-01	40-120	12/12/22 15:13
Fluorene-d10	*	S-01	40-120	12/12/22 10:21
Pyrene-d10	102		40-120	12/9/22 12:03
Pyrene-d10	*	S-01	40-120	12/12/22 15:13
Pyrene-d10	*	S-01	40-120	12/12/22 10:21

ANALYTICAL RESULTS

Project Location: -
Date Received: 11/28/2022
Field Sample #: R03-INT1
Sample ID: 22L0469-02
Sample Matrix: Air
Sampled: 11/23/2022 11:12

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22L0469

EPA TO-13A Modified

Sample Flags: H-06, RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	5.0		25	12/9/22 13:00		SPF
Acenaphthylene	31	5.0		25	12/9/22 13:00		SPF
Anthracene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(a)anthracene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(a)pyrene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(b)fluoranthene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(e)pyrene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(g,h,i)perylene	ND	5.0		25	12/9/22 13:00		SPF
Benzo(k)fluoranthene	ND	5.0		25	12/9/22 13:00		SPF
Chrysene	ND	5.0		25	12/9/22 13:00		SPF
Dibenz(a,h)anthracene	ND	5.0		25	12/9/22 13:00		SPF
Fluoranthene	ND	5.0		25	12/9/22 13:00		SPF
Fluorene	15	5.0		25	12/9/22 13:00		SPF
Indeno(1,2,3-cd)pyrene	ND	5.0		25	12/9/22 13:00		SPF
1-Methylnaphthalene	31	5.0		25	12/9/22 13:00		SPF
2-Methylnaphthalene	94	5.0		25	12/9/22 13:00		SPF
Naphthalene	1400	200		400	12/12/22 11:08		SPF
Perylene	ND	5.0		25	12/9/22 13:00		SPF
Phenanthrene	13	5.0		25	12/9/22 13:00		SPF
Pyrene	ND	5.0		25	12/9/22 13:00		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	40-120		12/12/22 11:08
Benzo(a)pyrene-d12	85.0		40-120		12/9/22 13:00
Fluoranthene-d10	87.5		40-120		12/9/22 13:00
Fluoranthene-d10	*	S-01	40-120		12/12/22 11:08
Fluorene-d10	97.5		40-120		12/9/22 13:00
Fluorene-d10	*	S-01	40-120		12/12/22 11:08
Pyrene-d10	102		40-120		12/9/22 13:00
Pyrene-d10	*	S-01	40-120		12/12/22 11:08

ANALYTICAL RESULTS

Project Location: -
Date Received: 11/28/2022
Field Sample #: R03-DW1
Sample ID: 22L0469-03
Sample Matrix: Air
Sampled: 11/23/2022 11:36

Sample Description/Location:
Sub Description/Location:

Work Order: 22L0469

Flow Controller ID:
Sample Type:

EPA TO-13A Modified

Sample Flags: H-06, RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.9	1.0		5	12/9/22 13:58		SPF
Acenaphthylene	ND	1.0		5	12/9/22 13:58		SPF
Anthracene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(a)anthracene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(a)pyrene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(b)fluoranthene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(e)pyrene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(g,h,i)perylene	ND	1.0		5	12/9/22 13:58		SPF
Benzo(k)fluoranthene	ND	1.0		5	12/9/22 13:58		SPF
Chrysene	ND	1.0		5	12/9/22 13:58		SPF
Dibenz(a,h)anthracene	ND	1.0		5	12/9/22 13:58		SPF
Fluoranthene	ND	1.0		5	12/9/22 13:58		SPF
Fluorene	1.9	1.0		5	12/9/22 13:58		SPF
Indeno(1,2,3-cd)pyrene	ND	1.0		5	12/9/22 13:58		SPF
1-Methylnaphthalene	3.0	1.0		5	12/9/22 13:58		SPF
2-Methylnaphthalene	5.6	1.0		5	12/9/22 13:58		SPF
Naphthalene	19	2.5		5	12/9/22 13:58		SPF
Perylene	ND	1.0		5	12/9/22 13:58		SPF
Phenanthrene	3.2	1.0		5	12/9/22 13:58		SPF
Pyrene	ND	1.0		5	12/9/22 13:58		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	89.0	40-120	12/9/22 13:58
Fluoranthene-d10	93.0	40-120	12/9/22 13:58
Fluorene-d10	95.5	40-120	12/9/22 13:58
Pyrene-d10	100	40-120	12/9/22 13:58

ANALYTICAL RESULTS

Project Location: -
Date Received: 11/28/2022
Field Sample #: R03-DW2
Sample ID: 22L0469-04
Sample Matrix: Air
Sampled: 11/23/2022 12:09

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22L0469
EPA TO-13A Modified

Sample Flags: H-06, RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.6	1.0		5	12/9/22 14:26		SPF
Acenaphthylene	2.5	1.0		5	12/9/22 14:26		SPF
Anthracene	1.2	1.0		5	12/9/22 14:26		SPF
Benzo(a)anthracene	ND	1.0		5	12/9/22 14:26		SPF
Benzo(a)pyrene	ND	1.0		5	12/9/22 14:26		SPF
Benzo(b)fluoranthene	1.2	1.0		5	12/9/22 14:26		SPF
Benzo(e)pyrene	ND	1.0		5	12/9/22 14:26		SPF
Benzo(g,h,i)perylene	ND	1.0		5	12/9/22 14:26		SPF
Benzo(k)fluoranthene	ND	1.0		5	12/9/22 14:26		SPF
Chrysene	1.2	1.0		5	12/9/22 14:26		SPF
Dibenz(a,h)anthracene	ND	1.0		5	12/9/22 14:26		SPF
Fluoranthene	4.3	1.0		5	12/9/22 14:26		SPF
Fluorene	3.3	1.0		5	12/9/22 14:26		SPF
Indeno(1,2,3-cd)pyrene	ND	1.0		5	12/9/22 14:26		SPF
1-Methylnaphthalene	3.7	1.0		5	12/9/22 14:26		SPF
2-Methylnaphthalene	7.9	1.0		5	12/9/22 14:26		SPF
Naphthalene	52	5.0		10	12/12/22 11:32		SPF
Perylene	ND	1.0		5	12/9/22 14:26		SPF
Phenanthrene	8.0	1.0		5	12/9/22 14:26		SPF
Pyrene	2.7	1.0		5	12/9/22 14:26		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	40-120		12/12/22 11:32
Benzo(a)pyrene-d12	88.5		40-120		12/9/22 14:26
Fluoranthene-d10	94.5		40-120		12/9/22 14:26
Fluoranthene-d10	*	S-01	40-120		12/12/22 11:32
Fluorene-d10	*	S-01	40-120		12/12/22 11:32
Fluorene-d10	102		40-120		12/9/22 14:26
Pyrene-d10	104		40-120		12/9/22 14:26
Pyrene-d10	*	S-01	40-120		12/12/22 11:32

ANALYTICAL RESULTS

Project Location: -
Date Received: 11/28/2022
Field Sample #: R03-UW
Sample ID: 22L0469-05
Sample Matrix: Air
Sampled: 11/23/2022 12:45

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22L0469

EPA TO-13A Modified

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.93	0.20		1	12/9/22 14:55		SPF
Acenaphthylene	ND	0.20		1	12/9/22 14:55		SPF
Anthracene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(a)anthracene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(a)pyrene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(e)pyrene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/9/22 14:55		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/9/22 14:55		SPF
Chrysene	ND	0.20		1	12/9/22 14:55		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/9/22 14:55		SPF
Fluoranthene	0.26	0.20		1	12/9/22 14:55		SPF
Fluorene	1.1	0.20		1	12/9/22 14:55		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/9/22 14:55		SPF
1-Methylnaphthalene	1.4	0.20		1	12/9/22 14:55		SPF
2-Methylnaphthalene	2.5	0.20		1	12/9/22 14:55		SPF
Naphthalene	4.5	0.50		1	12/9/22 14:55		SPF
Perylene	ND	0.20		1	12/9/22 14:55		SPF
Phenanthrene	1.9	0.20		1	12/9/22 14:55		SPF
Pyrene	ND	0.20		1	12/9/22 14:55		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	87.1	40-120	12/9/22 14:55
Fluoranthene-d10	92.0	40-120	12/9/22 14:55
Fluorene-d10	89.9	40-120	12/9/22 14:55
Pyrene-d10	92.3	40-120	12/9/22 14:55

ANALYTICAL RESULTS

Project Location: -
 Date Received: 11/28/2022
Field Sample #: R03-BLANK
Sample ID: 22L0469-06
 Sample Matrix: Air
 Sampled: 11/23/2022 00:00

Sample Description/Location:
 Sub Description/Location:

 Flow Controller ID:
 Sample Type:

Work Order: 22L0469

EPA TO-13A Modified

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	12/9/22 15:24		SPF
Acenaphthylene	ND	0.20		1	12/9/22 15:24		SPF
Anthracene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(a)anthracene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(a)pyrene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(e)pyrene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/9/22 15:24		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/9/22 15:24		SPF
Chrysene	ND	0.20		1	12/9/22 15:24		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/9/22 15:24		SPF
Fluoranthene	ND	0.20		1	12/9/22 15:24		SPF
Fluorene	ND	0.20		1	12/9/22 15:24		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/9/22 15:24		SPF
1-Methylnaphthalene	ND	0.20		1	12/9/22 15:24		SPF
2-Methylnaphthalene	ND	0.20		1	12/9/22 15:24		SPF
Naphthalene	ND	0.50		1	12/9/22 15:24		SPF
Perylene	ND	0.20		1	12/9/22 15:24		SPF
Phenanthrene	ND	0.20		1	12/9/22 15:24		SPF
Pyrene	ND	0.20		1	12/9/22 15:24		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	93.2	40-120	12/9/22 15:24
Fluoranthene-d10	96.4	40-120	12/9/22 15:24
Fluorene-d10	95.1	40-120	12/9/22 15:24
Pyrene-d10	110	40-120	12/9/22 15:24

Sample Extraction Data**Prep Method: SW-846 3540C Analytical Method: EPA TO-13A Modified**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
22L0469-01 [R03-INT2]	B324950	1.00	1.00	12/07/22
22L0469-01RE1 [R03-INT2]	B324950	1.00	1.00	12/07/22
22L0469-01RE2 [R03-INT2]	B324950	1.00	1.00	12/07/22
22L0469-02 [R03-INT1]	B324950	1.00	1.00	12/07/22
22L0469-02RE1 [R03-INT1]	B324950	1.00	1.00	12/07/22
22L0469-03 [R03-DW1]	B324950	1.00	1.00	12/07/22
22L0469-04 [R03-DW2]	B324950	1.00	1.00	12/07/22
22L0469-04RE1 [R03-DW2]	B324950	1.00	1.00	12/07/22
22L0469-05 [R03-UW]	B324950	1.00	1.00	12/07/22
22L0469-06 [R03-BLANK]	B324950	1.00	1.00	12/07/22

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B324950 - SW-846 3540C
Blank (B324950-BLK1)

Prepared: 12/06/22 Analyzed: 12/09/22

Acenaphthene	ND	0.20
Acenaphthylene	ND	0.20
Anthracene	ND	0.20
Benzo(a)anthracene	ND	0.20
Benzo(a)pyrene	ND	0.20
Benzo(b)fluoranthene	ND	0.20
Benzo(e)pyrene	ND	0.20
Benzo(g,h,i)perylene	ND	0.20
Benzo(k)fluoranthene	ND	0.20
Chrysene	ND	0.20
Dibenz(a,h)anthracene	ND	0.20
Fluoranthene	ND	0.20
Fluorene	ND	0.20
Indeno(1,2,3-cd)pyrene	ND	0.20
1-Methylnaphthalene	ND	0.20
2-Methylnaphthalene	ND	0.20
Naphthalene	ND	0.50
Perylene	ND	0.20
Phenanthrene	ND	0.20
Pyrene	ND	0.20

Surrogate: Fluorene-d10	0.884			1.00		88.4	40-120
Surrogate: Pyrene-d10	0.873			1.00		87.3	40-120

LCS (B324950-BS1)

Prepared: 12/06/22 Analyzed: 12/09/22

Acenaphthene	0.329	0.20	1.3	0.500		65.8	40-114
Acenaphthylene	0.360	0.20	1.2	0.500		72.0	40-120
Anthracene	0.341	0.20	1.5	0.500		68.2	40-120
Benzo(a)anthracene	0.336	0.20	1.9	0.500		67.2	40-117
Benzo(a)pyrene	0.343	0.20	2.1	0.500		68.6	40-120
Benzo(b)fluoranthene	0.356	0.20	2.1	0.500		71.2	40-120
Benzo(e)pyrene	0.376	0.20	2.1	0.500		75.2	40-120
Benzo(g,h,i)perylene	0.316	0.20	2.3	0.500		63.2	40-120
Benzo(k)fluoranthene	0.370	0.20	2.1	0.500		74.0	40-120
Chrysene	0.350	0.20	1.9	0.500		70.0	40-114
Dibenz(a,h)anthracene	0.311	0.20	2.3	0.500		62.2	40-120
Fluoranthene	0.358	0.20	1.7	0.500		71.6	40-120
Fluorene	0.358	0.20	1.4	0.500		71.6	40-118
Indeno(1,2,3-cd)pyrene	0.323	0.20	2.3	0.500		64.6	40-120
1-Methylnaphthalene	0.341	0.20	1.2	0.500		68.2	40-110
2-Methylnaphthalene	0.324	0.20	1.2	0.500		64.8	40-110
Naphthalene	0.429	0.50	2.6	0.500		85.8	40-120
Perylene	0.372	0.20	2.1	0.500		74.4	40-114
Phenanthrene	0.353	0.20	1.5	0.500		70.6	40-120
Pyrene	0.353	0.20	1.7	0.500		70.6	40-115

Surrogate: Fluorene-d10	1.77			2.00		88.6	40-120
Surrogate: Pyrene-d10	1.87			2.00		93.4	40-120

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	Limits	RPD	Limit	

Batch B324950 - SW-846 3540C
LCS Dup (B324950-BSD1)

Prepared: 12/06/22 Analyzed: 12/09/22

Acenaphthene	0.354	0.20		1.3	0.500		70.8	40-114	7.32	25.8
Acenaphthylene	0.383	0.20		1.2	0.500		76.6	40-120	6.19	50
Anthracene	0.369	0.20		1.5	0.500		73.8	40-120	7.89	46
Benzo(a)anthracene	0.369	0.20		1.9	0.500		73.8	40-117	9.36	22
Benzo(a)pyrene	0.371	0.20		2.1	0.500		74.2	40-120	7.84	40.6
Benzo(b)fluoranthene	0.387	0.20		2.1	0.500		77.4	40-120	8.34	18.8
Benzo(e)pyrene	0.405	0.20		2.1	0.500		81.0	40-120	7.43	18.5
Benzo(g,h,i)perylene	0.340	0.20		2.3	0.500		68.0	40-120	7.32	25
Benzo(k)fluoranthene	0.404	0.20		2.1	0.500		80.8	40-120	8.79	24.5
Chrysene	0.380	0.20		1.9	0.500		76.0	40-114	8.22	20.5
Dibenz(a,h)anthracene	0.332	0.20		2.3	0.500		66.4	40-120	6.53	31.7
Fluoranthene	0.405	0.20		1.7	0.500		81.0	40-120	12.3	21.5
Fluorene	0.385	0.20		1.4	0.500		77.0	40-118	7.27	24.1
Indeno(1,2,3-cd)pyrene	0.349	0.20		2.3	0.500		69.8	40-120	7.74	31.8
1-Methylnaphthalene	0.366	0.20		1.2	0.500		73.2	40-110	7.07	29.1
2-Methylnaphthalene	0.352	0.20		1.2	0.500		70.4	40-110	8.28	29.3
Naphthalene	0.408	0.50		2.6	0.500		81.6	40-120	5.02	30.4
Perylene	0.402	0.20		2.1	0.500		80.4	40-114	7.75	27.7
Phenanthrene	0.381	0.20		1.5	0.500		76.2	40-120	7.63	32
Pyrene	0.380	0.20		1.7	0.500		76.0	40-115	7.37	20.9
Surrogate: Fluorene-d10	0.931				1.00		93.1	40-120		
Surrogate: Pyrene-d10	0.973				1.00		97.3	40-120		

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-06	Sample was extracted past the recommended holding time.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B324950-BLK1)									
Lab File ID: E22S343004.D					Analyzed: 12/09/22 10:08				
Naphthalene-d8	84861	7.689	96269	7.693	88	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	54273	9.402	63492	9.402	85	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	118284	10.854	134895	10.854	88	50 - 200	0.0000	+/-0.50	
Chrysene-d12	129861	14.377	125730	14.373	103	50 - 200	0.0040	+/-0.50	
Perylene-d12	139019	17.624	130460	17.619	107	50 - 200	0.0050	+/-0.50	
LCS (B324950-BS1)									
Lab File ID: E22S343006.D					Analyzed: 12/09/22 11:05				
Naphthalene-d8	105403	7.689	96269	7.693	109	50 - 200	-0.0040	+/-0.50	
Acenaphthene-d10	69176	9.402	63492	9.402	109	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	140384	10.854	134895	10.854	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12	139389	14.381	125730	14.373	111	50 - 200	0.0080	+/-0.50	
Perylene-d12	148384	17.631	130460	17.619	114	50 - 200	0.0120	+/-0.50	
LCS Dup (B324950-BSD1)									
Lab File ID: E22S343007.D					Analyzed: 12/09/22 11:34				
Naphthalene-d8	110685	7.693	96269	7.693	115	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	71991	9.402	63492	9.402	113	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	151292	10.854	134895	10.854	112	50 - 200	0.0000	+/-0.50	
Chrysene-d12	156475	14.385	125730	14.373	124	50 - 200	0.0120	+/-0.50	
Perylene-d12	167674	17.631	130460	17.619	129	50 - 200	0.0120	+/-0.50	
R03-INT2 (22L0469-01)									
Lab File ID: E22S343008.D					Analyzed: 12/09/22 12:03				
Naphthalene-d8	103044	7.729	96269	7.693	107	50 - 200	0.0360	+/-0.50	
Acenaphthene-d10	79904	9.406	63492	9.402	126	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	150934	10.859	134895	10.854	112	50 - 200	0.0050	+/-0.50	
Chrysene-d12	137775	14.381	125730	14.373	110	50 - 200	0.0080	+/-0.50	
Perylene-d12	150231	17.623	130460	17.619	115	50 - 200	0.0040	+/-0.50	
R03-INT1 (22L0469-02)									
Lab File ID: E22S343010.D					Analyzed: 12/09/22 13:00				
Naphthalene-d8	110225	7.701	96269	7.693	114	50 - 200	0.0080	+/-0.50	
Acenaphthene-d10	71727	9.402	63492	9.402	113	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	146157	10.854	134895	10.854	108	50 - 200	0.0000	+/-0.50	
Chrysene-d12	127285	14.377	125730	14.373	101	50 - 200	0.0040	+/-0.50	
Perylene-d12	132787	17.623	130460	17.619	102	50 - 200	0.0040	+/-0.50	
R03-DW1 (22L0469-03)									
Lab File ID: E22S343012.D					Analyzed: 12/09/22 13:58				
Naphthalene-d8	110212	7.693	96269	7.693	114	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	74315	9.402	63492	9.402	117	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	149620	10.854	134895	10.854	111	50 - 200	0.0000	+/-0.50	
Chrysene-d12	139343	14.377	125730	14.373	111	50 - 200	0.0040	+/-0.50	
Perylene-d12	148769	17.627	130460	17.619	114	50 - 200	0.0080	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
R03-DW2 (22L0469-04) Lab File ID: E22S343013.D Analyzed: 12/09/22 14:26									
Naphthalene-d8	108094	7.693	96269	7.693	112	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	73510	9.402	63492	9.402	116	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	149997	10.859	134895	10.854	111	50 - 200	0.0050	+/-0.50	
Chrysene-d12	140168	14.381	125730	14.373	111	50 - 200	0.0080	+/-0.50	
Perylene-d12	150849	17.631	130460	17.619	116	50 - 200	0.0120	+/-0.50	
R03-UW (22L0469-05) Lab File ID: E22S343014.D Analyzed: 12/09/22 14:55									
Naphthalene-d8	114541	7.693	96269	7.693	119	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	78713	9.406	63492	9.402	124	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	157373	10.859	134895	10.854	117	50 - 200	0.0050	+/-0.50	
Chrysene-d12	146419	14.389	125730	14.373	116	50 - 200	0.0160	+/-0.50	
Perylene-d12	155455	17.639	130460	17.619	119	50 - 200	0.0200	+/-0.50	
R03-BLANK (22L0469-06) Lab File ID: E22S343015.D Analyzed: 12/09/22 15:24									
Naphthalene-d8	109385	7.697	96269	7.693	114	50 - 200	0.0040	+/-0.50	
Acenaphthene-d10	72665	9.406	63492	9.402	114	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	150747	10.859	134895	10.854	112	50 - 200	0.0050	+/-0.50	
Chrysene-d12	152138	14.393	125730	14.373	121	50 - 200	0.0200	+/-0.50	
Perylene-d12	163356	17.666	130460	17.619	125	50 - 200	0.0470	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
R03-INT2 (22L0469-01RE1) Lab File ID: H22S346005.D Analyzed: 12/12/22 10:21									
Naphthalene-d8	40851	4.925	41023	4.922	100	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	24044	6.621	23472	6.621	102	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	43725	8.086	44415	8.086	98	50 - 200	0.0000	+/-0.50	
Chrysene-d12	36078	11.015	38055	11.015	95	50 - 200	0.0000	+/-0.50	
Perylene-d12	34577	13.56	34636	13.559	100	50 - 200	0.0010	+/-0.50	
R03-INT1 (22L0469-02RE1) Lab File ID: H22S346007.D Analyzed: 12/12/22 11:08									
Naphthalene-d8	37736	4.922	41023	4.922	92	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	22460	6.621	23472	6.621	96	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	44894	8.086	44415	8.086	101	50 - 200	0.0000	+/-0.50	
Chrysene-d12	37947	11.015	38055	11.015	100	50 - 200	0.0000	+/-0.50	
Perylene-d12	35389	13.559	34636	13.559	102	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A Modified

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
R03-DW2 (22L0469-04RE1) Lab File ID: H22S346008.D Analyzed: 12/12/22 11:32									
Naphthalene-d8	41800	4.922	41023	4.922	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	25134	6.621	23472	6.621	107	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	48009	8.089	44415	8.086	108	50 - 200	0.0030	+/-0.50	
Chrysene-d12	41007	11.015	38055	11.015	108	50 - 200	0.0000	+/-0.50	
Perylene-d12	40246	13.559	34636	13.559	116	50 - 200	0.0000	+/-0.50	
R03-INT2 (22L0469-01RE2) Lab File ID: H22S346016.D Analyzed: 12/12/22 15:13									
Naphthalene-d8	45397	4.922	41023	4.922	111	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	26217	6.624	23472	6.621	112	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	49375	8.092	44415	8.086	111	50 - 200	0.0060	+/-0.50	
Chrysene-d12	41614	11.025	38055	11.015	109	50 - 200	0.0100	+/-0.50	
Perylene-d12	43423	13.571	34636	13.559	125	50 - 200	0.0120	+/-0.50	

CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
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No certified Analyses included in this Report

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
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22 LON 69
http://www.contestlabs.com
Doc #378 Rev 1_03242017
39 Spruce Street
East Longmeadow, MA 01028
Page 1 of 1
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD (AIR)

Company Name: <u>Clean Air</u>		Requested Turnaround Time: <input checked="" type="checkbox"/> 7-Day <input type="checkbox"/> 10-Day				
Address: <u>500 W. Wood St. Palatine IL 60067</u>		Due Date: <u>11/28</u>				
Phone: <u>1800 553 5511</u>		Rush Approval Required: <input type="checkbox"/> 1-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> 4-Day				
Project Name: <u>TCR</u>		Data Delivery: <input type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> Other: _____				
Project Location: <u>1618H</u>		CLP Like Data Pkg Required: <input type="checkbox"/>				
Project Number: <u>1A777</u>		Email To: _____				
Project Manager: <u>Rocky K</u>		Fax To #: _____				
Con-Test Quote Name/Number: _____						
Invoice Recipient: _____						
Sampled By: <u>DP</u>						
Lab Use	Client Use	Collection Data	Duration	Flow Rate	Matrix	Volume
Con-Test Work Order	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	min/hr	code	Liters
1	R03 - INTZ	11/22 12:35	11/23 10:53			
2	R03 - INTL	11/22 12:56	11/23 11:12			
3	R03 - DWI	11/22 13:36	11/23 11:36			
4	R03 - DWZ	11/22 14:09	11/23 12:09			
5	R03 - UW	11/22 14:42	11/23 12:45			
6	R03 - BLK					
Comments: <u>T0-13A</u>						
Relinquished by: (signature) <u>[Signature]</u> Date/Time: <u>11/28 16:00</u>						
Received by: (signature) <u>[Signature]</u> Date/Time: <u>11/28 8:15</u>						
Relinquished by: (signature) <u>[Signature]</u> Date/Time: _____						
Received by: (signature) _____ Date/Time: _____						
Relinquished by: (signature) _____ Date/Time: _____						
Received by: (signature) _____ Date/Time: _____						

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

con-test
ANALYTICAL LABORATORY
www.contestlabs.com

Other	Chromatogram	PCB ONLY
<input type="checkbox"/> WRTA	<input type="checkbox"/> Soxhlet	<input type="checkbox"/> Soxhlet
<input type="checkbox"/> MWRA	<input type="checkbox"/> School	<input type="checkbox"/> Non Soxhlet
<input type="checkbox"/> Municipality	<input type="checkbox"/> MBTA	
<input type="checkbox"/> 21 J		
<input type="checkbox"/> City		
<input type="checkbox"/> Government		
<input type="checkbox"/> Federal		
<input type="checkbox"/> Brownfield		

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Label Created

10/7/2022 10:55 AM

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SCHAUMBURG, IL

11/23/2022 7:37 PM

IN TRANSIT

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11/28/2022 7:20 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

11/28/2022 7:20 AM

DELIVERED

East Longmeadow, MA US

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December 28, 2022

Dan Pearson
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: Burns Harbor
Client Job Number:
Project Number: 14777
Laboratory Work Order Number: 22L1352

Enclosed are results of analyses for samples as received by the laboratory on December 9, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Dan Pearson

REPORT DATE: 12/28/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 14777

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L1352

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Burns Harbor

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO4-Int2	22L1352-01	Air		EPA TO-13A	
RO4-Int1	22L1352-02	Air		EPA TO-13A	
RO4-DW1	22L1352-03	Air		EPA TO-13A	
RO4-DW2	22L1352-04	Air		EPA TO-13A	
RO4-UW	22L1352-05	Air		EPA TO-13A	
RO4-Field Blank	22L1352-06	Air		EPA TO-13A	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-13A**Qualifications:**

L-05

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Naphthalene**

22L1352-01RE3[RO4-Int2], 22L1352-02RE2[RO4-Int1], 22L1352-04[RO4-DW2], 22L1352-05RE1[RO4-UW], 22L1352-06[RO4-Field Blank], B325517-BSD1

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

22L1352-01RE1[RO4-Int2], 22L1352-01RE2[RO4-Int2], 22L1352-01RE3[RO4-Int2], 22L1352-02RE2[RO4-Int1]

Fluoranthene-d10

22L1352-01RE1[RO4-Int2], 22L1352-01RE2[RO4-Int2], 22L1352-01RE3[RO4-Int2], 22L1352-02RE2[RO4-Int1]

Fluorene-d10

22L1352-01RE1[RO4-Int2], 22L1352-01RE2[RO4-Int2], 22L1352-01RE3[RO4-Int2], 22L1352-02RE2[RO4-Int1]

Pyrene-d10

22L1352-01RE1[RO4-Int2], 22L1352-01RE2[RO4-Int2], 22L1352-01RE3[RO4-Int2], 22L1352-02RE2[RO4-Int1]

S-20

Surrogate recovery is outside of control limits. Sample media does not allow for re-extraction.

Analyte & Samples(s) Qualified:**Fluoranthene-d10**

22L1352-01[RO4-Int2], 22L1352-02[RO4-Int1], 22L1352-02RE1[RO4-Int1]

Fluorene-d10

B325517-BS1

Pyrene-d10

22L1352-01[RO4-Int2], 22L1352-02[RO4-Int1], B325517-BS1

S-26

Surrogate outside of control limits.

Analyte & Samples(s) Qualified:**Fluoranthene-d10**

22L1352-03RE1[RO4-DW1], 22L1352-05RE1[RO4-UW]

Fluorene-d10

22L1352-03RE1[RO4-DW1], 22L1352-05RE1[RO4-UW]

Pyrene-d10

22L1352-03RE1[RO4-DW1], 22L1352-05RE1[RO4-UW]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**EPA TO-13A**

Reported results for air samples are calculated based on client sampling and sampling information provided by the laboratory.

Blank is not subtracted unless otherwise specified.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Tod E. Kopycinski
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-Int2
Sample ID: 22L1352-01

Sample Matrix: Air

Sampled: 12/7/2022 15:33

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A						
Analyte	Total µg		Flag/Qual	Dilution	Date/Time	
	Results	RL			Analyzed	Analyst
Acenaphthene	27	1.0		5	12/16/22 15:59	SPF
Acenaphthylene	750	20		100	12/19/22 17:25	SPF
Anthracene	75	20		100	12/19/22 17:25	SPF
Benzo(a)anthracene	22	1.0		5	12/16/22 15:59	SPF
Benzo(a)pyrene	11	1.0		5	12/16/22 15:59	SPF
Benzo(b)fluoranthene	21	1.0		5	12/16/22 15:59	SPF
Benzo(e)pyrene	9.9	1.0		5	12/16/22 15:59	SPF
Benzo(g,h,i)perylene	7.2	1.0		5	12/16/22 15:59	SPF
Benzo(k)fluoranthene	7.5	1.0		5	12/16/22 15:59	SPF
Chrysene	22	1.0		5	12/16/22 15:59	SPF
Dibenz(a,h)anthracene	2.2	1.0		5	12/16/22 15:59	SPF
Fluoranthene	89	20		100	12/19/22 17:25	SPF
Fluorene	290	20		100	12/19/22 17:25	SPF
Indeno(1,2,3-cd)pyrene	9.1	1.0		5	12/16/22 15:59	SPF
1-Methylnaphthalene	360	20		100	12/19/22 17:25	SPF
2-Methylnaphthalene	1200	40		200	12/19/22 17:50	SPF
Naphthalene	12000	1000	L-05	2000	12/21/22 15:41	SPF
Perylene	3.4	1.0		5	12/16/22 15:59	SPF
Phenanthrene	320	20		100	12/19/22 17:25	SPF
Pyrene	50	20		100	12/19/22 17:25	SPF

Surrogates	% Recovery	% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120	12/19/22 17:25
Benzo(a)pyrene-d12	*	S-01	60-120	12/19/22 17:50
Benzo(a)pyrene-d12	116		60-120	12/16/22 15:59
Benzo(a)pyrene-d12	*	S-01	60-120	12/21/22 15:41
Fluoranthene-d10	*	S-01	60-120	12/19/22 17:25
Fluoranthene-d10	*	S-01	60-120	12/19/22 17:50
Fluoranthene-d10	139*	S-20	60-120	12/16/22 15:59
Fluoranthene-d10	*	S-01	60-120	12/21/22 15:41
Fluorene-d10	*	S-01	60-120	12/19/22 17:25
Fluorene-d10	*	S-01	60-120	12/19/22 17:50
Fluorene-d10	*	S-01	60-120	12/21/22 15:41
Fluorene-d10	81.5		60-120	12/16/22 15:59
Pyrene-d10	126*	S-20	60-120	12/16/22 15:59
Pyrene-d10	*	S-01	60-120	12/19/22 17:50
Pyrene-d10	*	S-01	60-120	12/19/22 17:25
Pyrene-d10	*	S-01	60-120	12/21/22 15:41

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-Int2

Sample ID: 22L1352-01

Sample Matrix: Air

Sampled: 12/7/2022 15:33

Sample Description/Location:

Sub Description/Location:

Flow Controller ID:

Sample Type:

Work Order: 22L1352

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-Int1
Sample ID: 22L1352-02

Sample Matrix: Air

Sampled: 12/7/2022 15:55

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	8.2	1.0		5	12/16/22 16:22		SPF
Acenaphthylene	64	5.0		25	12/19/22 18:39		SPF
Anthracene	19	1.0		5	12/16/22 16:22		SPF
Benzo(a)anthracene	12	1.0		5	12/16/22 16:22		SPF
Benzo(a)pyrene	6.2	1.0		5	12/16/22 16:22		SPF
Benzo(b)fluoranthene	11	1.0		5	12/16/22 16:22		SPF
Benzo(e)pyrene	4.9	1.0		5	12/16/22 16:22		SPF
Benzo(g,h,i)perylene	3.7	1.0		5	12/16/22 16:22		SPF
Benzo(k)fluoranthene	3.9	1.0		5	12/16/22 16:22		SPF
Chrysene	11	1.0		5	12/16/22 16:22		SPF
Dibenz(a,h)anthracene	1.2	1.0		5	12/16/22 16:22		SPF
Fluoranthene	40	1.0		5	12/16/22 16:22		SPF
Fluorene	36	1.0		5	12/16/22 16:22		SPF
Indeno(1,2,3-cd)pyrene	4.5	1.0		5	12/16/22 16:22		SPF
1-Methylnaphthalene	48	1.0		5	12/16/22 16:22		SPF
2-Methylnaphthalene	110	5.0		25	12/19/22 18:39		SPF
Naphthalene	1500	100	L-05	200	12/19/22 19:04		SPF
Perylene	1.6	1.0		5	12/16/22 16:22		SPF
Phenanthrene	75	5.0		25	12/19/22 18:39		SPF
Pyrene	22	1.0		5	12/16/22 16:22		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	116		60-120		12/16/22 16:22
Benzo(a)pyrene-d12	*	S-01	60-120		12/19/22 19:04
Benzo(a)pyrene-d12	110		60-120		12/19/22 18:39
Fluoranthene-d10	142*	S-20	60-120		12/16/22 16:22
Fluoranthene-d10	*	S-01	60-120		12/19/22 19:04
Fluoranthene-d10	132*	S-20	60-120		12/19/22 18:39
Fluorene-d10	110		60-120		12/16/22 16:22
Fluorene-d10	*	S-01	60-120		12/19/22 19:04
Fluorene-d10	120		60-120		12/19/22 18:39
Pyrene-d10	133*	S-20	60-120		12/16/22 16:22
Pyrene-d10	*	S-01	60-120		12/19/22 19:04
Pyrene-d10	120		60-120		12/19/22 18:39

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-DW1
Sample ID: 22L1352-03

Sample Matrix: Air

Sampled: 12/7/2022 12:16

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	2.7	0.20		1	12/16/22 16:46		SPF
Acenaphthylene	14	4.0		20	12/21/22 16:06		SPF
Anthracene	0.65	0.20		1	12/16/22 16:46		SPF
Benzo(a)anthracene	ND	0.20		1	12/16/22 16:46		SPF
Benzo(a)pyrene	ND	0.20		1	12/16/22 16:46		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/16/22 16:46		SPF
Benzo(e)pyrene	ND	0.20		1	12/16/22 16:46		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/16/22 16:46		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/16/22 16:46		SPF
Chrysene	0.25	0.20		1	12/16/22 16:46		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/16/22 16:46		SPF
Fluoranthene	2.6	0.20		1	12/16/22 16:46		SPF
Fluorene	6.2	0.20		1	12/16/22 16:46		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/16/22 16:46		SPF
1-Methylnaphthalene	8.5	0.20		1	12/16/22 16:46		SPF
2-Methylnaphthalene	25	4.0		20	12/21/22 16:06		SPF
Naphthalene	120	10		20	12/21/22 16:06		SPF
Perylene	ND	0.20		1	12/16/22 16:46		SPF
Phenanthrene	6.1	0.20		1	12/16/22 16:46		SPF
Pyrene	1.5	0.20		1	12/16/22 16:46		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	108		60-120		12/21/22 16:06
Benzo(a)pyrene-d12	96.5		60-120		12/16/22 16:46
Fluoranthene-d10	119		60-120		12/16/22 16:46
Fluoranthene-d10	136*	S-26	60-120		12/21/22 16:06
Fluorene-d10	92.5		60-120		12/16/22 16:46
Fluorene-d10	142*	S-26	60-120		12/21/22 16:06
Pyrene-d10	119		60-120		12/16/22 16:46
Pyrene-d10	142*	S-26	60-120		12/21/22 16:06

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-DW2
Sample ID: 22L1352-04

Sample Matrix: Air

Sampled: 12/7/2022 12:48

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.2	0.20		1	12/16/22	17:10	SPF
Acenaphthylene	0.27	0.20		1	12/16/22	17:10	SPF
Anthracene	2.6	0.20		1	12/16/22	17:10	SPF
Benzo(a)anthracene	ND	0.20		1	12/16/22	17:10	SPF
Benzo(a)pyrene	ND	0.20		1	12/16/22	17:10	SPF
Benzo(b)fluoranthene	ND	0.20		1	12/16/22	17:10	SPF
Benzo(e)pyrene	ND	0.20		1	12/16/22	17:10	SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/16/22	17:10	SPF
Benzo(k)fluoranthene	ND	0.20		1	12/16/22	17:10	SPF
Chrysene	ND	0.20		1	12/16/22	17:10	SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/16/22	17:10	SPF
Fluoranthene	0.81	0.20		1	12/16/22	17:10	SPF
Fluorene	1.6	0.20		1	12/16/22	17:10	SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/16/22	17:10	SPF
1-Methylnaphthalene	1.4	0.20		1	12/16/22	17:10	SPF
2-Methylnaphthalene	2.5	0.20		1	12/16/22	17:10	SPF
Naphthalene	8.0	0.50	L-05	1	12/16/22	17:10	SPF
Perylene	ND	0.20		1	12/16/22	17:10	SPF
Phenanthrene	2.4	0.20		1	12/16/22	17:10	SPF
Pyrene	0.38	0.20		1	12/16/22	17:10	SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	101	60-120	12/16/22 17:10
Fluoranthene-d10	120	60-120	12/16/22 17:10
Fluorene-d10	90.7	60-120	12/16/22 17:10
Pyrene-d10	116	60-120	12/16/22 17:10

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-UW

Sample ID: 22L1352-05

Sample Matrix: Air

Sampled: 12/7/2022 13:36

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.8	0.20		1	12/16/22 17:33		SPF
Acenaphthylene	1.3	0.20		1	12/16/22 17:33		SPF
Anthracene	0.34	0.20		1	12/16/22 17:33		SPF
Benzo(a)anthracene	ND	0.20		1	12/16/22 17:33		SPF
Benzo(a)pyrene	ND	0.20		1	12/16/22 17:33		SPF
Benzo(b)fluoranthene	0.21	0.20		1	12/16/22 17:33		SPF
Benzo(e)pyrene	ND	0.20		1	12/16/22 17:33		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/16/22 17:33		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/16/22 17:33		SPF
Chrysene	ND	0.20		1	12/16/22 17:33		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/16/22 17:33		SPF
Fluoranthene	0.85	0.20		1	12/16/22 17:33		SPF
Fluorene	2.2	0.20		1	12/16/22 17:33		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/16/22 17:33		SPF
1-Methylnaphthalene	2.8	0.20		1	12/16/22 17:33		SPF
2-Methylnaphthalene	5.8	0.20		1	12/16/22 17:33		SPF
Naphthalene	38	2.5	L-05	5	12/21/22 16:30		SPF
Perylene	ND	0.20		1	12/16/22 17:33		SPF
Phenanthrene	4.7	0.20		1	12/16/22 17:33		SPF
Pyrene	0.47	0.20		1	12/16/22 17:33		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	116		60-120		12/21/22 16:30
Benzo(a)pyrene-d12	98.6		60-120		12/16/22 17:33
Fluoranthene-d10	128*	S-26	60-120		12/21/22 16:30
Fluoranthene-d10	119		60-120		12/16/22 17:33
Fluorene-d10	138*	S-26	60-120		12/21/22 16:30
Fluorene-d10	89.4		60-120		12/16/22 17:33
Pyrene-d10	114		60-120		12/16/22 17:33
Pyrene-d10	140*	S-26	60-120		12/21/22 16:30

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ANALYTICAL RESULTS

Project Location: Burns Harbor

Date Received: 12/9/2022

Field Sample #: RO4-Field Blank
Sample ID: 22L1352-06

Sample Matrix: Air

Sampled: 12/7/2022 00:00

Sample Description/Location:

Sub Description/Location:

Work Order: 22L1352

Flow Controller ID:

Sample Type:

EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	12/16/22 17:57		SPF
Acenaphthylene	ND	0.20		1	12/16/22 17:57		SPF
Anthracene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(a)anthracene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(a)pyrene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(e)pyrene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/16/22 17:57		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/16/22 17:57		SPF
Chrysene	ND	0.20		1	12/16/22 17:57		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/16/22 17:57		SPF
Fluoranthene	ND	0.20		1	12/16/22 17:57		SPF
Fluorene	ND	0.20		1	12/16/22 17:57		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/16/22 17:57		SPF
1-Methylnaphthalene	ND	0.20		1	12/16/22 17:57		SPF
2-Methylnaphthalene	ND	0.20		1	12/16/22 17:57		SPF
Naphthalene	ND	0.50	L-05	1	12/16/22 17:57		SPF
Perylene	ND	0.20		1	12/16/22 17:57		SPF
Phenanthrene	ND	0.20		1	12/16/22 17:57		SPF
Pyrene	ND	0.20		1	12/16/22 17:57		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	91.6	60-120	12/16/22 17:57
Fluoranthene-d10	108	60-120	12/16/22 17:57
Fluorene-d10	98.8	60-120	12/16/22 17:57
Pyrene-d10	120	60-120	12/16/22 17:57

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method: SW-846 3540C****Analytical Method: EPA TO-13A**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
22L1352-01 [RO4-Int2]	B325517	1.00	1.00	12/12/22
22L1352-01RE1 [RO4-Int2]	B325517	1.00	1.00	12/12/22
22L1352-01RE2 [RO4-Int2]	B325517	1.00	1.00	12/12/22
22L1352-01RE3 [RO4-Int2]	B325517	1.00	1.00	12/12/22
22L1352-02 [RO4-Int1]	B325517	1.00	1.00	12/12/22
22L1352-02RE1 [RO4-Int1]	B325517	1.00	1.00	12/12/22
22L1352-02RE2 [RO4-Int1]	B325517	1.00	1.00	12/12/22
22L1352-03 [RO4-DW1]	B325517	1.00	1.00	12/12/22
22L1352-03RE1 [RO4-DW1]	B325517	1.00	1.00	12/12/22
22L1352-04 [RO4-DW2]	B325517	1.00	1.00	12/12/22
22L1352-05 [RO4-UW]	B325517	1.00	1.00	12/12/22
22L1352-05RE1 [RO4-UW]	B325517	1.00	1.00	12/12/22
22L1352-06 [RO4-Field Blank]	B325517	1.00	1.00	12/12/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B325517 - SW-846 3540C
Blank (B325517-BLK1)

Prepared: 12/12/22 Analyzed: 12/16/22

Acenaphthene	ND	0.20
Acenaphthylene	ND	0.20
Anthracene	ND	0.20
Benzo(a)anthracene	ND	0.20
Benzo(a)pyrene	ND	0.20
Benzo(b)fluoranthene	ND	0.20
Benzo(e)pyrene	ND	0.20
Benzo(g,h,i)perylene	ND	0.20
Benzo(k)fluoranthene	ND	0.20
Chrysene	ND	0.20
Dibenz(a,h)anthracene	ND	0.20
Fluoranthene	ND	0.20
Fluorene	ND	0.20
Indeno(1,2,3-cd)pyrene	ND	0.20
1-Methylnaphthalene	ND	0.20
2-Methylnaphthalene	ND	0.20
Naphthalene	ND	0.50
Perylene	ND	0.20
Phenanthrene	ND	0.20
Pyrene	ND	0.20

Surrogate: Fluorene-d10	1.08			1.00	108	60-120
Surrogate: Pyrene-d10	1.03			1.00	103	60-120

LCS (B325517-BS1)

Prepared: 12/12/22 Analyzed: 12/16/22

Acenaphthene	0.358	0.20	1.3	0.500	71.6	60-110
Acenaphthylene	0.392	0.20	1.2	0.500	78.4	60-110
Anthracene	0.378	0.20	1.5	0.500	75.6	60-110
Benzo(a)anthracene	0.409	0.20	1.9	0.500	81.8	60-110
Benzo(a)pyrene	0.391	0.20	2.1	0.500	78.2	60-110
Benzo(b)fluoranthene	0.389	0.20	2.1	0.500	77.8	60-111
Benzo(e)pyrene	0.405	0.20	2.1	0.500	81.0	60-118
Benzo(g,h,i)perylene	0.351	0.20	2.3	0.500	70.2	60-111
Benzo(k)fluoranthene	0.404	0.20	2.1	0.500	80.8	60-114
Chrysene	0.392	0.20	1.9	0.500	78.4	60-110
Dibenz(a,h)anthracene	0.357	0.20	2.3	0.500	71.4	60-113
Fluoranthene	0.406	0.20	1.7	0.500	81.2	60-110
Fluorene	0.394	0.20	1.4	0.500	78.8	60-110
Indeno(1,2,3-cd)pyrene	0.371	0.20	2.3	0.500	74.2	60-110
1-Methylnaphthalene	0.363	0.20	1.2	0.500	72.6	60-110
2-Methylnaphthalene	0.359	0.20	1.2	0.500	71.8	60-110
Naphthalene	0.544	0.50	2.6	0.500	109	60-118
Perylene	0.414	0.20	2.1	0.500	82.8	60-110
Phenanthrene	0.397	0.20	1.5	0.500	79.4	60-110
Pyrene	0.382	0.20	1.7	0.500	76.4	60-110

Surrogate: Fluorene-d10	1.24			1.00	124	* 60-120	S-20
Surrogate: Pyrene-d10	1.25			1.00	125	* 60-120	S-20

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	
Batch B325517 - SW-846 3540C											
LCS Dup (B325517-BSD1)					Prepared: 12/12/22 Analyzed: 12/16/22						
Acenaphthene	0.406	0.20		1.3	0.500		81.2	60-110	12.6	29.8	
Acenaphthylene	0.446	0.20		1.2	0.500		89.2	60-110	12.9	50	
Anthracene	0.440	0.20		1.5	0.500		88.0	60-110	15.2	35.8	
Benzo(a)anthracene	0.463	0.20		1.9	0.500		92.6	60-110	12.4	27.3	
Benzo(a)pyrene	0.430	0.20		2.1	0.500		86.0	60-110	9.50	27.3	
Benzo(b)fluoranthene	0.433	0.20		2.1	0.500		86.6	60-111	10.7	32.7	
Benzo(e)pyrene	0.448	0.20		2.1	0.500		89.6	60-118	10.1	33.6	
Benzo(g,h,i)perylene	0.404	0.20		2.3	0.500		80.8	60-111	14.0	36	
Benzo(k)fluoranthene	0.443	0.20		2.1	0.500		88.6	60-114	9.21	32.5	
Chrysene	0.436	0.20		1.9	0.500		87.2	60-110	10.6	28	
Dibenz(a,h)anthracene	0.397	0.20		2.3	0.500		79.4	60-113	10.6	37.1	
Fluoranthene	0.465	0.20		1.7	0.500		93.0	60-110	13.5	29.5	
Fluorene	0.449	0.20		1.4	0.500		89.8	60-110	13.0	31.1	
Indeno(1,2,3-cd)pyrene	0.425	0.20		2.3	0.500		85.0	60-110	13.6	34	
1-Methylnaphthalene	0.400	0.20		1.2	0.500		80.0	60-110	9.70	28.9	
2-Methylnaphthalene	0.401	0.20		1.2	0.500		80.2	60-110	11.1	28.3	
Naphthalene	0.622	0.50		2.6	0.500		124	* 60-118	13.4	28.3	L-05
Perylene	0.462	0.20		2.1	0.500		92.4	60-110	11.0	25.9	
Phenanthrene	0.453	0.20		1.5	0.500		90.6	60-110	13.2	27.4	
Pyrene	0.432	0.20		1.7	0.500		86.4	60-110	12.3	30.7	
Surrogate: Fluorene-d10	1.09				1.00		109	60-120			
Surrogate: Pyrene-d10	1.13				1.00		113	60-120			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-20	Surrogate recovery is outside of control limits. Sample media does not allow for re-extraction.
S-26	Surrogate outside of control limits.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B325517-BLK1) Lab File ID: H22S350007.D Analyzed: 12/16/22 11:57									
Naphthalene-d8	28850	4.933	43114	4.931	67	50 - 200	0.0020	+/-0.50	
Acenaphthene-d10	16500	6.631	23554	6.63	70	50 - 200	0.0010	+/-0.50	
Phenanthrene-d10	33141	8.099	43976	8.095	75	50 - 200	0.0040	+/-0.50	
Chrysene-d12	29463	11.029	40342	11.025	73	50 - 200	0.0040	+/-0.50	
Perylene-d12	29299	13.58	36406	13.576	80	50 - 200	0.0040	+/-0.50	
LCS (B325517-BS1) Lab File ID: H22S350009.D Analyzed: 12/16/22 12:46									
Naphthalene-d8	31070	4.933	43114	4.931	72	50 - 200	0.0020	+/-0.50	
Acenaphthene-d10	17532	6.632	23554	6.63	74	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	34481	8.099	43976	8.095	78	50 - 200	0.0040	+/-0.50	
Chrysene-d12	30959	11.032	40342	11.025	77	50 - 200	0.0070	+/-0.50	
Perylene-d12	34347	13.583	36406	13.576	94	50 - 200	0.0070	+/-0.50	
LCS Dup (B325517-BSD1) Lab File ID: H22S350010.D Analyzed: 12/16/22 13:11									
Naphthalene-d8	31205	4.933	43114	4.931	72	50 - 200	0.0020	+/-0.50	
Acenaphthene-d10	17546	6.632	23554	6.63	74	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	34193	8.098	43976	8.095	78	50 - 200	0.0030	+/-0.50	
Chrysene-d12	31119	11.031	40342	11.025	77	50 - 200	0.0060	+/-0.50	
Perylene-d12	32209	13.582	36406	13.576	88	50 - 200	0.0060	+/-0.50	
RO4-Int2 (22L1352-01) Lab File ID: H22S350017.D Analyzed: 12/16/22 15:59									
Naphthalene-d8	32534	4.961	43114	4.931	75	50 - 200	0.0300	+/-0.50	
Acenaphthene-d10	26769	6.635	23554	6.63	114	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10	40000	8.102	43976	8.095	91	50 - 200	0.0070	+/-0.50	
Chrysene-d12	38183	11.032	40342	11.025	95	50 - 200	0.0070	+/-0.50	
Perylene-d12	40213	13.585	36406	13.576	110	50 - 200	0.0090	+/-0.50	
RO4-Int1 (22L1352-02) Lab File ID: H22S350018.D Analyzed: 12/16/22 16:22									
Naphthalene-d8	30793	4.939	43114	4.931	71	50 - 200	0.0080	+/-0.50	
Acenaphthene-d10	19704	6.632	23554	6.63	84	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	38085	8.099	43976	8.095	87	50 - 200	0.0040	+/-0.50	
Chrysene-d12	35035	11.032	40342	11.025	87	50 - 200	0.0070	+/-0.50	
Perylene-d12	37220	13.585	36406	13.576	102	50 - 200	0.0090	+/-0.50	
RO4-DW1 (22L1352-03) Lab File ID: H22S350019.D Analyzed: 12/16/22 16:46									
Naphthalene-d8	34142	4.936	43114	4.931	79	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10	21349	6.635	23554	6.63	91	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10	39349	8.099	43976	8.095	89	50 - 200	0.0040	+/-0.50	
Chrysene-d12	35892	11.032	40342	11.025	89	50 - 200	0.0070	+/-0.50	
Perylene-d12	38416	13.586	36406	13.576	106	50 - 200	0.0100	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO4-DW2 (22L1352-04) Lab File ID: H22S350020.D Analyzed: 12/16/22 17:10									
Naphthalene-d8	33854	4.936	43114	4.931	79	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10	20425	6.635	23554	6.63	87	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10	38226	8.099	43976	8.095	87	50 - 200	0.0040	+/-0.50	
Chrysene-d12	35341	11.032	40342	11.025	88	50 - 200	0.0070	+/-0.50	
Perylene-d12	38098	13.585	36406	13.576	105	50 - 200	0.0090	+/-0.50	
RO4-UW (22L1352-05) Lab File ID: H22S350021.D Analyzed: 12/16/22 17:33									
Naphthalene-d8	33329	4.936	43114	4.931	77	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10	20358	6.635	23554	6.63	86	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10	37797	8.102	43976	8.095	86	50 - 200	0.0070	+/-0.50	
Chrysene-d12	35793	11.032	40342	11.025	89	50 - 200	0.0070	+/-0.50	
Perylene-d12	38192	13.586	36406	13.576	105	50 - 200	0.0100	+/-0.50	
RO4-Field Blank (22L1352-06) Lab File ID: H22S350022.D Analyzed: 12/16/22 17:57									
Naphthalene-d8	34233	4.936	43114	4.931	79	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10	20125	6.635	23554	6.63	85	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10	38784	8.099	43976	8.095	88	50 - 200	0.0040	+/-0.50	
Chrysene-d12	35175	11.032	40342	11.025	87	50 - 200	0.0070	+/-0.50	
Perylene-d12	36842	13.586	36406	13.576	101	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO4-Int2 (22L1352-01RE1) Lab File ID: H22S353015.D Analyzed: 12/19/22 17:25									
Naphthalene-d8	29201	4.923	38916	4.923	75	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	17076	6.619	21640	6.622	79	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	31772	8.087	38224	8.087	83	50 - 200	0.0000	+/-0.50	
Chrysene-d12	27866	11.013	29165	11.016	96	50 - 200	-0.0030	+/-0.50	
Perylene-d12	28325	13.56	29345	13.56	97	50 - 200	0.0000	+/-0.50	
RO4-Int2 (22L1352-01RE2) Lab File ID: H22S353016.D Analyzed: 12/19/22 17:50									
Naphthalene-d8	34185	4.923	38916	4.923	88	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19361	6.619	21640	6.622	89	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	35898	8.087	38224	8.087	94	50 - 200	0.0000	+/-0.50	
Chrysene-d12	31588	11.013	29165	11.016	108	50 - 200	-0.0030	+/-0.50	
Perylene-d12	32045	13.561	29345	13.56	109	50 - 200	0.0010	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO4-Int1 (22L1352-02RE1) Lab File ID: H22S353018.D Analyzed: 12/19/22 18:39									
Naphthalene-d8	29887	4.923	38916	4.923	77	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	16618	6.619	21640	6.622	77	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	30564	8.087	38224	8.087	80	50 - 200	0.0000	+/-0.50	
Chrysene-d12	29067	11.013	29165	11.016	100	50 - 200	-0.0030	+/-0.50	
Perylene-d12	27340	13.56	29345	13.56	93	50 - 200	0.0000	+/-0.50	
RO4-Int1 (22L1352-02RE2) Lab File ID: H22S353019.D Analyzed: 12/19/22 19:04									
Naphthalene-d8	30691	4.92	38916	4.923	79	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	16656	6.619	21640	6.622	77	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	30745	8.087	38224	8.087	80	50 - 200	0.0000	+/-0.50	
Chrysene-d12	26439	11.013	29165	11.016	91	50 - 200	-0.0030	+/-0.50	
Perylene-d12	26314	13.56	29345	13.56	90	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO4-Int2 (22L1352-01RE3) Lab File ID: H22S355016.D Analyzed: 12/21/22 15:41									
Naphthalene-d8	37497	4.914	28986	4.914	129	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	21143	6.612	17386	6.61	122	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	40434	8.08	35043	8.078	115	50 - 200	0.0020	+/-0.50	
Chrysene-d12	35921	11	28044	11.001	128	50 - 200	-0.0010	+/-0.50	
Perylene-d12	34934	13.543	27420	13.538	127	50 - 200	0.0050	+/-0.50	
RO4-DW1 (22L1352-03RE1) Lab File ID: H22S355017.D Analyzed: 12/21/22 16:06									
Naphthalene-d8	32484	4.914	28986	4.914	112	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	18252	6.613	17386	6.61	105	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	34697	8.078	35043	8.078	99	50 - 200	0.0000	+/-0.50	
Chrysene-d12	30412	11.001	28044	11.001	108	50 - 200	0.0000	+/-0.50	
Perylene-d12	29376	13.541	27420	13.538	107	50 - 200	0.0030	+/-0.50	
RO4-UW (22L1352-05RE1) Lab File ID: H22S355018.D Analyzed: 12/21/22 16:30									
Naphthalene-d8	30919	4.914	28986	4.914	107	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19231	6.613	17386	6.61	111	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	37499	8.078	35043	8.078	107	50 - 200	0.0000	+/-0.50	
Chrysene-d12	31375	11.001	28044	11.001	112	50 - 200	0.0000	+/-0.50	
Perylene-d12	31480	13.544	27420	13.538	115	50 - 200	0.0060	+/-0.50	

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CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-13A in Air</i>	
Acenaphthene	AIHA,NJ,NY,NH
Acenaphthylene	AIHA,NJ,NY,NH
Anthracene	AIHA,NJ,NY,NH
Benzo(a)anthracene	AIHA,NJ,NY,NH
Benzo(a)pyrene	AIHA,NJ,NY,FL,NH
Benzo(b)fluoranthene	AIHA,NJ,NY,NH
Benzo(e)pyrene	AIHA,NJ
Benzo(g,h,i)perylene	AIHA,NJ,NY,NH
Benzo(k)fluoranthene	AIHA,NJ,NY,NH
Chrysene	AIHA,NJ,NY,NH
Dibenz(a,h)anthracene	AIHA,NJ,NY,NH
Fluoranthene	AIHA,NJ,NY,NH
Fluorene	AIHA,NJ,NY,NH
Indeno(1,2,3-cd)pyrene	AIHA,NJ,NY,NH
1-Methylnaphthalene	AIHA
2-Methylnaphthalene	AIHA
Naphthalene	AIHA,NJ,NY,FL,NH
Perylene	AIHA,NJ
Phenanthrene	AIHA,NJ,NY,NH
Pyrene	AIHA,NJ,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023

(https://www.fedex.com/en-us/home.html)

FedEx® Tracking



DELIVERED

Friday

12/9/2022 at 7:43 am

Signature release on file

Package delivered to recipient address

↓ Obtain Proof of delivery

DELIVERY STATUS

Delivered

TRACKING ID

791316309327

FROM

PALATINE, IL US

Label Created

11/29/2022 1:20 PM

PACKAGE RECEIVED BY FEDEX

SCHAUMBURG, IL

12/8/2022 8:08 PM

IN TRANSIT

EAST GRANBY, CT

12/9/2022 6:24 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

12/9/2022 7:12 AM

DELIVERED

East Longmeadow, MA US

DELIVERED

12/9/2022 at 7:43 AM

↓ View travel history

Want updates on this shipment? Enter your email and we will do the rest!

YOUR EMAIL

SUBMIT

Manage Delivery





Doc# 278 Rev 7 July 2022

Doc# 278 Rev 7 July 2022
Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False
Statement will be brought to the attention of the Client - State True or False
 Client Green Air

Client Green Air

Received By

Date _____

12/5

Time

3412

How Were the samples received?

In Cooler

On Ice

No Ice

Were samples within Temperature Compliance?

In Box

Ambient

Melted Ice

Was Custody Seal In tact?

Within

By Gun #

Actual Temp

Was COC Relinquished ?

2-6°C

By Blank &

Actual Temp

Are there any loose caps/valves on any samples? _____

Were Samples Tampered with?

Is COC in ink/ Legible?

Were samples received within holding time?

Did COC Include all Pertinent Information?

Client?

Analysis?

Sampler Name?

Are Sample Labels filled out and legible?

Project?

ID's?

Collection Dates/Times?

Are there Rushes?

Who was notified?

Samples are received within holding time?

Proper Media Used?

Individually Certified Cans?

Are there Trip Blanks?

Is there enough Volume?

Summa Cans					Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		
Radiello					Syringe		
Pufs/TO-11s	6	11			Tedlar		

[illegible]**Comments:**


January 12, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CCBH, Palatine, IL
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22L3537

Enclosed are results of analyses for samples as received by the laboratory on December 22, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 1/12/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L3537

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CCBH, Palatine, IL

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO5-INT1	22L3537-01	Air		EPA TO-13A	
RO5-INT2	22L3537-02	Air		EPA TO-13A	
RO5-DW1	22L3537-03	Air		EPA TO-13A	
RO5-DW2	22L3537-04	Air		EPA TO-13A	
RO5-UW	22L3537-05	Air		EPA TO-13A	
RO5-BLANK	22L3537-06	Air		EPA TO-13A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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EPA TO-13A**Qualifications:****B**

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:**Naphthalene**

22L3537-01RE3[RO5-INT1], 22L3537-02RE4[RO5-INT2], 22L3537-03RE1[RO5-DW1], 22L3537-04[RO5-DW2], 22L3537-05RE1[RO5-UW], B327079-BLK1, B327079-BS1, B327079-BSD1

B-05

Data is not affected by elevated level in laboratory blank since sample(s) result is "Not Detected".

Analyte & Samples(s) Qualified:**Naphthalene**

22L3537-06[RO5-BLANK]

B-07

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Naphthalene**

22L3537-01RE3[RO5-INT1], 22L3537-02RE4[RO5-INT2], 22L3537-05RE1[RO5-UW]

H-06

Sample was extracted past the recommended holding time.

Analyte & Samples(s) Qualified:

22L3537-01[RO5-INT1], 22L3537-01RE1[RO5-INT1], 22L3537-01RE2[RO5-INT1], 22L3537-01RE3[RO5-INT1], 22L3537-02[RO5-INT2], 22L3537-02RE1[RO5-INT2], 22L3537-02RE2[RO5-INT2], 22L3537-02RE3[RO5-INT2], 22L3537-02RE4[RO5-INT2], 22L3537-03[RO5-DW1], 22L3537-03RE1[RO5-DW1], 22L3537-04[RO5-DW2], 22L3537-05[RO5-UW], 22L3537-05RE1[RO5-UW], 22L3537-06[RO5-BLANK]

L-06

Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Naphthalene**

22L3537-01RE3[RO5-INT1], 22L3537-02RE4[RO5-INT2], 22L3537-03RE1[RO5-DW1], 22L3537-04[RO5-DW2], 22L3537-05RE1[RO5-UW], B327079-BS1, B327079-BSD1

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

22L3537-01RE2[RO5-INT1], 22L3537-01RE3[RO5-INT1], 22L3537-02RE2[RO5-INT2], 22L3537-02RE3[RO5-INT2], 22L3537-02RE4[RO5-INT2]

Fluoranthene-d10

22L3537-01RE2[RO5-INT1], 22L3537-01RE3[RO5-INT1], 22L3537-02RE2[RO5-INT2], 22L3537-02RE3[RO5-INT2], 22L3537-02RE4[RO5-INT2]

Fluorene-d10

22L3537-01RE2[RO5-INT1], 22L3537-01RE3[RO5-INT1], 22L3537-02RE2[RO5-INT2], 22L3537-02RE3[RO5-INT2], 22L3537-02RE4[RO5-INT2]

Pyrene-d10

22L3537-01RE2[RO5-INT1], 22L3537-01RE3[RO5-INT1], 22L3537-02RE2[RO5-INT2], 22L3537-02RE3[RO5-INT2], 22L3537-02RE4[RO5-INT2]

S-26

Surrogate outside of control limits.

Analyte & Samples(s) Qualified:**Fluoranthene-d10**

22L3537-01[RO5-INT1]

Fluorene-d10

B327079-BS1

Pyrene-d10

22L3537-01[RO5-INT1], 22L3537-02[RO5-INT2], B327079-BS1

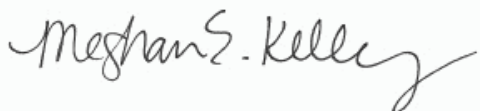
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**EPA TO-13A**

Reported results for air samples are calculated based on client sampling and sampling information provided by the laboratory.

Blank is not subtracted unless otherwise specified.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-INT1

Sample ID: 22L3537-01

Sample Matrix: Air

Sampled: 12/21/2022 10:09

Sample Description/Location:

Sub Description/Location:

Flow Controller ID:

Sample Type:

Work Order: 22L3537

EPA TO-13A

Sample Flags: H-06

Sample Flags: H-06		Total µg		Date/Time			
Analyte	Results	RL	Flag/Qual	Dilution	Analyzed	Analyst	
Acenaphthene	19	1.0	B-07, L-06, B	5	12/31/22 1:47	SPF	
Acenaphthylene	130	20		100	12/31/22 22:44	SPF	
Anthracene	37	1.0		5	12/31/22 1:47	SPF	
Benzo(a)anthracene	29	1.0		5	12/31/22 1:47	SPF	
Benzo(a)pyrene	16	1.0		5	12/31/22 1:47	SPF	
Benzo(b)fluoranthene	24	1.0		5	12/31/22 1:47	SPF	
Benzo(e)pyrene	11	1.0		5	12/31/22 1:47	SPF	
Benzo(g,h,i)perylene	8.7	1.0		5	12/31/22 1:47	SPF	
Benzo(k)fluoranthene	9.0	1.0		5	12/31/22 1:47	SPF	
Chrysene	25	1.0		5	12/31/22 1:47	SPF	
Dibenz(a,h)anthracene	2.7	1.0		5	12/31/22 1:47	SPF	
Fluoranthene	68	2.0		10	12/31/22 22:20	SPF	
Fluorene	62	2.0		10	12/31/22 22:20	SPF	
Indeno(1,2,3-cd)pyrene	11	1.0		5	12/31/22 1:47	SPF	
1-Methylnaphthalene	83	2.0		10	12/31/22 22:20	SPF	
2-Methylnaphthalene	210	20		100	12/31/22 22:44	SPF	
Naphthalene	3500	500		1000	1/5/23 12:30	CJM	
Perylene	4.3	1.0		5	12/31/22 1:47	SPF	
Phenanthrene	120	20		100	12/31/22 22:44	SPF	
Pyrene	50	1.0		5	12/31/22 1:47	SPF	

Surrogates	% Recovery		% REC Limits	
Benzo(a)pyrene-d12	106		60-120	12/31/22 1:47
Benzo(a)pyrene-d12	86.0		60-120	12/31/22 22:20
Benzo(a)pyrene-d12	*	S-01	60-120	1/5/23 12:30
Benzo(a)pyrene-d12	*	S-01	60-120	12/31/22 22:44
Fluoranthene-d10	107		60-120	12/31/22 22:20
Fluoranthene-d10	*	S-01	60-120	1/5/23 12:30
Fluoranthene-d10	124*	S-26	60-120	12/31/22 1:47
Fluoranthene-d10	*	S-01	60-120	12/31/22 22:44
Fluorene-d10	*	S-01	60-120	1/5/23 12:30
Fluorene-d10	103		60-120	12/31/22 22:20
Fluorene-d10	118		60-120	12/31/22 1:47
Fluorene-d10	*	S-01	60-120	12/31/22 22:44
Pyrene-d10	*	S-01	60-120	1/5/23 12:30
Pyrene-d10	135*	S-26	60-120	12/31/22 1:47
Pyrene-d10	109		60-120	12/31/22 22:20

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL
Date Received: 12/22/2022
Field Sample #: RO5-INT1
Sample ID: 22L3537-01
Sample Matrix: Air
Sampled: 12/21/2022 10:09

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 22L3537

EPA TO-13A

Sample Flags: H-06

Sample Flags: H-06		Total µg			Date/Time		
Analyte	Results	RL	Flag/Qual		Dilution	Analyzed	Analyst
Surrogates	% Recovery		% REC Limits				
Pyrene-d10		*	S-01	60-120	12/31/22 22:44		

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-INT2
Sample ID: 22L3537-02

Sample Matrix: Air

Sampled: 12/21/2022 10:43

Sample Description/Location:

Sub Description/Location:

Work Order: 22L3537

Flow Controller ID:

Sample Type:

EPA TO-13A

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	33	1.0		5	12/31/22 2:11		SPF
Acenaphthylene	680	20		100	12/31/22 23:33		SPF
Anthracene	49	2.0		10	12/31/22 23:09		SPF
Benzo(a)anthracene	15	1.0		5	12/31/22 2:11		SPF
Benzo(a)pyrene	6.9	1.0		5	12/31/22 2:11		SPF
Benzo(b)fluoranthene	13	1.0		5	12/31/22 2:11		SPF
Benzo(e)pyrene	5.9	1.0		5	12/31/22 2:11		SPF
Benzo(g,h,i)perylene	4.1	1.0		5	12/31/22 2:11		SPF
Benzo(k)fluoranthene	4.5	1.0		5	12/31/22 2:11		SPF
Chrysene	14	1.0		5	12/31/22 2:11		SPF
Dibenz(a,h)anthracene	1.3	1.0		5	12/31/22 2:11		SPF
Fluoranthene	50	2.0		10	12/31/22 23:09		SPF
Fluorene	220	20		100	12/31/22 23:33		SPF
Indeno(1,2,3-cd)pyrene	5.2	1.0		5	12/31/22 2:11		SPF
1-Methylnaphthalene	520	20		100	12/31/22 23:33		SPF
2-Methylnaphthalene	1500	200		1000	12/31/22 23:57		SPF
Naphthalene	30000	5000	B-07, L-06, B	10000	1/5/23 12:53		CJM
Perylene	1.9	1.0		5	12/31/22 2:11		SPF
Phenanthrene	200	20		100	12/31/22 23:33		SPF
Pyrene	33	1.0		5	12/31/22 2:11		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120		12/31/22 23:57
Benzo(a)pyrene-d12	94.5		60-120		12/31/22 2:11
Benzo(a)pyrene-d12	*	S-01	60-120		1/5/23 12:53
Benzo(a)pyrene-d12	*	S-01	60-120		12/31/22 23:33
Benzo(a)pyrene-d12	82.0		60-120		12/31/22 23:09
Fluoranthene-d10	*	S-01	60-120		12/31/22 23:57
Fluoranthene-d10	115		60-120		12/31/22 2:11
Fluoranthene-d10	*	S-01	60-120		1/5/23 12:53
Fluoranthene-d10	94.0		60-120		12/31/22 23:09
Fluoranthene-d10	*	S-01	60-120		12/31/22 23:33
Fluorene-d10	*	S-01	60-120		12/31/22 23:57
Fluorene-d10	101		60-120		12/31/22 2:11
Fluorene-d10	*	S-01	60-120		12/31/22 23:33
Fluorene-d10	*	S-01	60-120		1/5/23 12:53
Fluorene-d10	96.0		60-120		12/31/22 23:09

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-INT2
Sample ID: 22L3537-02

Sample Matrix: Air

Sampled: 12/21/2022 10:43

Sample Description/Location:

Sub Description/Location:

Flow Controller ID:

Sample Type:

Work Order: 22L3537
EPA TO-13A

Sample Flags: H-06

Sample Flags: H-06		Total µg		Date/Time		
Analyte	Results	RL	Flag/Qual	Dilution	Analyzed	Analyst
Surrogates	% Recovery		% REC Limits			
Pyrene-d10		*	S-01	60-120	12/31/22 23:33	
Pyrene-d10		132*	S-26	60-120	12/31/22 2:11	
Pyrene-d10		*	S-01	60-120	12/31/22 23:57	
Pyrene-d10		*	S-01	60-120	1/5/23 12:53	
Pyrene-d10		117		60-120	12/31/22 23:09	

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-DW1
Sample ID: 22L3537-03

Sample Matrix: Air

Sampled: 12/21/2022 11:05

Sample Description/Location:

Sub Description/Location:

Work Order: 22L3537

Flow Controller ID:

Sample Type:

EPA TO-13A

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.76	0.20		1	12/31/22 2:35		SPF
Acenaphthylene	0.25	0.20		1	12/31/22 2:35		SPF
Anthracene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(a)anthracene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(a)pyrene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(e)pyrene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/31/22 2:35		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/31/22 2:35		SPF
Chrysene	ND	0.20		1	12/31/22 2:35		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/31/22 2:35		SPF
Fluoranthene	0.52	0.20		1	12/31/22 2:35		SPF
Fluorene	0.77	0.20		1	12/31/22 2:35		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/31/22 2:35		SPF
1-Methylnaphthalene	1.9	0.20		1	12/31/22 2:35		SPF
2-Methylnaphthalene	3.4	0.20		1	12/31/22 2:35		SPF
Naphthalene	13	1.0	B, L-06	2	1/1/23 1:09		SPF
Perylene	ND	0.20		1	12/31/22 2:35		SPF
Phenanthrene	1.7	0.20		1	12/31/22 2:35		SPF
Pyrene	0.32	0.20		1	12/31/22 2:35		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	91.4	60-120	1/1/23 1:09
Benzo(a)pyrene-d12	88.5	60-120	12/31/22 2:35
Fluoranthene-d10	99.4	60-120	12/31/22 2:35
Fluoranthene-d10	104	60-120	1/1/23 1:09
Fluorene-d10	102	60-120	12/31/22 2:35
Fluorene-d10	115	60-120	1/1/23 1:09
Pyrene-d10	132*	60-120	1/1/23 1:09
Pyrene-d10	113	60-120	12/31/22 2:35

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-DW2
Sample ID: 22L3537-04

Sample Matrix: Air

Sampled: 12/21/2022 11:35

Sample Description/Location:

Sub Description/Location:

Work Order: 22L3537

Flow Controller ID:

Sample Type:

EPA TO-13A

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.60	0.20		1	12/31/22 2:59		SPF
Acenaphthylene	ND	0.20		1	12/31/22 2:59		SPF
Anthracene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(a)anthracene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(a)pyrene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(e)pyrene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/31/22 2:59		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/31/22 2:59		SPF
Chrysene	ND	0.20		1	12/31/22 2:59		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/31/22 2:59		SPF
Fluoranthene	0.34	0.20		1	12/31/22 2:59		SPF
Fluorene	0.64	0.20		1	12/31/22 2:59		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/31/22 2:59		SPF
1-Methylnaphthalene	1.6	0.20		1	12/31/22 2:59		SPF
2-Methylnaphthalene	2.8	0.20		1	12/31/22 2:59		SPF
Naphthalene	5.6	0.50	B, L-06	1	12/31/22 2:59		SPF
Perylene	ND	0.20		1	12/31/22 2:59		SPF
Phenanthrene	1.2	0.20		1	12/31/22 2:59		SPF
Pyrene	0.28	0.20		1	12/31/22 2:59		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	88.0	60-120	12/31/22 2:59
Fluoranthene-d10	101	60-120	12/31/22 2:59
Fluorene-d10	102	60-120	12/31/22 2:59
Pyrene-d10	112	60-120	12/31/22 2:59

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-UW
Sample ID: 22L3537-05

Sample Matrix: Air

Sampled: 12/21/2022 12:08

Sample Description/Location:

Sub Description/Location:

Work Order: 22L3537

Flow Controller ID:

Sample Type:

EPA TO-13A

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.57	0.20		1	12/31/22 3:23		SPF
Acenaphthylene	0.70	0.20		1	12/31/22 3:23		SPF
Anthracene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(a)anthracene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(a)pyrene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(e)pyrene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/31/22 3:23		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/31/22 3:23		SPF
Chrysene	ND	0.20		1	12/31/22 3:23		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/31/22 3:23		SPF
Fluoranthene	0.55	0.20		1	12/31/22 3:23		SPF
Fluorene	0.84	0.20		1	12/31/22 3:23		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/31/22 3:23		SPF
1-Methylnaphthalene	1.7	0.20		1	12/31/22 3:23		SPF
2-Methylnaphthalene	3.8	0.20		1	12/31/22 3:23		SPF
Naphthalene	28	2.5	B-07, L-06, B	5	1/1/23 0:21		SPF
Perylene	ND	0.20		1	12/31/22 3:23		SPF
Phenanthrene	1.9	0.20		1	12/31/22 3:23		SPF
Pyrene	0.33	0.20		1	12/31/22 3:23		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	108	60-120	1/1/23 0:21
Benzo(a)pyrene-d12	94.9	60-120	12/31/22 3:23
Fluoranthene-d10	119	60-120	1/1/23 0:21
Fluoranthene-d10	106	60-120	12/31/22 3:23
Fluorene-d10	110	60-120	12/31/22 3:23
Fluorene-d10	149*	60-120	1/1/23 0:21
Pyrene-d10	118	60-120	12/31/22 3:23
Pyrene-d10	164*	60-120	1/1/23 0:21

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ANALYTICAL RESULTS

Project Location: CCBH, Palatine, IL

Date Received: 12/22/2022

Field Sample #: RO5-BLANK
Sample ID: 22L3537-06

Sample Matrix: Air

Sampled: 12/21/2022 00:00

Sample Description/Location:

Sub Description/Location:

Work Order: 22L3537

Flow Controller ID:

Sample Type:

EPA TO-13A

Sample Flags: H-06

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	12/31/22 3:47		SPF
Acenaphthylene	ND	0.20		1	12/31/22 3:47		SPF
Anthracene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(a)anthracene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(a)pyrene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(b)fluoranthene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(e)pyrene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(g,h,i)perylene	ND	0.20		1	12/31/22 3:47		SPF
Benzo(k)fluoranthene	ND	0.20		1	12/31/22 3:47		SPF
Chrysene	ND	0.20		1	12/31/22 3:47		SPF
Dibenz(a,h)anthracene	ND	0.20		1	12/31/22 3:47		SPF
Fluoranthene	ND	0.20		1	12/31/22 3:47		SPF
Fluorene	ND	0.20		1	12/31/22 3:47		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	12/31/22 3:47		SPF
1-Methylnaphthalene	ND	0.20		1	12/31/22 3:47		SPF
2-Methylnaphthalene	ND	0.20		1	12/31/22 3:47		SPF
Naphthalene	ND	0.50	B-05	1	12/31/22 3:47		SPF
Perylene	ND	0.20		1	12/31/22 3:47		SPF
Phenanthrene	ND	0.20		1	12/31/22 3:47		SPF
Pyrene	ND	0.20		1	12/31/22 3:47		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	91.1	60-120	12/31/22 3:47
Fluoranthene-d10	103	60-120	12/31/22 3:47
Fluorene-d10	104	60-120	12/31/22 3:47
Pyrene-d10	115	60-120	12/31/22 3:47

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Sample Extraction Data**Prep Method: SW-846 3540C Analytical Method: EPA TO-13A**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
22L3537-01 [RO5-INT1]	B327079	1.00	1.00	12/29/22
22L3537-01RE1 [RO5-INT1]	B327079	1.00	1.00	12/29/22
22L3537-01RE2 [RO5-INT1]	B327079	1.00	1.00	12/29/22
22L3537-01RE3 [RO5-INT1]	B327079	1.00	1.00	12/29/22
22L3537-02 [RO5-INT2]	B327079	1.00	1.00	12/29/22
22L3537-02RE1 [RO5-INT2]	B327079	1.00	1.00	12/29/22
22L3537-02RE2 [RO5-INT2]	B327079	1.00	1.00	12/29/22
22L3537-02RE3 [RO5-INT2]	B327079	1.00	1.00	12/29/22
22L3537-02RE4 [RO5-INT2]	B327079	1.00	1.00	12/29/22
22L3537-03 [RO5-DW1]	B327079	1.00	1.00	12/29/22
22L3537-03RE1 [RO5-DW1]	B327079	1.00	1.00	12/29/22
22L3537-04 [RO5-DW2]	B327079	1.00	1.00	12/29/22
22L3537-05 [RO5-UW]	B327079	1.00	1.00	12/29/22
22L3537-05RE1 [RO5-UW]	B327079	1.00	1.00	12/29/22
22L3537-06 [RO5-BLANK]	B327079	1.00	1.00	12/29/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B327079 - SW-846 3540C

Blank (B327079-BLK1)

Prepared: 12/29/22 Analyzed: 12/30/22

Acenaphthene	ND	0.20									
Acenaphthylene	ND	0.20									
Anthracene	ND	0.20									
Benzo(a)anthracene	ND	0.20									
Benzo(a)pyrene	ND	0.20									
Benzo(b)fluoranthene	ND	0.20									
Benzo(e)pyrene	ND	0.20									
Benzo(g,h,i)perylene	ND	0.20									
Benzo(k)fluoranthene	ND	0.20									
Chrysene	ND	0.20									
Dibenz(a,h)anthracene	ND	0.20									
Fluoranthene	ND	0.20									
Fluorene	ND	0.20									
Indeno(1,2,3-cd)pyrene	ND	0.20									
1-Methylnaphthalene	ND	0.20									
2-Methylnaphthalene	ND	0.20									
Naphthalene	1.3	0.50									B
Perylene	ND	0.20									
Phenanthrene	ND	0.20									
Pyrene	ND	0.20									
Surrogate: Fluorene-d10	0.970				1.00		97.0	60-120			
Surrogate: Pyrene-d10	1.08				1.00		108	60-120			

LCS (B327079-BS1)

Prepared: 12/29/22 Analyzed: 12/30/22

Acenaphthene	0.355	0.20	1.3	0.500		71.0	60-110				
Acenaphthylene	0.389	0.20	1.2	0.500		77.8	60-110				
Anthracene	0.375	0.20	1.5	0.500		75.0	60-110				
Benzo(a)anthracene	0.398	0.20	1.9	0.500		79.6	60-110				
Benzo(a)pyrene	0.372	0.20	2.1	0.500		74.4	60-110				
Benzo(b)fluoranthene	0.378	0.20	2.1	0.500		75.6	60-111				
Benzo(e)pyrene	0.395	0.20	2.1	0.500		79.0	60-118				
Benzo(g,h,i)perylene	0.363	0.20	2.3	0.500		72.6	60-111				
Benzo(k)fluoranthene	0.386	0.20	2.1	0.500		77.2	60-114				
Chrysene	0.368	0.20	1.9	0.500		73.6	60-110				
Dibenz(a,h)anthracene	0.371	0.20	2.3	0.500		74.2	60-113				
Fluoranthene	0.375	0.20	1.7	0.500		75.0	60-110				
Fluorene	0.389	0.20	1.4	0.500		77.8	60-110				
Indeno(1,2,3-cd)pyrene	0.387	0.20	2.3	0.500		77.4	60-110				
1-Methylnaphthalene	0.355	0.20	1.2	0.500		71.0	60-110				
2-Methylnaphthalene	0.370	0.20	1.2	0.500		74.0	60-110				
Naphthalene	1.63	0.50	2.6	0.500		326 *	60-118				L-06, B
Perylene	0.399	0.20	2.1	0.500		79.8	60-110				
Phenanthrene	0.391	0.20	1.5	0.500		78.2	60-110				
Pyrene	0.378	0.20	1.7	0.500		75.6	60-110				
Surrogate: Fluorene-d10	2.28			1.00		228 *	60-120				S-26
Surrogate: Pyrene-d10	2.41			1.00		241 *	60-120				S-26

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	
Batch B327079 - SW-846 3540C											
LCS Dup (B327079-BSD1)					Prepared: 12/29/22 Analyzed: 12/30/22						
Acenaphthene	0.392	0.20		1.3	0.500		78.4	60-110	9.91	29.8	
Acenaphthylene	0.434	0.20		1.2	0.500		86.8	60-110	10.9	50	
Anthracene	0.418	0.20		1.5	0.500		83.6	60-110	10.8	35.8	
Benzo(a)anthracene	0.443	0.20		1.9	0.500		88.6	60-110	10.7	27.3	
Benzo(a)pyrene	0.422	0.20		2.1	0.500		84.4	60-110	12.6	27.3	
Benzo(b)fluoranthene	0.426	0.20		2.1	0.500		85.2	60-111	11.9	32.7	
Benzo(e)pyrene	0.447	0.20		2.1	0.500		89.4	60-118	12.4	33.6	
Benzo(g,h,i)perylene	0.411	0.20		2.3	0.500		82.2	60-111	12.4	36	
Benzo(k)fluoranthene	0.440	0.20		2.1	0.500		88.0	60-114	13.1	32.5	
Chrysene	0.413	0.20		1.9	0.500		82.6	60-110	11.5	28	
Dibenz(a,h)anthracene	0.419	0.20		2.3	0.500		83.8	60-113	12.2	37.1	
Fluoranthene	0.407	0.20		1.7	0.500		81.4	60-110	8.18	29.5	
Fluorene	0.421	0.20		1.4	0.500		84.2	60-110	7.90	31.1	
Indeno(1,2,3-cd)pyrene	0.438	0.20		2.3	0.500		87.6	60-110	12.4	34	
1-Methylnaphthalene	0.411	0.20		1.2	0.500		82.2	60-110	14.6	28.9	
2-Methylnaphthalene	0.429	0.20		1.2	0.500		85.8	60-110	14.8	28.3	
Naphthalene	1.71	0.50		2.6	0.500		342	* 60-118	4.85	28.3	L-06, B
Perylene	0.451	0.20		2.1	0.500		90.2	60-110	12.2	25.9	
Phenanthrene	0.430	0.20		1.5	0.500		86.0	60-110	9.50	27.4	
Pyrene	0.426	0.20		1.7	0.500		85.2	60-110	11.9	30.7	
Surrogate: Fluorene-d10	1.06				1.00		106	60-120			
Surrogate: Pvrene-d10	1.18				1.00		118	60-120			

L-06, B

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-05	Data is not affected by elevated level in laboratory blank since sample(s) result is "Not Detected".
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
H-06	Sample was extracted past the recommended holding time.
L-06	Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-26	Surrogate outside of control limits.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B327079-BLK1) Lab File ID: H22S364032.D Analyzed: 12/30/22 21:50									
Naphthalene-d8	33140	4.861	36964	4.861	90	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19834	6.56	21490	6.56	92	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	38568	8.025	41834	8.025	92	50 - 200	0.0000	+/-0.50	
Chrysene-d12	30479	10.922	33048	10.922	92	50 - 200	0.0000	+/-0.50	
Perylene-d12	29402	13.433	31518	13.427	93	50 - 200	0.0060	+/-0.50	
LCS (B327079-BS1) Lab File ID: H22S364034.D Analyzed: 12/30/22 22:38									
Naphthalene-d8	32852	4.861	36964	4.861	89	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19314	6.56	21490	6.56	90	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	37896	8.025	41834	8.025	91	50 - 200	0.0000	+/-0.50	
Chrysene-d12	30825	10.922	33048	10.922	93	50 - 200	0.0000	+/-0.50	
Perylene-d12	31433	13.43	31518	13.427	100	50 - 200	0.0030	+/-0.50	
LCS Dup (B327079-BSD1) Lab File ID: H22S364035.D Analyzed: 12/30/22 23:01									
Naphthalene-d8	34610	4.861	36964	4.861	94	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	20446	6.56	21490	6.56	95	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	37881	8.025	41834	8.025	91	50 - 200	0.0000	+/-0.50	
Chrysene-d12	29402	10.922	33048	10.922	89	50 - 200	0.0000	+/-0.50	
Perylene-d12	29662	13.433	31518	13.427	94	50 - 200	0.0060	+/-0.50	
RO5-INT1 (22L3537-01) Lab File ID: H22S364042.D Analyzed: 12/31/22 01:47									
Naphthalene-d8	30352	4.87	36964	4.861	82	50 - 200	0.0090	+/-0.50	
Acenaphthene-d10	19644	6.56	21490	6.56	91	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	32501	8.026	41834	8.025	78	50 - 200	0.0010	+/-0.50	
Chrysene-d12	26887	10.926	33048	10.922	81	50 - 200	0.0040	+/-0.50	
Perylene-d12	31087	13.433	31518	13.427	99	50 - 200	0.0060	+/-0.50	
RO5-INT2 (22L3537-02) Lab File ID: H22S364043.D Analyzed: 12/31/22 02:11									
Naphthalene-d8	23169	4.911	36964	4.861	63	50 - 200	0.0500	+/-0.50	
Acenaphthene-d10	23531	6.56	21490	6.56	109	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	33614	8.028	41834	8.025	80	50 - 200	0.0030	+/-0.50	
Chrysene-d12	28269	10.926	33048	10.922	86	50 - 200	0.0040	+/-0.50	
Perylene-d12	32203	13.436	31518	13.427	102	50 - 200	0.0090	+/-0.50	
RO5-DW1 (22L3537-03) Lab File ID: H22S364044.D Analyzed: 12/31/22 02:35									
Naphthalene-d8	33433	4.864	36964	4.861	90	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	19800	6.56	21490	6.56	92	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	34286	8.025	41834	8.025	82	50 - 200	0.0000	+/-0.50	
Chrysene-d12	28021	10.926	33048	10.922	85	50 - 200	0.0040	+/-0.50	
Perylene-d12	30849	13.433	31518	13.427	98	50 - 200	0.0060	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO5-DW2 (22L3537-04) Lab File ID: H22S364045.D Analyzed: 12/31/22 02:59									
Naphthalene-d8	30395	4.864	36964	4.861	82	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	18517	6.56	21490	6.56	86	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	33409	8.028	41834	8.025	80	50 - 200	0.0030	+/-0.50	
Chrysene-d12	27631	10.928	33048	10.922	84	50 - 200	0.0060	+/-0.50	
Perylene-d12	30060	13.435	31518	13.427	95	50 - 200	0.0080	+/-0.50	
RO5-UW (22L3537-05) Lab File ID: H22S364046.D Analyzed: 12/31/22 03:23									
Naphthalene-d8	29758	4.864	36964	4.861	81	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	17694	6.56	21490	6.56	82	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	31278	8.025	41834	8.025	75	50 - 200	0.0000	+/-0.50	
Chrysene-d12	26116	10.926	33048	10.922	79	50 - 200	0.0040	+/-0.50	
Perylene-d12	28317	13.436	31518	13.427	90	50 - 200	0.0090	+/-0.50	
RO5-BLANK (22L3537-06) Lab File ID: H22S364047.D Analyzed: 12/31/22 03:47									
Naphthalene-d8	31445	4.864	36964	4.861	85	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	18540	6.56	21490	6.56	86	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	33668	8.025	41834	8.025	80	50 - 200	0.0000	+/-0.50	
Chrysene-d12	28002	10.925	33048	10.922	85	50 - 200	0.0030	+/-0.50	
Perylene-d12	30615	13.436	31518	13.427	97	50 - 200	0.0090	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO5-INT1 (22L3537-01RE1) Lab File ID: H22S365034.D Analyzed: 12/31/22 22:20									
Naphthalene-d8	29676	4.876	55269	4.87	54	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10	18436	6.569	32113	6.566	57	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	33535	8.035	60813	8.032	55	50 - 200	0.0030	+/-0.50	
Chrysene-d12	28260	10.938	49015	10.932	58	50 - 200	0.0060	+/-0.50	
Perylene-d12	30387	13.452	51795	13.447	59	50 - 200	0.0050	+/-0.50	
RO5-INT1 (22L3537-01RE2) Lab File ID: H22S365035.D Analyzed: 12/31/22 22:44									
Naphthalene-d8	29306	4.873	55269	4.87	53	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	17130	6.569	32113	6.566	53	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	31809	8.035	60813	8.032	52	50 - 200	0.0030	+/-0.50	
Chrysene-d12	26198	10.938	49015	10.932	53	50 - 200	0.0060	+/-0.50	
Perylene-d12	28044	13.455	51795	13.447	54	50 - 200	0.0080	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO5-INT2 (22L3537-02RE1) Lab File ID: H22S365036.D Analyzed: 12/31/22 23:09									
Naphthalene-d8	25918	4.898	55269	4.87	47	50 - 200	0.0280	+/-0.50	*
Acenaphthene-d10	19983	6.569	32113	6.566	62	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	33746	8.035	60813	8.032	55	50 - 200	0.0030	+/-0.50	
Chrysene-d12	26827	10.938	49015	10.932	55	50 - 200	0.0060	+/-0.50	
Perylene-d12	28448	13.452	51795	13.447	55	50 - 200	0.0050	+/-0.50	
RO5-INT2 (22L3537-02RE2) Lab File ID: H22S365037.D Analyzed: 12/31/22 23:33									
Naphthalene-d8	31780	4.876	55269	4.87	58	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10	19077	6.57	32113	6.566	59	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	34070	8.038	60813	8.032	56	50 - 200	0.0060	+/-0.50	
Chrysene-d12	26414	10.941	49015	10.932	54	50 - 200	0.0090	+/-0.50	
Perylene-d12	28448	13.458	51795	13.447	55	50 - 200	0.0110	+/-0.50	
RO5-INT2 (22L3537-02RE3) Lab File ID: H22S365038.D Analyzed: 12/31/22 23:57									
Naphthalene-d8	26635	4.873	55269	4.87	48	50 - 200	0.0030	+/-0.50	*
Acenaphthene-d10	15253	6.573	32113	6.566	47	50 - 200	0.0070	+/-0.50	*
Phenanthrene-d10	28257	8.038	60813	8.032	46	50 - 200	0.0060	+/-0.50	*
Chrysene-d12	22439	10.941	49015	10.932	46	50 - 200	0.0090	+/-0.50	*
Perylene-d12	23852	13.46	51795	13.447	46	50 - 200	0.0130	+/-0.50	*
RO5-UW (22L3537-05RE1) Lab File ID: H22S365039.D Analyzed: 01/01/23 00:21									
Naphthalene-d8	29361	4.873	55269	4.87	53	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	17426	6.569	32113	6.566	54	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	32343	8.035	60813	8.032	53	50 - 200	0.0030	+/-0.50	
Chrysene-d12	25733	10.938	49015	10.932	53	50 - 200	0.0060	+/-0.50	
Perylene-d12	26758	13.455	51795	13.447	52	50 - 200	0.0080	+/-0.50	
RO5-DW1 (22L3537-03RE1) Lab File ID: H22S365041.D Analyzed: 01/01/23 01:09									
Naphthalene-d8	33606	4.876	55269	4.87	61	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10	19661	6.573	32113	6.566	61	50 - 200	0.0070	+/-0.50	
Phenanthrene-d10	35458	8.038	60813	8.032	58	50 - 200	0.0060	+/-0.50	
Chrysene-d12	27241	10.941	49015	10.932	56	50 - 200	0.0090	+/-0.50	
Perylene-d12	27755	13.458	51795	13.447	54	50 - 200	0.0110	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO5-INT1 (22L3537-01RE3) Lab File ID: H23S005008.D Analyzed: 01/05/23 12:30									
Naphthalene-d8	31156	4.867	37800	4.867	82	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	16918	6.563	21280	6.563	80	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	28725	8.028	37478	8.025	77	50 - 200	0.0030	+/-0.50	
Chrysene-d12	20989	10.929	26058	10.926	81	50 - 200	0.0030	+/-0.50	
Perylene-d12	20693	13.441	26361	13.438	78	50 - 200	0.0030	+/-0.50	
RO5-INT2 (22L3537-02RE4) Lab File ID: H23S005009.D Analyzed: 01/05/23 12:53									
Naphthalene-d8	29472	4.867	37800	4.867	78	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	15951	6.563	21280	6.563	75	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	27952	8.028	37478	8.025	75	50 - 200	0.0030	+/-0.50	
Chrysene-d12	20625	10.929	26058	10.926	79	50 - 200	0.0030	+/-0.50	
Perylene-d12	20156	13.438	26361	13.438	76	50 - 200	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-13A in Air</i>	
Acenaphthene	AIHA,NJ,NY,NH
Acenaphthylene	AIHA,NJ,NY,NH
Anthracene	AIHA,NJ,NY,NH
Benzo(a)anthracene	AIHA,NJ,NY,NH
Benzo(a)pyrene	AIHA,NJ,NY,FL,NH
Benzo(b)fluoranthene	AIHA,NJ,NY,NH
Benzo(e)pyrene	AIHA,NJ
Benzo(g,h,i)perylene	AIHA,NJ,NY,NH
Benzo(k)fluoranthene	AIHA,NJ,NY,NH
Chrysene	AIHA,NJ,NY,NH
Dibenz(a,h)anthracene	AIHA,NJ,NY,NH
Fluoranthene	AIHA,NJ,NY,NH
Fluorene	AIHA,NJ,NY,NH
Indeno(1,2,3-cd)pyrene	AIHA,NJ,NY,NH
1-Methylnaphthalene	AIHA
2-Methylnaphthalene	AIHA
Naphthalene	AIHA,NJ,NY,FL,NH
Perylene	AIHA,NJ
Phenanthrene	AIHA,NJ,NY,NH
Pyrene	AIHA,NJ,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023

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Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By ML Date 12/22/22 Time 1047

How Were the samples received? In Cooler T On Ice T No Ice
In Box Ambient Melted Ice

Were samples within Temperature Compliance? Within 2-6°C T By Gun # 2 Actual Temp - 2.3
By Blank # Actual Temp -

Was Custody Seal In tact? NA Were Samples Tampered with? NA
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC Include all Pertinent Information? Client? T Analysis? T Sampler Name? T
Project? T ID's? T Collection Dates/Times?

Are Sample Labels filled out and legible?

Are there Rushes? F Who was notified?

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? F

Are there Trip Blanks? T Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans					Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s	<u>6</u>				Tedlar		

Can #'s					Reg #'s				
Unused Media					Pufs/TO-17's				
					<u>112922C</u>	<u>01</u>			
					<u>1</u>	<u>02</u>			
						<u>03</u>			
						<u>05</u>			
						<u>06</u>			

Comments:

January 12, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: IL
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 23A0547

Enclosed are results of analyses for samples as received by the laboratory on January 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 1/12/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23A0547

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: IL

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO6-INT1	23A0547-01	Air		EPA TO-13A	
RO6-INT2	23A0547-02	Air		EPA TO-13A	
RO6-DW1	23A0547-03	Air		EPA TO-13A	
RO6-DW2	23A0547-04	Air		EPA TO-13A	
RO6-UW	23A0547-05	Air		EPA TO-13A	
RO6-Blank	23A0547-06	Air		EPA TO-13A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-13A**Qualifications:**

B

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:**Naphthalene**

23A0547-01RE2[RO6-INT1], 23A0547-02[RO6-INT2], 23A0547-03RE1[RO6-DW1], 23A0547-04RE1[RO6-DW2], 23A0547-05[RO6-UW], 23A0547-06[RO6-Blank], B327905-BLK1, B327905-BS1, B327905-BSD1

B-07

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Naphthalene**

23A0547-02[RO6-INT2], 23A0547-03RE1[RO6-DW1], 23A0547-04RE1[RO6-DW2]

L-05

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Naphthalene**

23A0547-02[RO6-INT2], 23A0547-03RE1[RO6-DW1], 23A0547-04RE1[RO6-DW2], 23A0547-05[RO6-UW], 23A0547-06[RO6-Blank], B327905-BS1, B327905-BSD1

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

23A0547-01[RO6-INT1], 23A0547-02[RO6-INT2]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

23A0547-01[RO6-INT1], 23A0547-01RE1[RO6-INT1], 23A0547-01RE2[RO6-INT1]

Fluoranthene-d10

23A0547-01[RO6-INT1], 23A0547-01RE1[RO6-INT1], 23A0547-01RE2[RO6-INT1]

Fluorene-d10

23A0547-01[RO6-INT1], 23A0547-01RE1[RO6-INT1], 23A0547-01RE2[RO6-INT1]

Pyrene-d10

23A0547-01[RO6-INT1], 23A0547-01RE1[RO6-INT1], 23A0547-01RE2[RO6-INT1]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**EPA TO-13A**

Reported results for air samples are calculated based on client sampling and sampling information provided by the laboratory.

Blank is not subtracted unless otherwise specified.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Tod E. Kopycinski
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-INT1
Sample ID: 23A0547-01
Sample Matrix: Air
Sampled: 1/5/2023 10:08

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547

EPA TO-13A						
Sample Flags: RL-12						
Analyte	Total µg		Flag/Qual	Dilution	Date/Time	
	Results	RL			Analyzed	Analyst
Acenaphthene	34	20		100	1/10/23 16:50	SPF
Acenaphthylene	850	20		100	1/10/23 16:50	SPF
Anthracene	36	20		100	1/10/23 16:50	SPF
Benzo(a)anthracene	ND	20		100	1/10/23 16:50	SPF
Benzo(a)pyrene	ND	20		100	1/10/23 16:50	SPF
Benzo(b)fluoranthene	ND	20		100	1/10/23 16:50	SPF
Benzo(e)pyrene	ND	20		100	1/10/23 16:50	SPF
Benzo(g,h,i)perylene	ND	20		100	1/10/23 16:50	SPF
Benzo(k)fluoranthene	ND	20		100	1/10/23 16:50	SPF
Chrysene	ND	20		100	1/10/23 16:50	SPF
Dibenz(a,h)anthracene	ND	20		100	1/10/23 16:50	SPF
Fluoranthene	ND	20		100	1/10/23 16:50	SPF
Fluorene	280	20		100	1/10/23 16:50	SPF
Indeno(1,2,3-cd)pyrene	ND	20		100	1/10/23 16:50	SPF
1-Methylnaphthalene	670	20		100	1/10/23 16:50	SPF
2-Methylnaphthalene	1700	200		1000	1/10/23 17:13	SPF
Naphthalene	23000	2500	B	5000	1/11/23 9:36	SPF
Perylene	ND	20		100	1/10/23 16:50	SPF
Phenanthrene	180	20		100	1/10/23 16:50	SPF
Pyrene	ND	20		100	1/10/23 16:50	SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120		1/10/23 17:13
Benzo(a)pyrene-d12	*	S-01	60-120		1/10/23 16:50
Benzo(a)pyrene-d12	*	S-01	60-120		1/11/23 9:36
Fluoranthene-d10	*	S-01	60-120		1/10/23 16:50
Fluoranthene-d10	*	S-01	60-120		1/10/23 17:13
Fluoranthene-d10	*	S-01	60-120		1/11/23 9:36
Fluorene-d10	*	S-01	60-120		1/10/23 16:50
Fluorene-d10	*	S-01	60-120		1/10/23 17:13
Fluorene-d10	*	S-01	60-120		1/11/23 9:36
Pyrene-d10	*	S-01	60-120		1/10/23 16:50
Pyrene-d10	*	S-01	60-120		1/10/23 17:13
Pyrene-d10	*	S-01	60-120		1/11/23 9:36

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-INT2
Sample ID: 23A0547-02
Sample Matrix: Air
Sampled: 1/5/2023 10:32

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547
EPA TO-13A

Sample Flags: RL-12

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	10		50	1/10/23 17:37		SPF
Acenaphthylene	12	10		50	1/10/23 17:37		SPF
Anthracene	ND	10		50	1/10/23 17:37		SPF
Benzo(a)anthracene	ND	10		50	1/10/23 17:37		SPF
Benzo(a)pyrene	ND	10		50	1/10/23 17:37		SPF
Benzo(b)fluoranthene	ND	10		50	1/10/23 17:37		SPF
Benzo(e)pyrene	ND	10		50	1/10/23 17:37		SPF
Benzo(g,h,i)perylene	ND	10		50	1/10/23 17:37		SPF
Benzo(k)fluoranthene	ND	10		50	1/10/23 17:37		SPF
Chrysene	ND	10		50	1/10/23 17:37		SPF
Dibenz(a,h)anthracene	ND	10		50	1/10/23 17:37		SPF
Fluoranthene	ND	10		50	1/10/23 17:37		SPF
Fluorene	ND	10		50	1/10/23 17:37		SPF
Indeno(1,2,3-cd)pyrene	ND	10		50	1/10/23 17:37		SPF
1-Methylnaphthalene	13	10		50	1/10/23 17:37		SPF
2-Methylnaphthalene	33	10		50	1/10/23 17:37		SPF
Naphthalene	440	25	B-07, L-05, B	50	1/10/23 17:37		SPF
Perylene	ND	10		50	1/10/23 17:37		SPF
Phenanthrene	ND	10		50	1/10/23 17:37		SPF
Pyrene	ND	10		50	1/10/23 17:37		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	80.0	60-120	1/10/23 17:37
Fluoranthene-d10	90.0	60-120	1/10/23 17:37
Fluorene-d10	90.0	60-120	1/10/23 17:37
Pyrene-d10	85.0	60-120	1/10/23 17:37

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-DW1
Sample ID: 23A0547-03
Sample Matrix: Air
Sampled: 1/5/2023 10:53

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.92	0.20		1	1/10/23 18:24		SPF
Acenaphthylene	0.71	0.20		1	1/10/23 18:24		SPF
Anthracene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(a)anthracene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(a)pyrene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(b)fluoranthene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(e)pyrene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(g,h,i)perylene	ND	0.20		1	1/10/23 18:24		SPF
Benzo(k)fluoranthene	ND	0.20		1	1/10/23 18:24		SPF
Chrysene	ND	0.20		1	1/10/23 18:24		SPF
Dibenz(a,h)anthracene	ND	0.20		1	1/10/23 18:24		SPF
Fluoranthene	0.42	0.20		1	1/10/23 18:24		SPF
Fluorene	1.1	0.20		1	1/10/23 18:24		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	1/10/23 18:24		SPF
1-Methylnaphthalene	4.9	0.20		1	1/10/23 18:24		SPF
2-Methylnaphthalene	9.2	2.0		10	1/10/23 18:47		SPF
Naphthalene	71	5.0	B-07, L-05, B	10	1/10/23 18:47		SPF
Perylene	ND	0.20		1	1/10/23 18:24		SPF
Phenanthrene	2.0	0.20		1	1/10/23 18:24		SPF
Pyrene	0.34	0.20		1	1/10/23 18:24		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	71.0	60-120	1/10/23 18:47
Benzo(a)pyrene-d12	74.1	60-120	1/10/23 18:24
Fluoranthene-d10	85.0	60-120	1/10/23 18:24
Fluoranthene-d10	84.0	60-120	1/10/23 18:47
Fluorene-d10	78.5	60-120	1/10/23 18:24
Fluorene-d10	76.0	60-120	1/10/23 18:47
Pyrene-d10	83.9	60-120	1/10/23 18:24
Pyrene-d10	79.0	60-120	1/10/23 18:47

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-DW2
Sample ID: 23A0547-04
Sample Matrix: Air
Sampled: 1/5/2023 11:22

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.93	0.20		1	1/10/23 19:11		SPF
Acenaphthylene	2.5	0.20		1	1/10/23 19:11		SPF
Anthracene	0.59	0.20		1	1/10/23 19:11		SPF
Benzo(a)anthracene	0.21	0.20		1	1/10/23 19:11		SPF
Benzo(a)pyrene	ND	0.20		1	1/10/23 19:11		SPF
Benzo(b)fluoranthene	0.31	0.20		1	1/10/23 19:11		SPF
Benzo(e)pyrene	ND	0.20		1	1/10/23 19:11		SPF
Benzo(g,h,i)perylene	ND	0.20		1	1/10/23 19:11		SPF
Benzo(k)fluoranthene	ND	0.20		1	1/10/23 19:11		SPF
Chrysene	0.31	0.20		1	1/10/23 19:11		SPF
Dibenz(a,h)anthracene	ND	0.20		1	1/10/23 19:11		SPF
Fluoranthene	1.2	0.20		1	1/10/23 19:11		SPF
Fluorene	1.5	0.20		1	1/10/23 19:11		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	1/10/23 19:11		SPF
1-Methylnaphthalene	3.8	0.20		1	1/10/23 19:11		SPF
2-Methylnaphthalene	7.7	0.20		1	1/10/23 19:11		SPF
Naphthalene	58	5.0	B-07, L-05, B	10	1/11/23 9:59		SPF
Perylene	ND	0.20		1	1/10/23 19:11		SPF
Phenanthrene	3.7	0.20		1	1/10/23 19:11		SPF
Pyrene	0.94	0.20		1	1/10/23 19:11		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	76.0	60-120	1/11/23 9:59
Benzo(a)pyrene-d12	79.1	60-120	1/10/23 19:11
Fluoranthene-d10	87.0	60-120	1/11/23 9:59
Fluoranthene-d10	90.1	60-120	1/10/23 19:11
Fluorene-d10	75.5	60-120	1/10/23 19:11
Fluorene-d10	77.0	60-120	1/11/23 9:59
Pyrene-d10	85.8	60-120	1/10/23 19:11
Pyrene-d10	85.0	60-120	1/11/23 9:59

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-UW
Sample ID: 23A0547-05
Sample Matrix: Air
Sampled: 1/5/2023 11:57

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.58	0.20		1	1/10/23 19:35		SPF
Acenaphthylene	ND	0.20		1	1/10/23 19:35		SPF
Anthracene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(a)anthracene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(a)pyrene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(b)fluoranthene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(e)pyrene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(g,h,i)perylene	ND	0.20		1	1/10/23 19:35		SPF
Benzo(k)fluoranthene	ND	0.20		1	1/10/23 19:35		SPF
Chrysene	ND	0.20		1	1/10/23 19:35		SPF
Dibenz(a,h)anthracene	ND	0.20		1	1/10/23 19:35		SPF
Fluoranthene	ND	0.20		1	1/10/23 19:35		SPF
Fluorene	0.47	0.20		1	1/10/23 19:35		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	1/10/23 19:35		SPF
1-Methylnaphthalene	0.71	0.20		1	1/10/23 19:35		SPF
2-Methylnaphthalene	1.2	0.20		1	1/10/23 19:35		SPF
Naphthalene	4.5	0.50	B, L-05	1	1/10/23 19:35		SPF
Perylene	ND	0.20		1	1/10/23 19:35		SPF
Phenanthrene	0.83	0.20		1	1/10/23 19:35		SPF
Pyrene	ND	0.20		1	1/10/23 19:35		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	78.1	60-120	1/10/23 19:35
Fluoranthene-d10	87.4	60-120	1/10/23 19:35
Fluorene-d10	81.2	60-120	1/10/23 19:35
Pyrene-d10	88.5	60-120	1/10/23 19:35

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/6/2023
Field Sample #: RO6-Blank
Sample ID: 23A0547-06
Sample Matrix: Air
Sampled: 1/5/2023 00:00

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A0547
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	1/10/23 19:59		SPF
Acenaphthylene	ND	0.20		1	1/10/23 19:59		SPF
Anthracene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(a)anthracene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(a)pyrene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(b)fluoranthene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(e)pyrene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(g,h,i)perylene	ND	0.20		1	1/10/23 19:59		SPF
Benzo(k)fluoranthene	ND	0.20		1	1/10/23 19:59		SPF
Chrysene	ND	0.20		1	1/10/23 19:59		SPF
Dibenz(a,h)anthracene	ND	0.20		1	1/10/23 19:59		SPF
Fluoranthene	ND	0.20		1	1/10/23 19:59		SPF
Fluorene	ND	0.20		1	1/10/23 19:59		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	1/10/23 19:59		SPF
1-Methylnaphthalene	ND	0.20		1	1/10/23 19:59		SPF
2-Methylnaphthalene	ND	0.20		1	1/10/23 19:59		SPF
Naphthalene	1.7	0.50	B, L-05	1	1/10/23 19:59		SPF
Perylene	ND	0.20		1	1/10/23 19:59		SPF
Phenanthrene	ND	0.20		1	1/10/23 19:59		SPF
Pyrene	ND	0.20		1	1/10/23 19:59		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	67.2	60-120	1/10/23 19:59
Fluoranthene-d10	77.4	60-120	1/10/23 19:59
Fluorene-d10	76.9	60-120	1/10/23 19:59
Pyrene-d10	83.7	60-120	1/10/23 19:59

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method: SW-846 3540C Analytical Method: EPA TO-13A**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
23A0547-01 [RO6-INT1]	B327905	1.00	1.00	01/09/23
23A0547-01RE1 [RO6-INT1]	B327905	1.00	1.00	01/09/23
23A0547-01RE2 [RO6-INT1]	B327905	1.00	1.00	01/09/23
23A0547-02 [RO6-INT2]	B327905	1.00	1.00	01/09/23
23A0547-03 [RO6-DW1]	B327905	1.00	1.00	01/09/23
23A0547-03RE1 [RO6-DW1]	B327905	1.00	1.00	01/09/23
23A0547-04 [RO6-DW2]	B327905	1.00	1.00	01/09/23
23A0547-04RE1 [RO6-DW2]	B327905	1.00	1.00	01/09/23
23A0547-05 [RO6-UW]	B327905	1.00	1.00	01/09/23
23A0547-06 [RO6-Blank]	B327905	1.00	1.00	01/09/23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B327905 - SW-846 3540C
Blank (B327905-BLK1)

Prepared: 01/06/23 Analyzed: 01/10/23

Acenaphthene	ND	0.20									
Acenaphthylene	ND	0.20									
Anthracene	ND	0.20									
Benzo(a)anthracene	ND	0.20									
Benzo(a)pyrene	ND	0.20									
Benzo(b)fluoranthene	ND	0.20									
Benzo(e)pyrene	ND	0.20									
Benzo(g,h,i)perylene	ND	0.20									
Benzo(k)fluoranthene	ND	0.20									
Chrysene	ND	0.20									
Dibenz(a,h)anthracene	ND	0.20									
Fluoranthene	ND	0.20									
Fluorene	ND	0.20									
Indeno(1,2,3-cd)pyrene	ND	0.20									
1-Methylnaphthalene	ND	0.20									
2-Methylnaphthalene	ND	0.20									
Naphthalene	1.9	0.50									B
Perylene	ND	0.20									
Phenanthrene	ND	0.20									
Pyrene	ND	0.20									
Surrogate: Fluorene-d10	0.683				1.00		68.3	60-120			
Surrogate: Pyrene-d10	0.760				1.00		76.0	60-120			

LCS (B327905-BS1)

Prepared: 01/06/23 Analyzed: 01/10/23

Acenaphthene	0.329	0.20	1.3	0.500		65.8	60-110				
Acenaphthylene	0.365	0.20	1.2	0.500		73.0	60-110				
Anthracene	0.355	0.20	1.5	0.500		71.0	60-110				
Benzo(a)anthracene	0.370	0.20	1.9	0.500		74.0	60-110				
Benzo(a)pyrene	0.331	0.20	2.1	0.500		66.2	60-110				
Benzo(b)fluoranthene	0.331	0.20	2.1	0.500		66.2	60-111				
Benzo(e)pyrene	0.349	0.20	2.1	0.500		69.8	60-118				
Benzo(g,h,i)perylene	0.313	0.20	2.3	0.500		62.6	60-111				
Benzo(k)fluoranthene	0.344	0.20	2.1	0.500		68.8	60-114				
Chrysene	0.338	0.20	1.9	0.500		67.6	60-110				
Dibenz(a,h)anthracene	0.304	0.20	2.3	0.500		60.8	60-113				
Fluoranthene	0.329	0.20	1.7	0.500		65.8	60-110				
Fluorene	0.351	0.20	1.4	0.500		70.2	60-110				
Indeno(1,2,3-cd)pyrene	0.327	0.20	2.3	0.500		65.4	60-110				
1-Methylnaphthalene	0.345	0.20	1.2	0.500		69.0	60-110				
2-Methylnaphthalene	0.368	0.20	1.2	0.500		73.6	60-110				
Naphthalene	2.00	0.50	2.6	0.500		400 *	60-118				L-05, B
Perylene	0.361	0.20	2.1	0.500		72.2	60-110				
Phenanthrene	0.362	0.20	1.5	0.500		72.4	60-110				
Pyrene	0.368	0.20	1.7	0.500		73.6	60-110				
Surrogate: Fluorene-d10	0.785			1.00		78.5	60-120				
Surrogate: Pyrene-d10	0.883			1.00		88.3	60-120				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	
Batch B327905 - SW-846 3540C											
LCS Dup (B327905-BSD1)					Prepared: 01/06/23 Analyzed: 01/10/23						
Acenaphthene	0.354	0.20		1.3	0.500		70.8	60-110	7.32	29.8	
Acenaphthylene	0.383	0.20		1.2	0.500		76.6	60-110	4.81	50	
Anthracene	0.372	0.20		1.5	0.500		74.4	60-110	4.68	35.8	
Benzo(a)anthracene	0.391	0.20		1.9	0.500		78.2	60-110	5.52	27.3	
Benzo(a)pyrene	0.359	0.20		2.1	0.500		71.8	60-110	8.12	27.3	
Benzo(b)fluoranthene	0.361	0.20		2.1	0.500		72.2	60-111	8.67	32.7	
Benzo(e)pyrene	0.380	0.20		2.1	0.500		76.0	60-118	8.50	33.6	
Benzo(g,h,i)perylene	0.349	0.20		2.3	0.500		69.8	60-111	10.9	36	
Benzo(k)fluoranthene	0.374	0.20		2.1	0.500		74.8	60-114	8.36	32.5	
Chrysene	0.362	0.20		1.9	0.500		72.4	60-110	6.86	28	
Dibenz(a,h)anthracene	0.353	0.20		2.3	0.500		70.6	60-113	14.9	37.1	
Fluoranthene	0.357	0.20		1.7	0.500		71.4	60-110	8.16	29.5	
Fluorene	0.386	0.20		1.4	0.500		77.2	60-110	9.50	31.1	
Indeno(1,2,3-cd)pyrene	0.367	0.20		2.3	0.500		73.4	60-110	11.5	34	
1-Methylnaphthalene	0.372	0.20		1.2	0.500		74.4	60-110	7.53	28.9	
2-Methylnaphthalene	0.391	0.20		1.2	0.500		78.2	60-110	6.06	28.3	
Naphthalene	1.92	0.50		2.6	0.500		385	* 60-118	3.82	28.3	L-05, B
Perylene	0.390	0.20		2.1	0.500		78.0	60-110	7.72	25.9	
Phenanthrene	0.386	0.20		1.5	0.500		77.2	60-110	6.42	27.4	
Pyrene	0.384	0.20		1.7	0.500		76.8	60-110	4.26	30.7	
Surrogate: Fluorene-d10	0.797				1.00		79.7	60-120			
Surrogate: Pyrene-d10	0.853				1.00		85.3	60-120			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B327905-BLK1) Lab File ID: H23S010007.D Analyzed: 01/10/23 15:16									
Naphthalene-d8	35335	4.864	49744	4.867	71	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	20801	6.56	28562	6.563	73	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	38873	8.025	52086	8.028	75	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	29153	10.929	38071	10.929	77	50 - 200	0.0000	+/-0.50	
Perylene-d12	30163	13.438	37809	13.438	80	50 - 200	0.0000	+/-0.50	
LCS (B327905-BS1) Lab File ID: H23S010009.D Analyzed: 01/10/23 16:03									
Naphthalene-d8	36635	4.864	49744	4.867	74	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	21572	6.56	28562	6.563	76	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	39690	8.025	52086	8.028	76	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	29147	10.926	38071	10.929	77	50 - 200	-0.0030	+/-0.50	
Perylene-d12	31195	13.436	37809	13.438	83	50 - 200	-0.0020	+/-0.50	
LCS Dup (B327905-BSD1) Lab File ID: H23S010010.D Analyzed: 01/10/23 16:26									
Naphthalene-d8	34361	4.864	49744	4.867	69	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	20384	6.563	28562	6.563	71	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	39124	8.025	52086	8.028	75	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	29626	10.925	38071	10.929	78	50 - 200	-0.0040	+/-0.50	
Perylene-d12	31300	13.435	37809	13.438	83	50 - 200	-0.0030	+/-0.50	
RO6-INT1 (23A0547-01) Lab File ID: H23S010011.D Analyzed: 01/10/23 16:50									
Naphthalene-d8	35769	4.87	49744	4.867	72	50 - 200	0.0030	+/-0.50	
Acenaphthene-d10	21537	6.56	28562	6.563	75	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	37192	8.025	52086	8.028	71	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	26841	10.926	38071	10.929	71	50 - 200	-0.0030	+/-0.50	
Perylene-d12	29725	13.436	37809	13.438	79	50 - 200	-0.0020	+/-0.50	
RO6-INT1 (23A0547-01RE1) Lab File ID: H23S010012.D Analyzed: 01/10/23 17:13									
Naphthalene-d8	35659	4.864	49744	4.867	72	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	19846	6.563	28562	6.563	69	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	34631	8.029	52086	8.028	66	50 - 200	0.0010	+/-0.50	
Chrysene-d12	25062	10.929	38071	10.929	66	50 - 200	0.0000	+/-0.50	
Perylene-d12	27715	13.438	37809	13.438	73	50 - 200	0.0000	+/-0.50	
RO6-INT2 (23A0547-02) Lab File ID: H23S010013.D Analyzed: 01/10/23 17:37									
Naphthalene-d8	34682	4.864	49744	4.867	70	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	20124	6.563	28562	6.563	70	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	37009	8.028	52086	8.028	71	50 - 200	0.0000	+/-0.50	
Chrysene-d12	28542	10.928	38071	10.929	75	50 - 200	-0.0010	+/-0.50	
Perylene-d12	30600	13.438	37809	13.438	81	50 - 200	0.0000	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO6-DW1 (23A0547-03) Lab File ID: H23S010015.D Analyzed: 01/10/23 18:24									
Naphthalene-d8	32317	4.867	49744	4.867	65	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	20646	6.563	28562	6.563	72	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	38051	8.026	52086	8.028	73	50 - 200	-0.0020	+/-0.50	
Chrysene-d12	28426	10.926	38071	10.929	75	50 - 200	-0.0030	+/-0.50	
Perylene-d12	30524	13.434	37809	13.438	81	50 - 200	-0.0040	+/-0.50	
RO6-DW1 (23A0547-03RE1) Lab File ID: H23S010016.D Analyzed: 01/10/23 18:47									
Naphthalene-d8	32373	4.864	49744	4.867	65	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	19243	6.563	28562	6.563	67	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	35795	8.028	52086	8.028	69	50 - 200	0.0000	+/-0.50	
Chrysene-d12	29064	10.925	38071	10.929	76	50 - 200	-0.0040	+/-0.50	
Perylene-d12	31352	13.435	37809	13.438	83	50 - 200	-0.0030	+/-0.50	
RO6-DW2 (23A0547-04) Lab File ID: H23S010017.D Analyzed: 01/10/23 19:11									
Naphthalene-d8	35701	4.867	49744	4.867	72	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	22073	6.563	28562	6.563	77	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	40497	8.025	52086	8.028	78	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	32159	10.926	38071	10.929	84	50 - 200	-0.0030	+/-0.50	
Perylene-d12	34999	13.436	37809	13.438	93	50 - 200	-0.0020	+/-0.50	
RO6-UW (23A0547-05) Lab File ID: H23S010018.D Analyzed: 01/10/23 19:35									
Naphthalene-d8	33226	4.864	49744	4.867	67	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	20180	6.56	28562	6.563	71	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	37487	8.026	52086	8.028	72	50 - 200	-0.0020	+/-0.50	
Chrysene-d12	28777	10.926	38071	10.929	76	50 - 200	-0.0030	+/-0.50	
Perylene-d12	31249	13.436	37809	13.438	83	50 - 200	-0.0020	+/-0.50	
RO6-Blank (23A0547-06) Lab File ID: H23S010019.D Analyzed: 01/10/23 19:59									
Naphthalene-d8	34044	4.864	49744	4.867	68	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	20121	6.56	28562	6.563	70	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	37208	8.025	52086	8.028	71	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	29410	10.926	38071	10.929	77	50 - 200	-0.0030	+/-0.50	
Perylene-d12	31986	13.436	37809	13.438	85	50 - 200	-0.0020	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO6-INT1 (23A0547-01RE2) Lab File ID: H23S011004.D Analyzed: 01/11/23 09:36									
Naphthalene-d8	34620	4.858	30696	4.858	113	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19188	6.557	17968	6.557	107	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	33334	8.022	33639	8.019	99	50 - 200	0.0030	+/-0.50	
Chrysene-d12	24565	10.919	26677	10.919	92	50 - 200	0.0000	+/-0.50	
Perylene-d12	25635	13.427	28658	13.424	89	50 - 200	0.0030	+/-0.50	
RO6-DW2 (23A0547-04RE1) Lab File ID: H23S011005.D Analyzed: 01/11/23 09:59									
Naphthalene-d8	32505	4.858	30696	4.858	106	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	19337	6.557	17968	6.557	108	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	35835	8.021	33639	8.019	107	50 - 200	0.0020	+/-0.50	
Chrysene-d12	27619	10.918	26677	10.919	104	50 - 200	-0.0010	+/-0.50	
Perylene-d12	29326	13.424	28658	13.424	102	50 - 200	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

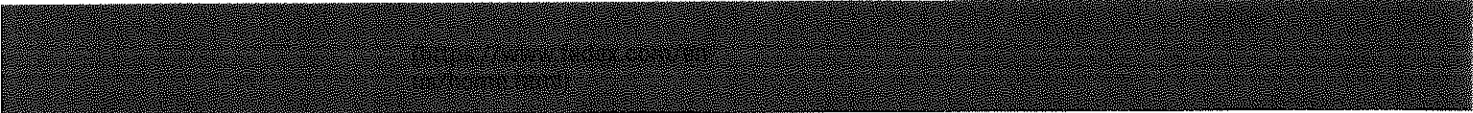
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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-13A in Air</i>	
Acenaphthene	AIHA,NJ,NY,NH
Acenaphthylene	AIHA,NJ,NY,NH
Anthracene	AIHA,NJ,NY,NH
Benzo(a)anthracene	AIHA,NJ,NY,NH
Benzo(a)pyrene	AIHA,NJ,NY,FL,NH
Benzo(b)fluoranthene	AIHA,NJ,NY,NH
Benzo(e)pyrene	AIHA,NJ
Benzo(g,h,i)perylene	AIHA,NJ,NY,NH
Benzo(k)fluoranthene	AIHA,NJ,NY,NH
Chrysene	AIHA,NJ,NY,NH
Dibenz(a,h)anthracene	AIHA,NJ,NY,NH
Fluoranthene	AIHA,NJ,NY,NH
Fluorene	AIHA,NJ,NY,NH
Indeno(1,2,3-cd)pyrene	AIHA,NJ,NY,NH
1-Methylnaphthalene	AIHA
2-Methylnaphthalene	AIHA
Naphthalene	AIHA,NJ,NY,FL,NH
Perylene	AIHA,NJ
Phenanthrene	AIHA,NJ,NY,NH
Pyrene	AIHA,NJ,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023



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Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By UR Date 1/5 Time 256

How Were the samples received? In Cooler T On Ice No Ice

In Box Ambient Melted Ice

Were samples within Temperature Compliance? Within By Gun # 3 Actual Temp - 2.0

2-6°C T By Blank # Actual Temp -

Was Custody Seal In tact? MA Were Samples Tampered with? MA

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC Include all Pertinent Information? Client? T Analysis? T Sampler Name? T

Project? T ID's? T Collection Dates/Times? T

Are Sample Labels filled out and legible?

Are there Rushes? F Who was notified?

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? F

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans					Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s	<u>6</u>	<u>hV</u>			Tedlar		

Can #'s					Reg #'s				
Unused Media					Pufs/TO-17's				
					<u>12122A-02</u>	<u>-06</u>			
					<u>-01</u>				
					<u>-03</u>				
					<u>-04</u>				
					<u>-05</u>				

Comments:

February 7, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CC BA
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 23A2525

Enclosed are results of analyses for samples as received by the laboratory on January 26, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 2/7/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23A2525

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CC BA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO7-INT1	23A2525-01	Air		EPA TO-13A	
RO7-INT2	23A2525-02	Air		EPA TO-13A	
RO7-DW1	23A2525-03	Air		EPA TO-13A	
RO7-DW2	23A2525-04	Air		EPA TO-13A	
RO7-UW	23A2525-05	Air		EPA TO-13A	
RO7-BLANK	23A2525-06	Air		EPA TO-13A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-13A**Qualifications:**

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

23A2525-01[RO7-INT1]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:**Benzo(a)pyrene-d12**

23A2525-01RE1[RO7-INT1], 23A2525-01RE2[RO7-INT1], 23A2525-01RE3[RO7-INT1], 23A2525-02RE1[RO7-INT2]

Fluoranthene-d10

23A2525-01RE1[RO7-INT1], 23A2525-01RE2[RO7-INT1], 23A2525-01RE3[RO7-INT1], 23A2525-02RE1[RO7-INT2]

Fluorene-d10

23A2525-01RE1[RO7-INT1], 23A2525-01RE2[RO7-INT1], 23A2525-01RE3[RO7-INT1], 23A2525-02RE1[RO7-INT2]

Pyrene-d10

23A2525-01RE1[RO7-INT1], 23A2525-01RE2[RO7-INT1], 23A2525-01RE3[RO7-INT1], 23A2525-02RE1[RO7-INT2]

S-07

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:**Fluoranthene-d10**

23A2525-03RE1[RO7-DW1], 23A2525-04[RO7-DW2]

Pyrene-d10

B329792-BS1

S-20

Surrogate recovery is outside of control limits. Sample media does not allow for re-extraction.

Analyte & Samples(s) Qualified:**Fluoranthene-d10**

23A2525-01[RO7-INT1]

Pyrene-d10

23A2525-01[RO7-INT1]

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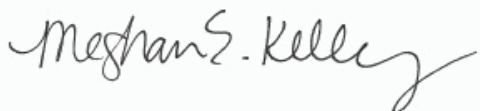
EPA TO-13A

Reported results for air samples are calculated based on client sampling and sampling information provided by the laboratory.

Blank is not subtracted unless otherwise specified.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-INT1
Sample ID: 23A2525-01
Sample Matrix: Air
Sampled: 1/24/2023 10:07

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525

EPA TO-13A						
Sample Flags: RL-12						
Analyte	Total µg		Flag/Qual	Dilution	Date/Time	
	Results	RL			Analyzed	Analyst
Acenaphthene	22	1.0		5	2/2/23 16:23	SPF
Acenaphthylene	380	20		100	2/2/23 16:47	SPF
Anthracene	28	1.0		5	2/2/23 16:23	SPF
Benzo(a)anthracene	1.8	1.0		5	2/2/23 16:23	SPF
Benzo(a)pyrene	1.4	1.0		5	2/2/23 16:23	SPF
Benzo(b)fluoranthene	2.1	1.0		5	2/2/23 16:23	SPF
Benzo(e)pyrene	1.0	1.0		5	2/2/23 16:23	SPF
Benzo(g,h,i)perylene	ND	1.0		5	2/2/23 16:23	SPF
Benzo(k)fluoranthene	ND	1.0		5	2/2/23 16:23	SPF
Chrysene	1.9	1.0		5	2/2/23 16:23	SPF
Dibenz(a,h)anthracene	ND	1.0		5	2/2/23 16:23	SPF
Fluoranthene	17	1.0		5	2/2/23 16:23	SPF
Fluorene	190	20		100	2/2/23 16:47	SPF
Indeno(1,2,3-cd)pyrene	1.1	1.0		5	2/2/23 16:23	SPF
1-Methylnaphthalene	540	20		100	2/2/23 16:47	SPF
2-Methylnaphthalene	1200	80		400	2/6/23 9:57	SPF
Naphthalene	18000	2000		4000	2/6/23 10:21	SPF
Perylene	ND	1.0		5	2/2/23 16:23	SPF
Phenanthrene	120	20		100	2/2/23 16:47	SPF
Pyrene	9.3	1.0		5	2/2/23 16:23	SPF

Surrogates	% Recovery		% REC Limits			
Benzo(a)pyrene-d12	*	S-01	60-120		2/6/23 9:57	
Benzo(a)pyrene-d12	*	S-01	60-120		2/2/23 16:47	
Benzo(a)pyrene-d12	118		60-120		2/2/23 16:23	
Benzo(a)pyrene-d12	*	S-01	60-120		2/6/23 10:21	
Fluoranthene-d10	138*	S-20	60-120		2/2/23 16:23	
Fluoranthene-d10	*	S-01	60-120		2/2/23 16:47	
Fluoranthene-d10	*	S-01	60-120		2/6/23 9:57	
Fluoranthene-d10	*	S-01	60-120		2/6/23 10:21	
Fluorene-d10	97.0		60-120		2/2/23 16:23	
Fluorene-d10	*	S-01	60-120		2/2/23 16:47	
Fluorene-d10	*	S-01	60-120		2/6/23 10:21	
Fluorene-d10	*	S-01	60-120		2/6/23 9:57	
Pyrene-d10	135*	S-20	60-120		2/2/23 16:23	
Pyrene-d10	*	S-01	60-120		2/2/23 16:47	
Pyrene-d10	*	S-01	60-120		2/6/23 9:57	
Pyrene-d10	*	S-01	60-120		2/6/23 10:21	

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ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-INT1
Sample ID: 23A2525-01
Sample Matrix: Air
Sampled: 1/24/2023 10:07

Sample Description/Location:
Sub Description/Location:

Work Order: 23A2525

Flow Controller ID:
Sample Type:

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ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-INT2
Sample ID: 23A2525-02
Sample Matrix: Air
Sampled: 1/24/2023 10:27

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	4.0		20	2/2/23 17:10		SPF
Acenaphthylene	7.4	4.0		20	2/2/23 17:10		SPF
Anthracene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(a)anthracene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(a)pyrene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(b)fluoranthene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(e)pyrene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(g,h,i)perylene	ND	4.0		20	2/2/23 17:10		SPF
Benzo(k)fluoranthene	ND	4.0		20	2/2/23 17:10		SPF
Chrysene	ND	4.0		20	2/2/23 17:10		SPF
Dibenz(a,h)anthracene	ND	4.0		20	2/2/23 17:10		SPF
Fluoranthene	6.2	4.0		20	2/2/23 17:10		SPF
Fluorene	8.6	4.0		20	2/2/23 17:10		SPF
Indeno(1,2,3-cd)pyrene	ND	4.0		20	2/2/23 17:10		SPF
1-Methylnaphthalene	12	4.0		20	2/2/23 17:10		SPF
2-Methylnaphthalene	30	4.0		20	2/2/23 17:10		SPF
Naphthalene	310	50		100	2/2/23 17:34		SPF
Perylene	ND	4.0		20	2/2/23 17:10		SPF
Phenanthrene	14	4.0		20	2/2/23 17:10		SPF
Pyrene	4.4	4.0		20	2/2/23 17:10		SPF

Surrogates	% Recovery		% REC Limits		
Benzo(a)pyrene-d12	*	S-01	60-120		2/2/23 17:34
Benzo(a)pyrene-d12	86.0		60-120		2/2/23 17:10
Fluoranthene-d10	*	S-01	60-120		2/2/23 17:34
Fluoranthene-d10	102		60-120		2/2/23 17:10
Fluorene-d10	98.0		60-120		2/2/23 17:10
Fluorene-d10	*	S-01	60-120		2/2/23 17:34
Pyrene-d10	*	S-01	60-120		2/2/23 17:34
Pyrene-d10	112		60-120		2/2/23 17:10

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ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-DW1
Sample ID: 23A2525-03
Sample Matrix: Air
Sampled: 1/24/2023 10:54

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	1.4	0.20		1	2/2/23 17:58		SPF
Acenaphthylene	0.57	0.20		1	2/2/23 17:58		SPF
Anthracene	0.23	0.20		1	2/2/23 17:58		SPF
Benzo(a)anthracene	ND	0.20		1	2/2/23 17:58		SPF
Benzo(a)pyrene	ND	0.20		1	2/2/23 17:58		SPF
Benzo(b)fluoranthene	ND	0.20		1	2/2/23 17:58		SPF
Benzo(e)pyrene	ND	0.20		1	2/2/23 17:58		SPF
Benzo(g,h,i)perylene	ND	0.20		1	2/2/23 17:58		SPF
Benzo(k)fluoranthene	ND	0.20		1	2/2/23 17:58		SPF
Chrysene	ND	0.20		1	2/2/23 17:58		SPF
Dibenz(a,h)anthracene	ND	0.20		1	2/2/23 17:58		SPF
Fluoranthene	0.71	0.20		1	2/2/23 17:58		SPF
Fluorene	3.2	0.20		1	2/2/23 17:58		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	2/2/23 17:58		SPF
1-Methylnaphthalene	9.5	0.20		1	2/2/23 17:58		SPF
2-Methylnaphthalene	27	1.0		5	2/6/23 10:44		SPF
Naphthalene	460	25		50	2/6/23 11:08		SPF
Perylene	ND	0.20		1	2/2/23 17:58		SPF
Phenanthrene	3.8	0.20		1	2/2/23 17:58		SPF
Pyrene	0.52	0.20		1	2/2/23 17:58		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	100	60-120	2/6/23 10:44
Benzo(a)pyrene-d12	95.0	60-120	2/6/23 11:08
Benzo(a)pyrene-d12	91.6	60-120	2/2/23 17:58
Fluoranthene-d10	107	60-120	2/2/23 17:58
Fluoranthene-d10	120	60-120	2/6/23 11:08
Fluoranthene-d10	124*	S-07 60-120	2/6/23 10:44
Fluorene-d10	90.4	60-120	2/2/23 17:58
Fluorene-d10	106	60-120	2/6/23 10:44
Fluorene-d10	120	60-120	2/6/23 11:08
Pyrene-d10	115	60-120	2/6/23 11:08
Pyrene-d10	100	60-120	2/2/23 17:58
Pyrene-d10	114	60-120	2/6/23 10:44

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ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-DW2
Sample ID: 23A2525-04
Sample Matrix: Air
Sampled: 1/24/2023 11:29

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.90	0.20		1	2/2/23 18:21		SPF
Acenaphthylene	0.99	0.20		1	2/2/23 18:21		SPF
Anthracene	0.50	0.20		1	2/2/23 18:21		SPF
Benzo(a)anthracene	0.22	0.20		1	2/2/23 18:21		SPF
Benzo(a)pyrene	ND	0.20		1	2/2/23 18:21		SPF
Benzo(b)fluoranthene	0.42	0.20		1	2/2/23 18:21		SPF
Benzo(e)pyrene	0.20	0.20		1	2/2/23 18:21		SPF
Benzo(g,h,i)perylene	ND	0.20		1	2/2/23 18:21		SPF
Benzo(k)fluoranthene	ND	0.20		1	2/2/23 18:21		SPF
Chrysene	0.36	0.20		1	2/2/23 18:21		SPF
Dibenz(a,h)anthracene	ND	0.20		1	2/2/23 18:21		SPF
Fluoranthene	1.4	0.20		1	2/2/23 18:21		SPF
Fluorene	1.6	0.20		1	2/2/23 18:21		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	2/2/23 18:21		SPF
1-Methylnaphthalene	3.2	0.20		1	2/2/23 18:21		SPF
2-Methylnaphthalene	6.8	0.20		1	2/2/23 18:21		SPF
Naphthalene	60	5.0		10	2/6/23 12:44		SPF
Perylene	ND	0.20		1	2/2/23 18:21		SPF
Phenanthrene	3.5	0.20		1	2/2/23 18:21		SPF
Pyrene	0.90	0.20		1	2/2/23 18:21		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	105	60-120	2/6/23 12:44
Benzo(a)pyrene-d12	109	60-120	2/2/23 18:21
Fluoranthene-d10	118	60-120	2/6/23 12:44
Fluoranthene-d10	126*	60-120	2/2/23 18:21
Fluorene-d10	103	60-120	2/6/23 12:44
Fluorene-d10	103	60-120	2/2/23 18:21
Pyrene-d10	115	60-120	2/2/23 18:21
Pyrene-d10	117	60-120	2/6/23 12:44

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-UW
Sample ID: 23A2525-05
Sample Matrix: Air
Sampled: 1/24/2023 12:02

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	0.52	0.20		1	2/2/23 18:45		SPF
Acenaphthylene	ND	0.20		1	2/2/23 18:45		SPF
Anthracene	1.1	0.20		1	2/2/23 18:45		SPF
Benzo(a)anthracene	ND	0.20		1	2/2/23 18:45		SPF
Benzo(a)pyrene	ND	0.20		1	2/2/23 18:45		SPF
Benzo(b)fluoranthene	ND	0.20		1	2/2/23 18:45		SPF
Benzo(e)pyrene	ND	0.20		1	2/2/23 18:45		SPF
Benzo(g,h,i)perylene	ND	0.20		1	2/2/23 18:45		SPF
Benzo(k)fluoranthene	ND	0.20		1	2/2/23 18:45		SPF
Chrysene	ND	0.20		1	2/2/23 18:45		SPF
Dibenz(a,h)anthracene	ND	0.20		1	2/2/23 18:45		SPF
Fluoranthene	ND	0.20		1	2/2/23 18:45		SPF
Fluorene	0.54	0.20		1	2/2/23 18:45		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	2/2/23 18:45		SPF
1-Methylnaphthalene	0.69	0.20		1	2/2/23 18:45		SPF
2-Methylnaphthalene	1.3	0.20		1	2/2/23 18:45		SPF
Naphthalene	3.2	0.50		1	2/2/23 18:45		SPF
Perylene	ND	0.20		1	2/2/23 18:45		SPF
Phenanthrene	0.96	0.20		1	2/2/23 18:45		SPF
Pyrene	ND	0.20		1	2/2/23 18:45		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	97.7	60-120	2/2/23 18:45
Fluoranthene-d10	113	60-120	2/2/23 18:45
Fluorene-d10	97.0	60-120	2/2/23 18:45
Pyrene-d10	109	60-120	2/2/23 18:45

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BA
Date Received: 1/26/2023
Field Sample #: RO7-BLANK
Sample ID: 23A2525-06
Sample Matrix: Air
Sampled: 1/24/2023 00:00

Sample Description/Location:
Sub Description/Location:

Flow Controller ID:
Sample Type:

Work Order: 23A2525
EPA TO-13A

Analyte	Total µg		Flag/Qual	Dilution	Date/Time		Analyst
	Results	RL			Analyzed		
Acenaphthene	ND	0.20		1	2/2/23 19:09		SPF
Acenaphthylene	ND	0.20		1	2/2/23 19:09		SPF
Anthracene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(a)anthracene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(a)pyrene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(b)fluoranthene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(e)pyrene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(g,h,i)perylene	ND	0.20		1	2/2/23 19:09		SPF
Benzo(k)fluoranthene	ND	0.20		1	2/2/23 19:09		SPF
Chrysene	ND	0.20		1	2/2/23 19:09		SPF
Dibenz(a,h)anthracene	ND	0.20		1	2/2/23 19:09		SPF
Fluoranthene	ND	0.20		1	2/2/23 19:09		SPF
Fluorene	ND	0.20		1	2/2/23 19:09		SPF
Indeno(1,2,3-cd)pyrene	ND	0.20		1	2/2/23 19:09		SPF
1-Methylnaphthalene	ND	0.20		1	2/2/23 19:09		SPF
2-Methylnaphthalene	ND	0.20		1	2/2/23 19:09		SPF
Naphthalene	ND	0.50		1	2/2/23 19:09		SPF
Perylene	ND	0.20		1	2/2/23 19:09		SPF
Phenanthrene	ND	0.20		1	2/2/23 19:09		SPF
Pyrene	ND	0.20		1	2/2/23 19:09		SPF

Surrogates	% Recovery	% REC Limits	
Benzo(a)pyrene-d12	105	60-120	2/2/23 19:09
Fluoranthene-d10	118	60-120	2/2/23 19:09
Fluorene-d10	99.7	60-120	2/2/23 19:09
Pyrene-d10	111	60-120	2/2/23 19:09

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method: SW-846 3540C****Analytical Method: EPA TO-13A**

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date
23A2525-01 [RO7-INT1]	B329792	1.00	1.00	01/30/23
23A2525-01RE1 [RO7-INT1]	B329792	1.00	1.00	01/30/23
23A2525-01RE2 [RO7-INT1]	B329792	1.00	1.00	01/30/23
23A2525-01RE3 [RO7-INT1]	B329792	1.00	1.00	01/30/23
23A2525-02 [RO7-INT2]	B329792	1.00	1.00	01/30/23
23A2525-02RE1 [RO7-INT2]	B329792	1.00	1.00	01/30/23
23A2525-03 [RO7-DW1]	B329792	1.00	1.00	01/30/23
23A2525-03RE1 [RO7-DW1]	B329792	1.00	1.00	01/30/23
23A2525-03RE2 [RO7-DW1]	B329792	1.00	1.00	01/30/23
23A2525-04 [RO7-DW2]	B329792	1.00	1.00	01/30/23
23A2525-04RE1 [RO7-DW2]	B329792	1.00	1.00	01/30/23
23A2525-05 [RO7-UW]	B329792	1.00	1.00	01/30/23
23A2525-06 [RO7-BLANK]	B329792	1.00	1.00	01/30/23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result	%REC	Limits	RPD	Limit	

Batch B329792 - SW-846 3540C
Blank (B329792-BLK1)

Prepared: 01/26/23 Analyzed: 02/02/23

Acenaphthene	ND	0.20
Acenaphthylene	ND	0.20
Anthracene	ND	0.20
Benzo(a)anthracene	ND	0.20
Benzo(a)pyrene	ND	0.20
Benzo(b)fluoranthene	ND	0.20
Benzo(e)pyrene	ND	0.20
Benzo(g,h,i)perylene	ND	0.20
Benzo(k)fluoranthene	ND	0.20
Chrysene	ND	0.20
Dibenz(a,h)anthracene	ND	0.20
Fluoranthene	ND	0.20
Fluorene	ND	0.20
Indeno(1,2,3-cd)pyrene	ND	0.20
1-Methylnaphthalene	ND	0.20
2-Methylnaphthalene	ND	0.20
Naphthalene	ND	0.50
Perylene	ND	0.20
Phenanthrene	ND	0.20
Pyrene	ND	0.20

Surrogate: Fluorene-d10	0.909			1.00		90.9	60-120
Surrogate: Pyrene-d10	1.08			1.00		108	60-120

LCS (B329792-BS1)

Prepared: 01/26/23 Analyzed: 02/02/23

Acenaphthene	0.426	0.20	1.3	0.500		85.2	60-110
Acenaphthylene	0.452	0.20	1.2	0.500		90.4	60-110
Anthracene	0.450	0.20	1.5	0.500		90.0	60-110
Benzo(a)anthracene	0.487	0.20	1.9	0.500		97.4	60-110
Benzo(a)pyrene	0.446	0.20	2.1	0.500		89.2	60-110
Benzo(b)fluoranthene	0.465	0.20	2.1	0.500		93.0	60-111
Benzo(e)pyrene	0.481	0.20	2.1	0.500		96.2	60-118
Benzo(g,h,i)perylene	0.434	0.20	2.3	0.500		86.8	60-111
Benzo(k)fluoranthene	0.475	0.20	2.1	0.500		95.0	60-114
Chrysene	0.476	0.20	1.9	0.500		95.2	60-110
Dibenz(a,h)anthracene	0.439	0.20	2.3	0.500		87.8	60-113
Fluoranthene	0.464	0.20	1.7	0.500		92.8	60-110
Fluorene	0.454	0.20	1.4	0.500		90.8	60-110
Indeno(1,2,3-cd)pyrene	0.452	0.20	2.3	0.500		90.4	60-110
1-Methylnaphthalene	0.445	0.20	1.2	0.500		89.0	60-110
2-Methylnaphthalene	0.464	0.20	1.2	0.500		92.8	60-110
Naphthalene	0.487	0.50	2.6	0.500		97.4	60-118
Perylene	0.493	0.20	2.1	0.500		98.6	60-110
Phenanthrene	0.471	0.20	1.5	0.500		94.2	60-110
Pyrene	0.467	0.20	1.7	0.500		93.4	60-110

Surrogate: Fluorene-d10	1.08			1.00		108	60-120
Surrogate: Pyrene-d10	1.22			1.00		122	* 60-120

S-07

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	Total µg		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	Total µg	Result		Limits	RPD	Limit	

Batch B329792 - SW-846 3540C
LCS Dup (B329792-BSD1)

Prepared: 01/26/23 Analyzed: 02/02/23

Acenaphthene	0.467	0.20		1.3	0.500		93.4	60-110	9.18	29.8	
Acenaphthylene	0.514	0.20		1.2	0.500		103	60-110	12.8	50	
Anthracene	0.508	0.20		1.5	0.500		102	60-110	12.1	35.8	
Benzo(a)anthracene	0.534	0.20		1.9	0.500		107	60-110	9.21	27.3	
Benzo(a)pyrene	0.500	0.20		2.1	0.500		100	60-110	11.4	27.3	
Benzo(b)fluoranthene	0.512	0.20		2.1	0.500		102	60-111	9.62	32.7	
Benzo(e)pyrene	0.534	0.20		2.1	0.500		107	60-118	10.4	33.6	
Benzo(g,h,i)perylene	0.480	0.20		2.3	0.500		96.0	60-111	10.1	36	
Benzo(k)fluoranthene	0.536	0.20		2.1	0.500		107	60-114	12.1	32.5	
Chrysene	0.514	0.20		1.9	0.500		103	60-110	7.68	28	
Dibenz(a,h)anthracene	0.486	0.20		2.3	0.500		97.2	60-113	10.2	37.1	
Fluoranthene	0.506	0.20		1.7	0.500		101	60-110	8.66	29.5	
Fluorene	0.501	0.20		1.4	0.500		100	60-110	9.84	31.1	
Indeno(1,2,3-cd)pyrene	0.505	0.20		2.3	0.500		101	60-110	11.1	34	
1-Methylnaphthalene	0.467	0.20		1.2	0.500		93.4	60-110	4.82	28.9	
2-Methylnaphthalene	0.468	0.20		1.2	0.500		93.6	60-110	0.858	28.3	
Naphthalene	0.485	0.50		2.6	0.500		97.0	60-118	0.412	28.3	
Perylene	0.538	0.20		2.1	0.500		108	60-110	8.73	25.9	
Phenanthrene	0.519	0.20		1.5	0.500		104	60-110	9.70	27.4	
Pyrene	0.527	0.20		1.7	0.500		105	60-110	12.1	30.7	
Surrogate: Fluorene-d10	1.02				1.00		102	60-120			
Surrogate: Pyrene-d10	1.15				1.00		115	60-120			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
S-20	Surrogate recovery is outside of control limits. Sample media does not allow for re-extraction.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B329792-BLK1)									
Lab File ID: H23S033014.D					Analyzed: 02/02/23 15:11				
Naphthalene-d8	29586	4.808	41249	4.804	72	50 - 200	0.0040	+/-0.50	
Acenaphthene-d10	16829	6.504	23524	6.498	72	50 - 200	0.0060	+/-0.50	
Phenanthrene-d10	31331	7.968	44622	7.962	70	50 - 200	0.0060	+/-0.50	
Chrysene-d12	23409	10.841	34896	10.832	67	50 - 200	0.0090	+/-0.50	
Perylene-d12	22371	13.313	33585	13.302	67	50 - 200	0.0110	+/-0.50	
LCS (B329792-BS1)									
Lab File ID: H23S033015.D					Analyzed: 02/02/23 15:35				
Naphthalene-d8	26506	4.811	41249	4.804	64	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	14918	6.504	23524	6.498	63	50 - 200	0.0060	+/-0.50	
Phenanthrene-d10	28078	7.967	44622	7.962	63	50 - 200	0.0050	+/-0.50	
Chrysene-d12	23007	10.844	34896	10.832	66	50 - 200	0.0120	+/-0.50	
Perylene-d12	22569	13.315	33585	13.302	67	50 - 200	0.0130	+/-0.50	
LCS Dup (B329792-BSD1)									
Lab File ID: H23S033016.D					Analyzed: 02/02/23 15:59				
Naphthalene-d8	27907	4.811	41249	4.804	68	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	16032	6.504	23524	6.498	68	50 - 200	0.0060	+/-0.50	
Phenanthrene-d10	30214	7.968	44622	7.962	68	50 - 200	0.0060	+/-0.50	
Chrysene-d12	23950	10.841	34896	10.832	69	50 - 200	0.0090	+/-0.50	
Perylene-d12	22873	13.315	33585	13.302	68	50 - 200	0.0130	+/-0.50	
RO7-INT1 (23A2525-01)									
Lab File ID: H23S033017.D					Analyzed: 02/02/23 16:23				
Naphthalene-d8	24171	4.855	41249	4.804	59	50 - 200	0.0510	+/-0.50	
Acenaphthene-d10	20083	6.507	23524	6.498	85	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	29306	7.97	44622	7.962	66	50 - 200	0.0080	+/-0.50	
Chrysene-d12	22707	10.843	34896	10.832	65	50 - 200	0.0110	+/-0.50	
Perylene-d12	21795	13.315	33585	13.302	65	50 - 200	0.0130	+/-0.50	
RO7-INT1 (23A2525-01RE1)									
Lab File ID: H23S033018.D					Analyzed: 02/02/23 16:47				
Naphthalene-d8	26816	4.814	41249	4.804	65	50 - 200	0.0100	+/-0.50	
Acenaphthene-d10	15275	6.507	23524	6.498	65	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	27641	7.968	44622	7.962	62	50 - 200	0.0060	+/-0.50	
Chrysene-d12	21472	10.844	34896	10.832	62	50 - 200	0.0120	+/-0.50	
Perylene-d12	22017	13.315	33585	13.302	66	50 - 200	0.0130	+/-0.50	
RO7-INT2 (23A2525-02)									
Lab File ID: H23S033019.D					Analyzed: 02/02/23 17:10				
Naphthalene-d8	28692	4.811	41249	4.804	70	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	16467	6.507	23524	6.498	70	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	30361	7.968	44622	7.962	68	50 - 200	0.0060	+/-0.50	
Chrysene-d12	23625	10.844	34896	10.832	68	50 - 200	0.0120	+/-0.50	
Perylene-d12	23105	13.318	33585	13.302	69	50 - 200	0.0160	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO7-INT2 (23A2525-02RE1) Lab File ID: H23S033020.D Analyzed: 02/02/23 17:34									
Naphthalene-d8	27138	4.811	41249	4.804	66	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	14980	6.507	23524	6.498	64	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	27009	7.968	44622	7.962	61	50 - 200	0.0060	+/-0.50	
Chrysene-d12	20729	10.844	34896	10.832	59	50 - 200	0.0120	+/-0.50	
Perylene-d12	20648	13.321	33585	13.302	61	50 - 200	0.0190	+/-0.50	
RO7-DW1 (23A2525-03) Lab File ID: H23S033021.D Analyzed: 02/02/23 17:58									
Naphthalene-d8	23925	4.814	41249	4.804	58	50 - 200	0.0100	+/-0.50	
Acenaphthene-d10	15372	6.507	23524	6.498	65	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	28454	7.968	44622	7.962	64	50 - 200	0.0060	+/-0.50	
Chrysene-d12	22819	10.844	34896	10.832	65	50 - 200	0.0120	+/-0.50	
Perylene-d12	22443	13.318	33585	13.302	67	50 - 200	0.0160	+/-0.50	
RO7-DW2 (23A2525-04) Lab File ID: H23S033022.D Analyzed: 02/02/23 18:21									
Naphthalene-d8	24447	4.811	41249	4.804	59	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	14632	6.507	23524	6.498	62	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	27213	7.968	44622	7.962	61	50 - 200	0.0060	+/-0.50	
Chrysene-d12	22854	10.844	34896	10.832	65	50 - 200	0.0120	+/-0.50	
Perylene-d12	23292	13.318	33585	13.302	69	50 - 200	0.0160	+/-0.50	
RO7-UW (23A2525-05) Lab File ID: H23S033023.D Analyzed: 02/02/23 18:45									
Naphthalene-d8	24408	4.811	41249	4.804	59	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	14687	6.507	23524	6.498	62	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	27828	7.971	44622	7.962	62	50 - 200	0.0090	+/-0.50	
Chrysene-d12	22611	10.844	34896	10.832	65	50 - 200	0.0120	+/-0.50	
Perylene-d12	22703	13.321	33585	13.302	68	50 - 200	0.0190	+/-0.50	
RO7-BLANK (23A2525-06) Lab File ID: H23S033024.D Analyzed: 02/02/23 19:09									
Naphthalene-d8	25123	4.811	41249	4.804	61	50 - 200	0.0070	+/-0.50	
Acenaphthene-d10	14464	6.507	23524	6.498	61	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	27823	7.97	44622	7.962	62	50 - 200	0.0080	+/-0.50	
Chrysene-d12	22694	10.846	34896	10.832	65	50 - 200	0.0140	+/-0.50	
Perylene-d12	23251	13.32	33585	13.302	69	50 - 200	0.0180	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-13A

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO7-INT1 (23A2525-01RE2) Lab File ID: H23S037034.D Analyzed: 02/06/23 09:57									
Naphthalene-d8	33126	4.808	25140	4.807	132	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	18634	6.504	14369	6.504	130	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	33597	7.968	27434	7.968	122	50 - 200	0.0000	+/-0.50	
Chrysene-d12	25281	10.841	21246	10.841	119	50 - 200	0.0000	+/-0.50	
Perylene-d12	23887	13.313	20596	13.312	116	50 - 200	0.0010	+/-0.50	
RO7-INT1 (23A2525-01RE3) Lab File ID: H23S037035.D Analyzed: 02/06/23 10:21									
Naphthalene-d8	26653	4.808	25140	4.807	106	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	14584	6.504	14369	6.504	101	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	26541	7.968	27434	7.968	97	50 - 200	0.0000	+/-0.50	
Chrysene-d12	20060	10.841	21246	10.841	94	50 - 200	0.0000	+/-0.50	
Perylene-d12	19285	13.313	20596	13.312	94	50 - 200	0.0010	+/-0.50	
RO7-DW1 (23A2525-03RE1) Lab File ID: H23S037036.D Analyzed: 02/06/23 10:44									
Naphthalene-d8	26112	4.808	25140	4.807	104	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	15600	6.504	14369	6.504	109	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	29476	7.965	27434	7.968	107	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	24456	10.838	21246	10.841	115	50 - 200	-0.0030	+/-0.50	
Perylene-d12	23605	13.307	20596	13.312	115	50 - 200	-0.0050	+/-0.50	
RO7-DW1 (23A2525-03RE2) Lab File ID: H23S037037.D Analyzed: 02/06/23 11:08									
Naphthalene-d8	25854	4.808	25140	4.807	103	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	14844	6.503	14369	6.504	103	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	28104	7.967	27434	7.968	102	50 - 200	-0.0010	+/-0.50	
Chrysene-d12	21729	10.84	21246	10.841	102	50 - 200	-0.0010	+/-0.50	
Perylene-d12	21307	13.315	20596	13.312	103	50 - 200	0.0030	+/-0.50	
RO7-DW2 (23A2525-04RE1) Lab File ID: H23S037006.D Analyzed: 02/06/23 12:44									
Naphthalene-d8	27367	4.808	25140	4.807	109	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	15691	6.504	14369	6.504	109	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	29400	7.965	27434	7.968	107	50 - 200	-0.0030	+/-0.50	
Chrysene-d12	22929	10.841	21246	10.841	108	50 - 200	0.0000	+/-0.50	
Perylene-d12	21818	13.312	20596	13.312	106	50 - 200	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

COMPOUND	TYPE			RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-13A in Air</i>	
Acenaphthene	AIHA,NJ,NY,NH
Acenaphthylene	AIHA,NJ,NY,NH
Anthracene	AIHA,NJ,NY,NH
Benzo(a)anthracene	AIHA,NJ,NY,NH
Benzo(a)pyrene	AIHA,NJ,NY,FL,NH
Benzo(b)fluoranthene	AIHA,NJ,NY,NH
Benzo(e)pyrene	AIHA,NJ
Benzo(g,h,i)perylene	AIHA,NJ,NY,NH
Benzo(k)fluoranthene	AIHA,NJ,NY,NH
Chrysene	AIHA,NJ,NY,NH
Dibenz(a,h)anthracene	AIHA,NJ,NY,NH
Fluoranthene	AIHA,NJ,NY,NH
Fluorene	AIHA,NJ,NY,NH
Indeno(1,2,3-cd)pyrene	AIHA,NJ,NY,NH
1-Methylnaphthalene	AIHA
2-Methylnaphthalene	AIHA
Naphthalene	AIHA,NJ,NY,FL,NH
Perylene	AIHA,NJ
Phenanthrene	AIHA,NJ,NY,NH
Pyrene	AIHA,NJ,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023

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Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans					Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s	6				Tedlar			

Comments:

November 16, 2022

Dr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: PA
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22K0521

Enclosed are results of analyses for samples as received by the laboratory on November 2, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alexandra M Gooch
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Dr. Volker Schmid

REPORT DATE: 11/16/2022

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22K0521

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: PA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
UW-1	22K0521-01	Air		EPA TO-15	
DW1-1	22K0521-02	Air		EPA TO-15	
DW2-1	22K0521-03	Air		EPA TO-15	
INTS-1	22K0521-04	Air		EPA TO-15	
DW1-Duplicate	22K0521-05	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15**Qualifications:**

L-01

Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

Analyte & Samples(s) Qualified:**1,1-Dichloroethane**

B323204-BS1

4-Methyl-2-pentanone (MIBK)

B323204-BS1

Benzyl chloride

B323204-BS1

Methyl tert-Butyl Ether (MTBE)B323204-BS1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**Vinyl Acetate**22K0521-01[UW-1], 22K0521-02[DW1-1], 22K0521-03[DW2-1], 22K0521-04[INTS-1], 22K0521-05[DW1-Duplicate], B323204-BLK1, B323204-BS1, S079418-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**1,1,1-Trichloroethane**

B323204-BS1, S079418-CCV1

1,1-Dichloroethane

B323204-BS1, S079418-CCV1

4-Methyl-2-pentanone (MIBK)

B323204-BS1, S079418-CCV1

Benzyl chloride

B323204-BS1, S079418-CCV1

Ethyl Acetate

B323204-BS1, S079418-CCV1

Methyl tert-Butyl Ether (MTBE)B323204-BS1, S079418-CCV1

V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**1,2,4-Trichlorobenzene**

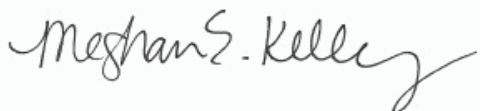
B323204-BS1, S079418-CCV1

Benzyl chloride

B323204-BS1, S079418-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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ANALYTICAL RESULTS

 Project Location: PA
 Date Received: 11/2/2022
Field Sample #: UW-1
Sample ID: 22K0521-01
 Sample Matrix: Air
 Sampled: 10/28/2022 12:57

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2156
 Canister Size: 6 liter
 Flow Controller ID: 3542
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -6
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	3.9	1.4		9.4	3.3	0.698	11/14/22 21:00	CMR
Benzene	0.12	0.035		0.38	0.11	0.698	11/14/22 21:00	CMR
Benzyl chloride	ND	0.070		ND	0.36	0.698	11/14/22 21:00	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	11/14/22 21:00	CMR
Bromoform	ND	0.035		ND	0.36	0.698	11/14/22 21:00	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	11/14/22 21:00	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	11/14/22 21:00	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	11/14/22 21:00	CMR
Carbon Tetrachloride	0.11	0.035		0.67	0.22	0.698	11/14/22 21:00	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	11/14/22 21:00	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	11/14/22 21:00	CMR
Chloroform	ND	0.035		ND	0.17	0.698	11/14/22 21:00	CMR
Chloromethane	0.52	0.070		1.1	0.14	0.698	11/14/22 21:00	CMR
Cyclohexane	ND	0.035		ND	0.12	0.698	11/14/22 21:00	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	11/14/22 21:00	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	11/14/22 21:00	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:00	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:00	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:00	CMR
Dichlorodifluoromethane (Freon 12)	0.56	0.035		2.8	0.17	0.698	11/14/22 21:00	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	11/14/22 21:00	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 21:00	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 21:00	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	11/14/22 21:00	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	11/14/22 21:00	CMR
Ethanol	3.5	1.4		6.7	2.6	0.698	11/14/22 21:00	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	11/14/22 21:00	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.698	11/14/22 21:00	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	11/14/22 21:00	CMR
Heptane	0.035	0.035		0.14	0.14	0.698	11/14/22 21:00	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.698	11/14/22 21:00	CMR

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ANALYTICAL RESULTS

 Project Location: PA
 Date Received: 11/2/2022
Field Sample #: UW-1
Sample ID: 22K0521-01
 Sample Matrix: Air
 Sampled: 10/28/2022 12:57

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2156
 Canister Size: 6 liter
 Flow Controller ID: 3542
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -6
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	11/14/22 21:00	CMR
2-Hexanone (MBK)	0.12	0.035		0.48	0.14	0.698	11/14/22 21:00	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	11/14/22 21:00	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	11/14/22 21:00	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	11/14/22 21:00	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	11/14/22 21:00	CMR
Naphthalene	ND	0.035		ND	0.18	0.698	11/14/22 21:00	CMR
Propene	ND	1.4		ND	2.4	0.698	11/14/22 21:00	CMR
Styrene	ND	0.035		ND	0.15	0.698	11/14/22 21:00	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	11/14/22 21:00	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	11/14/22 21:00	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	11/14/22 21:00	CMR
Toluene	0.14	0.035		0.53	0.13	0.698	11/14/22 21:00	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.698	11/14/22 21:00	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 21:00	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 21:00	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	11/14/22 21:00	CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.78	0.698	11/14/22 21:00	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	11/14/22 21:00	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 21:00	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 21:00	CMR
Vinyl Acetate	ND	0.70	V-05	ND	2.5	0.698	11/14/22 21:00	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	11/14/22 21:00	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.698	11/14/22 21:00	CMR
o-Xylene	ND	0.035		ND	0.15	0.698	11/14/22 21:00	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	88.8	70-130	11/14/22 21:00

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ANALYTICAL RESULTS

 Project Location: PA
 Date Received: 11/2/2022
Field Sample #: DW1-1
Sample ID: 22K0521-02
 Sample Matrix: Air
 Sampled: 10/28/2022 14:07

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1025
 Canister Size: 6 liter
 Flow Controller ID: 3360
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -8.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	2.5	1.4		5.8	3.3	0.698	11/14/22 21:34	CMR
Benzene	1.2	0.035		3.9	0.11	0.698	11/14/22 21:34	CMR
Benzyl chloride	ND	0.070		ND	0.36	0.698	11/14/22 21:34	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	11/14/22 21:34	CMR
Bromoform	ND	0.035		ND	0.36	0.698	11/14/22 21:34	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
1,3-Butadiene	0.048	0.035		0.11	0.077	0.698	11/14/22 21:34	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	11/14/22 21:34	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	11/14/22 21:34	CMR
Carbon Tetrachloride	0.091	0.035		0.57	0.22	0.698	11/14/22 21:34	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	11/14/22 21:34	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	11/14/22 21:34	CMR
Chloroform	ND	0.035		ND	0.17	0.698	11/14/22 21:34	CMR
Chloromethane	0.49	0.070		1.0	0.14	0.698	11/14/22 21:34	CMR
Cyclohexane	ND	0.035		ND	0.12	0.698	11/14/22 21:34	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	11/14/22 21:34	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	11/14/22 21:34	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:34	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:34	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 21:34	CMR
Dichlorodifluoromethane (Freon 12)	0.52	0.035		2.6	0.17	0.698	11/14/22 21:34	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	11/14/22 21:34	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 21:34	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 21:34	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	11/14/22 21:34	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	11/14/22 21:34	CMR
Ethanol	2.7	1.4		5.1	2.6	0.698	11/14/22 21:34	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	11/14/22 21:34	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.698	11/14/22 21:34	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	11/14/22 21:34	CMR
Heptane	0.043	0.035		0.18	0.14	0.698	11/14/22 21:34	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.698	11/14/22 21:34	CMR

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ANALYTICAL RESULTS

Project Location: PA
Date Received: 11/2/2022
Field Sample #: DW1-1
Sample ID: 22K0521-02
Sample Matrix: Air
Sampled: 10/28/2022 14:07

Sample Description/Location:
Sub Description/Location:
Canister ID: 1025
Canister Size: 6 liter
Flow Controller ID: 3360
Sample Type: 24 hr

Work Order: 22K0521
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -8.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	11/14/22 21:34	CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	11/14/22 21:34	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	11/14/22 21:34	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	11/14/22 21:34	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	11/14/22 21:34	CMR
Naphthalene	ND	0.035		ND	0.18	0.698	11/14/22 21:34	CMR
Propene	ND	1.4		ND	2.4	0.698	11/14/22 21:34	CMR
Styrene	ND	0.035		ND	0.15	0.698	11/14/22 21:34	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	11/14/22 21:34	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	11/14/22 21:34	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	11/14/22 21:34	CMR
Toluene	0.27	0.035		1.0	0.13	0.698	11/14/22 21:34	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.698	11/14/22 21:34	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 21:34	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 21:34	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	11/14/22 21:34	CMR
Trichlorofluoromethane (Freon 11)	0.21	0.14		1.2	0.78	0.698	11/14/22 21:34	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	11/14/22 21:34	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 21:34	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 21:34	CMR
Vinyl Acetate	ND	0.70	V-05	ND	2.5	0.698	11/14/22 21:34	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	11/14/22 21:34	CMR
m&p-Xylene	0.072	0.070		0.31	0.30	0.698	11/14/22 21:34	CMR
o-Xylene	ND	0.035		ND	0.15	0.698	11/14/22 21:34	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	84.6	70-130	11/14/22 21:34

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ANALYTICAL RESULTS

 Project Location: PA
 Date Received: 11/2/2022
Field Sample #: DW2-1
Sample ID: 22K0521-03
 Sample Matrix: Air
 Sampled: 10/28/2022 15:38

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2044
 Canister Size: 6 liter
 Flow Controller ID: 3543
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -27
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -10.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	3.1	1.4		7.4	3.3	0.698	11/14/22 22:08	CMR
Benzene	0.099	0.035		0.32	0.11	0.698	11/14/22 22:08	CMR
Benzyl chloride	ND	0.070		ND	0.36	0.698	11/14/22 22:08	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	11/14/22 22:08	CMR
Bromoform	ND	0.035		ND	0.36	0.698	11/14/22 22:08	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	11/14/22 22:08	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	11/14/22 22:08	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	11/14/22 22:08	CMR
Carbon Tetrachloride	0.096	0.035		0.61	0.22	0.698	11/14/22 22:08	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	11/14/22 22:08	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	11/14/22 22:08	CMR
Chloroform	ND	0.035		ND	0.17	0.698	11/14/22 22:08	CMR
Chloromethane	0.51	0.070		1.1	0.14	0.698	11/14/22 22:08	CMR
Cyclohexane	ND	0.035		ND	0.12	0.698	11/14/22 22:08	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	11/14/22 22:08	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	11/14/22 22:08	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 22:08	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 22:08	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22 22:08	CMR
Dichlorodifluoromethane (Freon 12)	0.52	0.035		2.6	0.17	0.698	11/14/22 22:08	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22 22:08	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	11/14/22 22:08	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 22:08	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22 22:08	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	11/14/22 22:08	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	11/14/22 22:08	CMR
Ethanol	3.0	1.4		5.7	2.6	0.698	11/14/22 22:08	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	11/14/22 22:08	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.698	11/14/22 22:08	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	11/14/22 22:08	CMR
Heptane	0.063	0.035		0.26	0.14	0.698	11/14/22 22:08	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.698	11/14/22 22:08	CMR

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ANALYTICAL RESULTS

Project Location: PA
 Date Received: 11/2/2022
Field Sample #: DW2-1
Sample ID: 22K0521-03
 Sample Matrix: Air
 Sampled: 10/28/2022 15:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2044
 Canister Size: 6 liter
 Flow Controller ID: 3543
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -27
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -10.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.698	11/14/22 22:08		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.698	11/14/22 22:08		CMR
Isopropanol	ND	1.4		ND	3.4	0.698	11/14/22 22:08		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	11/14/22 22:08		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	11/14/22 22:08		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	11/14/22 22:08		CMR
Naphthalene	ND	0.035		ND	0.18	0.698	11/14/22 22:08		CMR
Propene	ND	1.4		ND	2.4	0.698	11/14/22 22:08		CMR
Styrene	ND	0.035		ND	0.15	0.698	11/14/22 22:08		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	11/14/22 22:08		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	11/14/22 22:08		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	11/14/22 22:08		CMR
Toluene	0.11	0.035		0.40	0.13	0.698	11/14/22 22:08		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.698	11/14/22 22:08		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 22:08		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 22:08		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	11/14/22 22:08		CMR
Trichlorofluoromethane (Freon 11)	0.23	0.14		1.3	0.78	0.698	11/14/22 22:08		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	11/14/22 22:08		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 22:08		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	11/14/22 22:08		CMR
Vinyl Acetate	ND	0.70	V-05	ND	2.5	0.698	11/14/22 22:08		CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	11/14/22 22:08		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.698	11/14/22 22:08		CMR
o-Xylene	ND	0.035		ND	0.15	0.698	11/14/22 22:08		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	86.8	70-130	11/14/22 22:08

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ANALYTICAL RESULTS

Project Location: PA
Date Received: 11/2/2022
Field Sample #: INTS-1
Sample ID: 22K0521-04
Sample Matrix: Air
Sampled: 10/28/2022 14:07

Sample Description/Location:
Sub Description/Location:
Canister ID: 1804
Canister Size: 6 liter
Flow Controller ID: 3063
Sample Type: 24 hr

Work Order: 22K0521
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -9.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.1	1.4		5.1	3.3	0.698	11/14/22	22:42	CMR
Benzene	35	0.40		110	1.3	4	11/16/22	11:04	CMR
Benzyl chloride	ND	0.070		ND	0.36	0.698	11/14/22	22:42	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	11/14/22	22:42	CMR
Bromoform	ND	0.035		ND	0.36	0.698	11/14/22	22:42	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
1,3-Butadiene	0.42	0.035		0.93	0.077	0.698	11/14/22	22:42	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	11/14/22	22:42	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	11/14/22	22:42	CMR
Carbon Tetrachloride	0.096	0.035		0.61	0.22	0.698	11/14/22	22:42	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	11/14/22	22:42	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	11/14/22	22:42	CMR
Chloroform	ND	0.035		ND	0.17	0.698	11/14/22	22:42	CMR
Chloromethane	0.51	0.070		1.1	0.14	0.698	11/14/22	22:42	CMR
Cyclohexane	0.066	0.035		0.23	0.12	0.698	11/14/22	22:42	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	11/14/22	22:42	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	11/14/22	22:42	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22	22:42	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22	22:42	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	11/14/22	22:42	CMR
Dichlorodifluoromethane (Freon 12)	0.49	0.035		2.4	0.17	0.698	11/14/22	22:42	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	11/14/22	22:42	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	11/14/22	22:42	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22	22:42	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	11/14/22	22:42	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	11/14/22	22:42	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	11/14/22	22:42	CMR
Ethanol	3.2	1.4		6.0	2.6	0.698	11/14/22	22:42	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	11/14/22	22:42	CMR
Ethylbenzene	0.15	0.035		0.65	0.15	0.698	11/14/22	22:42	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	11/14/22	22:42	CMR
Heptane	0.087	0.035		0.35	0.14	0.698	11/14/22	22:42	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.698	11/14/22	22:42	CMR

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ANALYTICAL RESULTS

Project Location: PA
 Date Received: 11/2/2022
Field Sample #: INTS-1
Sample ID: 22K0521-04
 Sample Matrix: Air
 Sampled: 10/28/2022 14:07

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1804
 Canister Size: 6 liter
 Flow Controller ID: 3063
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -9.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	11/14/22 22:42	CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.698	11/14/22 22:42	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	11/14/22 22:42	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	11/14/22 22:42	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	11/14/22 22:42	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	11/14/22 22:42	CMR
Naphthalene	27	0.035		140	0.18	0.698	11/14/22 22:42	CMR
Propene	3.4	1.4		5.9	2.4	0.698	11/14/22 22:42	CMR
Styrene	1.9	0.035		8.0	0.15	0.698	11/14/22 22:42	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	11/14/22 22:42	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	11/14/22 22:42	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	11/14/22 22:42	CMR
Toluene	9.5	0.035		36	0.13	0.698	11/14/22 22:42	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.698	11/14/22 22:42	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 22:42	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	11/14/22 22:42	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	11/14/22 22:42	CMR
Trichlorofluoromethane (Freon 11)	0.21	0.14		1.2	0.78	0.698	11/14/22 22:42	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	11/14/22 22:42	CMR
1,2,4-Trimethylbenzene	0.67	0.035		3.3	0.17	0.698	11/14/22 22:42	CMR
1,3,5-Trimethylbenzene	0.42	0.035		2.1	0.17	0.698	11/14/22 22:42	CMR
Vinyl Acetate	ND	0.70	V-05	ND	2.5	0.698	11/14/22 22:42	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	11/14/22 22:42	CMR
m&p-Xylene	3.5	0.070		15	0.30	0.698	11/14/22 22:42	CMR
o-Xylene	0.89	0.035		3.9	0.15	0.698	11/14/22 22:42	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	71.5	70-130	11/16/22 11:04
4-Bromofluorobenzene (1)	96.7	70-130	11/14/22 22:42

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ANALYTICAL RESULTS

Project Location: PA
Date Received: 11/2/2022
Field Sample #: DW1-Duplicate
Sample ID: 22K0521-05
Sample Matrix: Air
Sampled: 10/28/2022 14:49

Sample Description/Location:
Sub Description/Location:
Canister ID: 1722
Canister Size: 6 liter
Flow Controller ID: 3486
Sample Type: 24 hr

Work Order: 22K0521
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -11.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	2.8	1.4		6.7	3.3	0.696	11/14/22 23:17	CMR
Benzene	1.2	0.035		4.0	0.11	0.696	11/14/22 23:17	CMR
Benzyl chloride	ND	0.070		ND	0.36	0.696	11/14/22 23:17	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.696	11/14/22 23:17	CMR
Bromoform	ND	0.035		ND	0.36	0.696	11/14/22 23:17	CMR
Bromomethane	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.696	11/14/22 23:17	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.696	11/14/22 23:17	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.696	11/14/22 23:17	CMR
Carbon Tetrachloride	0.059	0.035		0.37	0.22	0.696	11/14/22 23:17	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.696	11/14/22 23:17	CMR
Chloroethane	ND	0.035		ND	0.092	0.696	11/14/22 23:17	CMR
Chloroform	ND	0.035		ND	0.17	0.696	11/14/22 23:17	CMR
Chloromethane	0.60	0.070		1.2	0.14	0.696	11/14/22 23:17	CMR
Cyclohexane	ND	0.035		ND	0.12	0.696	11/14/22 23:17	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.696	11/14/22 23:17	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.696	11/14/22 23:17	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.696	11/14/22 23:17	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.696	11/14/22 23:17	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.696	11/14/22 23:17	CMR
Dichlorodifluoromethane (Freon 12)	0.61	0.035		3.0	0.17	0.696	11/14/22 23:17	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.696	11/14/22 23:17	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	11/14/22 23:17	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	11/14/22 23:17	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.696	11/14/22 23:17	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.696	11/14/22 23:17	CMR
Ethanol	2.7	1.4		5.1	2.6	0.696	11/14/22 23:17	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.696	11/14/22 23:17	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.696	11/14/22 23:17	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.696	11/14/22 23:17	CMR
Heptane	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.696	11/14/22 23:17	CMR

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ANALYTICAL RESULTS

Project Location: PA
 Date Received: 11/2/2022
Field Sample #: DW1-Duplicate
Sample ID: 22K0521-05
 Sample Matrix: Air
 Sampled: 10/28/2022 14:49

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1722
 Canister Size: 6 liter
 Flow Controller ID: 3486
 Sample Type: 24 hr

Work Order: 22K0521
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -11.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.696	11/14/22 23:17	CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
Isopropanol	ND	1.4		ND	3.4	0.696	11/14/22 23:17	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.696	11/14/22 23:17	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.696	11/14/22 23:17	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.696	11/14/22 23:17	CMR
Naphthalene	0.39	0.035		2.1	0.18	0.696	11/14/22 23:17	CMR
Propene	ND	1.4		ND	2.4	0.696	11/14/22 23:17	CMR
Styrene	0.040	0.035		0.17	0.15	0.696	11/14/22 23:17	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.696	11/14/22 23:17	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.696	11/14/22 23:17	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.696	11/14/22 23:17	CMR
Toluene	0.26	0.035		1.00	0.13	0.696	11/14/22 23:17	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.696	11/14/22 23:17	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.696	11/14/22 23:17	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.696	11/14/22 23:17	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.696	11/14/22 23:17	CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.3	0.78	0.696	11/14/22 23:17	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.696	11/14/22 23:17	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.696	11/14/22 23:17	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.696	11/14/22 23:17	CMR
Vinyl Acetate	ND	0.70	V-05	ND	2.5	0.696	11/14/22 23:17	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.696	11/14/22 23:17	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.696	11/14/22 23:17	CMR
o-Xylene	ND	0.035		ND	0.15	0.696	11/14/22 23:17	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	88.6	70-130	11/14/22 23:17

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Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K0521-01 [UW-1]	B323204	1.5	1	N/A	1000	200	430	11/14/22
22K0521-02 [DW1-1]	B323204	1.5	1	N/A	1000	200	430	11/14/22
22K0521-03 [DW2-1]	B323204	1.5	1	N/A	1000	200	430	11/14/22
22K0521-04 [INTS-1]	B323204	1.5	1	N/A	1000	200	430	11/14/22
22K0521-05 [DW1-Duplicate]	B323204	1.74	1	N/A	1000	200	500	11/14/22

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K0521-04RE1 [INTS-1]	B323217	1.5	1	N/A	1000	200	75	11/16/22

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	

Batch B323204 - TO-15 Prep
Blank (B323204-BLK1)

Prepared & Analyzed: 11/14/22

Acetone	ND	0.80
Benzene	ND	0.020
Benzyl chloride	ND	0.040
Bromodichloromethane	ND	0.020
Bromoform	ND	0.020
Bromomethane	ND	0.020
1,3-Butadiene	ND	0.020
2-Butanone (MEK)	ND	0.80
Carbon Disulfide	ND	0.20
Carbon Tetrachloride	ND	0.020
Chlorobenzene	ND	0.020
Chloroethane	ND	0.020
Chloroform	ND	0.020
Chloromethane	ND	0.040
Cyclohexane	ND	0.020
Dibromochloromethane	ND	0.020
1,2-Dibromoethane (EDB)	ND	0.020
1,2-Dichlorobenzene	ND	0.020
1,3-Dichlorobenzene	ND	0.020
1,4-Dichlorobenzene	ND	0.020
Dichlorodifluoromethane (Freon 12)	ND	0.020
1,1-Dichloroethane	ND	0.020
1,2-Dichloroethane	ND	0.020
1,1-Dichloroethylene	ND	0.020
cis-1,2-Dichloroethylene	ND	0.020
trans-1,2-Dichloroethylene	ND	0.020
1,2-Dichloropropane	ND	0.020
cis-1,3-Dichloropropene	ND	0.020
trans-1,3-Dichloropropene	ND	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020
1,4-Dioxane	ND	0.20
Ethanol	ND	0.80
Ethyl Acetate	ND	0.20
Ethylbenzene	ND	0.020
4-Ethyltoluene	ND	0.020
Heptane	ND	0.020
Hexachlorobutadiene	ND	0.020
Hexane	ND	0.80
2-Hexanone (MBK)	ND	0.020
Isopropanol	ND	0.80
Methyl tert-Butyl Ether (MTBE)	ND	0.020
Methylene Chloride	ND	0.20
4-Methyl-2-pentanone (MIBK)	ND	0.020
Naphthalene	ND	0.020
Propene	ND	0.80
Styrene	ND	0.020

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							
Batch B323204 - TO-15 Prep											
Blank (B323204-BLK1)					Prepared & Analyzed: 11/14/22						
1,1,2,2-Tetrachloroethane	ND	0.020									
Tetrachloroethylene	ND	0.020									
Tetrahydrofuran	ND	0.20									
Toluene	ND	0.020									
1,2,4-Trichlorobenzene	ND	0.020									
1,1,1-Trichloroethane	ND	0.020									
1,1,2-Trichloroethane	ND	0.020									
Trichloroethylene	ND	0.020									
Trichlorofluoromethane (Freon 11)	ND	0.080									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080									
1,2,4-Trimethylbenzene	ND	0.020									
1,3,5-Trimethylbenzene	ND	0.020									
Vinyl Acetate	ND	0.40									V-05
Vinyl Chloride	ND	0.020									
m&p-Xylene	ND	0.040									
o-Xylene	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	6.80				8.00		85.0	70-130			
LCS (B323204-BS1)					Prepared & Analyzed: 11/14/22						
Acetone	5.24				5.00		105	70-130			
Benzene	5.67				5.00		113	70-130			
Benzyl chloride	6.95				5.00		139 *	70-130			L-01, V-20,
Bromodichloromethane	5.67				5.00		113	70-130			
Bromoform	4.73				5.00		94.6	70-130			
Bromomethane	5.39				5.00		108	70-130			
1,3-Butadiene	5.30				5.00		106	70-130			
2-Butanone (MEK)	6.48				5.00		130	70-130			
Carbon Disulfide	4.99				5.00		99.7	70-130			
Carbon Tetrachloride	4.98				5.00		99.6	70-130			
Chlorobenzene	5.40				5.00		108	70-130			
Chloroethane	5.45				5.00		109	70-130			
Chloroform	5.58				5.00		112	70-130			
Chloromethane	5.44				5.00		109	70-130			
Cyclohexane	5.99				5.00		120	70-130			
Dibromochloromethane	5.38				5.00		108	70-130			
1,2-Dibromoethane (EDB)	5.71				5.00		114	70-130			
1,2-Dichlorobenzene	5.71				5.00		114	70-130			
1,3-Dichlorobenzene	5.71				5.00		114	70-130			
1,4-Dichlorobenzene	6.04				5.00		121	70-130			
Dichlorodifluoromethane (Freon 12)	5.68				5.00		114	70-130			
1,1-Dichloroethane	6.70				5.00		134 *	70-130			L-01, V-20
1,2-Dichloroethane	5.65				5.00		113	70-130			
1,1-Dichloroethylene	6.20				5.00		124	70-130			
cis-1,2-Dichloroethylene	5.52				5.00		110	70-130			
trans-1,2-Dichloroethylene	6.41				5.00		128	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B323204 - TO-15 Prep											
LCS (B323204-BS1)					Prepared & Analyzed: 11/14/22						
1,2-Dichloropropane	5.77				5.00		115	70-130			
cis-1,3-Dichloropropene	5.43				5.00		109	70-130			
trans-1,3-Dichloropropene	5.83				5.00		117	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.12				5.00		102	70-130			
1,4-Dioxane	5.84				5.00		117	70-130			
Ethanol	4.03				5.00		80.5	70-130			
Ethyl Acetate	6.24				5.00		125	70-130			V-20
Ethylbenzene	5.60				5.00		112	70-130			
4-Ethyltoluene	5.77				5.00		115	70-130			
Heptane	6.11				5.00		122	70-130			
Hexachlorobutadiene	3.83				5.00		76.5	70-130			
Hexane	5.84				5.00		117	70-130			
2-Hexanone (MBK)	5.80				5.00		116	70-130			
Isopropanol	4.52				5.00		90.4	70-130			
Methyl tert-Butyl Ether (MTBE)	7.36				5.00		147	* 70-130			L-01, V-20
Methylene Chloride	5.89				5.00		118	70-130			
4-Methyl-2-pentanone (MIBK)	10.7				5.00		215	* 70-130			L-01, V-20
Naphthalene	3.80				5.00		76.1	70-130			
Propene	5.53				5.00		111	70-130			
Styrene	5.86				5.00		117	70-130			
1,1,2,2-Tetrachloroethane	5.58				5.00		112	70-130			
Tetrachloroethylene	5.32				5.00		106	70-130			
Tetrahydrofuran	5.50				5.00		110	70-130			
Toluene	5.57				5.00		111	70-130			
1,2,4-Trichlorobenzene	4.45				5.00		88.9	70-130			V-36
1,1,1-Trichloroethane	6.18				5.00		124	70-130			V-20
1,1,2-Trichloroethane	5.72				5.00		114	70-130			
Trichloroethylene	5.64				5.00		113	70-130			
Trichlorofluoromethane (Freon 11)	5.56				5.00		111	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.99				5.00		99.8	70-130			
1,2,4-Trimethylbenzene	5.82				5.00		116	70-130			
1,3,5-Trimethylbenzene	6.17				5.00		123	70-130			
Vinyl Acetate	4.18				5.00		83.5	70-130			V-05
Vinyl Chloride	5.46				5.00		109	70-130			
m&p-Xylene	12.2				10.0		122	70-130			
o-Xylene	5.95				5.00		119	70-130			
Surrogate: 4-Bromofluorobenzene (1)	7.66				8.00		95.8	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B323217 - TO-15 Prep
Blank (B323217-BLK1)

Prepared & Analyzed: 11/16/22

Acetone	ND	0.80
Benzene	ND	0.020

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>6.94</i>	<i>8.00</i>	<i>86.8</i>	<i>70-130</i>
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LCS (B323217-BS1)

Prepared & Analyzed: 11/16/22

Acetone	6.03	5.00	121	70-130
Benzene	5.71	5.00	114	70-130

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.48</i>	<i>8.00</i>	<i>93.6</i>	<i>70-130</i>
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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-01	Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	104138	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	315817	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	233658	5.159	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S078066-ICV1)			Lab File ID: J22A0285019.D			Analyzed: 10/12/22 23:33			
Bromochloromethane (1)	506252	2.809	506252	2.809	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	983315	3.434	983315	3.434	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	887710	5.041	887710	5.041	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S079418-CCV1)			Lab File ID: K22A318004.D			Analyzed: 11/14/22 13:13			
Bromochloromethane (1)	89280	2.997	89280	2.997	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	239691	3.584	239691	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	181466	5.163	181466	5.163	100	60 - 140	0.0000	+/-0.50	
LCS (B323204-BS1)			Lab File ID: K22A318005.D			Analyzed: 11/14/22 13:43			
Bromochloromethane (1)	88278	2.992	89280	2.997	99	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	241867	3.584	239691	3.584	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	180466	5.163	181466	5.163	99	60 - 140	0.0000	+/-0.50	
Blank (B323204-BLK1)			Lab File ID: K22A318011.D			Analyzed: 11/14/22 17:08			
Bromochloromethane (1)	90103	2.996	89280	2.997	101	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	219595	3.588	239691	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	172254	5.163	181466	5.163	95	60 - 140	0.0000	+/-0.50	
UW-1 (22K0521-01)			Lab File ID: K22A318018.D			Analyzed: 11/14/22 21:00			
Bromochloromethane (1)	89380	2.997	89280	2.997	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	222628	3.589	239691	3.584	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	176115	5.163	181466	5.163	97	60 - 140	0.0000	+/-0.50	
DW1-1 (22K0521-02)			Lab File ID: K22A318019.D			Analyzed: 11/14/22 21:34			
Bromochloromethane (1)	99538	2.996	89280	2.997	111	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	221420	3.589	239691	3.584	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	177940	5.163	181466	5.163	98	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
DW2-1 (22K0521-03) Lab File ID: K22A318020.D Analyzed: 11/14/22 22:08									
Bromochloromethane (1)	91186	2.996	89280	2.997	102	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	226141	3.588	239691	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	180904	5.163	181466	5.163	100	60 - 140	0.0000	+/-0.50	
INTS-1 (22K0521-04) Lab File ID: K22A318021.D Analyzed: 11/14/22 22:42									
Bromochloromethane (1)	98602	3.001	89280	2.997	110	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	228089	3.588	239691	3.584	95	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	179724	5.163	181466	5.163	99	60 - 140	0.0000	+/-0.50	
DW1-Duplicate (22K0521-05) Lab File ID: K22A318022.D Analyzed: 11/14/22 23:17									
Bromochloromethane (1)	91066	2.996	89280	2.997	102	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	227433	3.584	239691	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	175934	5.163	181466	5.163	97	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S079426-CCV1) Lab File ID: J22A320003.D Analyzed: 11/16/22 03:17									
Bromochloromethane (1)	450874	2.803	450874	2.803	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	949286	3.428	949286	3.428	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	804846	5.041	804846	5.041	100	60 - 140	0.0000	+/-0.50	
LCS (B323217-BS1) Lab File ID: J22A320004.D Analyzed: 11/16/22 03:42									
Bromochloromethane (1)	458286	2.803	450874	2.803	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	963396	3.429	949286	3.428	101	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	808282	5.042	804846	5.041	100	60 - 140	0.0010	+/-0.50	
Blank (B323217-BLK1) Lab File ID: J22A320006.D Analyzed: 11/16/22 09:50									
Bromochloromethane (1)	434023	2.792	450874	2.803	96	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	812198	3.422	949286	3.428	86	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	711592	5.039	804846	5.041	88	60 - 140	-0.0020	+/-0.50	
INTS-1 (22K0521-04RE1) Lab File ID: J22A320009.D Analyzed: 11/16/22 11:04									
Bromochloromethane (1)	451676	2.792	450874	2.803	100	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	859827	3.422	949286	3.428	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	723359	5.039	804846	5.041	90	60 - 140	-0.0020	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S079418-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.36	1.001504	1.073262		7.2	30
Benzene	A	5.00	5.82	0.633704	0.7381103		16.5	30
Benzyl chloride	A	5.00	7.27	0.4421081	0.6426504		45.4	30 *
Bromodichloromethane	A	5.00	6.00	0.4484742	0.5378191		19.9	30
Bromoform	A	5.00	5.47	0.5313608	0.5808691		9.3	30
Bromomethane	A	5.00	5.46	0.56846	0.6206989		9.2	30
1,3-Butadiene	A	5.00	5.58	0.4941294	0.5519355		11.7	30
2-Butanone (MEK)	A	5.00	6.01	1.143339	1.373799		20.2	30
Carbon Disulfide	A	5.00	4.71	2.101097	1.980054		-5.8	30
Carbon Tetrachloride	A	5.00	5.52	0.3583793	0.3956494		10.4	30
Chlorobenzene	A	5.00	5.62	0.7307357	0.8216547		12.4	30
Chloroethane	A	5.00	5.39	0.3728969	0.4020789		7.8	30
Chloroform	A	5.00	5.65	1.205973	1.363656		13.1	30
Chloromethane	A	5.00	5.51	0.5843503	0.6436918		10.2	30
Cyclohexane	A	5.00	5.92	0.2474396	0.2928637		18.4	30
Dibromochloromethane	A	5.00	5.81	0.5365627	0.6239141		16.3	30
1,2-Dibromoethane (EDB)	A	5.00	5.88	0.4696428	0.5521431		17.6	30
1,2-Dichlorobenzene	A	5.00	6.05	0.5425411	0.6564756		21.0	30
1,3-Dichlorobenzene	A	5.00	5.99	0.5577685	0.6681141		19.8	30
1,4-Dichlorobenzene	A	5.00	6.30	0.4841678	0.6100184		26.0	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.67	1.437368	1.630502		13.4	30
1,1-Dichloroethane	A	5.00	6.59	0.9933117	1.308351		31.7	30 *
1,2-Dichloroethane	A	5.00	5.80	0.7604954	0.8822043		16.0	30
1,1-Dichloroethylene	A	5.00	5.93	1.025417	1.215645		18.6	30
cis-1,2-Dichloroethylene	A	5.00	5.54	0.8174361	0.9048925		10.7	30
trans-1,2-Dichloroethylene	A	5.00	6.41	0.8265571	1.059032		28.1	30
1,2-Dichloropropane	A	5.00	5.90	0.2525551	0.297957		18.0	30
cis-1,3-Dichloropropene	A	5.00	5.95	0.4042268	0.4812196		19.0	30
trans-1,3-Dichloropropene	A	5.00	6.28	0.2821754	0.3542761		25.6	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.52	1.571176	1.735072		10.4	30
1,4-Dioxane	A	5.00	5.76	0.1252326	0.144219		15.2	30
Ethanol	A	5.00	4.44	0.2348114	0.2087634		-11.1	30
Ethyl Acetate	A	5.00	6.62	0.1797762	0.2379211		32.3	30 *
Ethylbenzene	A	5.00	5.72	1.166103	1.333715		14.4	30
4-Ethyltoluene	A	5.00	5.90	1.091537	1.288034		18.0	30
Heptane	A	5.00	6.26	0.2370975	0.2966086		25.1	30
Hexachlorobutadiene	A	5.00	4.70	0.3846991	0.3613063		-6.1	30
Hexane	L	5.00	5.87	0.6117314	0.7451075		17.4	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S079418-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.73	0.5293432	0.6062535		14.5	30
Isopropanol	A	5.00	5.75	1.233151	1.418996		15.1	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	7.44	1.403919	2.088082		48.7	30 *
Methylene Chloride	A	5.00	5.97	0.7749664	0.9258602		19.5	30
4-Methyl-2-pentanone (MIBK)	A	5.00	11.1	0.1036732	0.2293086		121	30 *
Naphthalene	A	5.00	4.66	0.9067208	0.8456725		-6.7	30
Propene	A	5.00	5.73	0.4757755	0.5449283		14.5	30
Styrene	A	5.00	5.97	0.6195572	0.7402819		19.5	30
1,1,2,2-Tetrachloroethane	A	5.00	5.85	0.7649521	0.8956653		17.1	30
Tetrachloroethylene	A	5.00	5.50	0.4025457	0.4431199		10.1	30
Tetrahydrofuran	A	5.00	5.67	0.6192362	0.7020072		13.4	30
Toluene	A	5.00	5.66	0.9588753	1.086035		13.3	30
1,2,4-Trichlorobenzene	A	5.00	5.59	0.2888558	0.3229608		11.8	30
1,1,1-Trichloroethane	A	5.00	6.68	0.4005075	0.5349154		33.6	30 *
1,1,2-Trichloroethane	A	5.00	5.74	0.333956	0.3835782		14.9	30
Trichloroethylene	A	5.00	5.98	0.2669212	0.3192777		19.6	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.69	1.362748	1.551326		13.8	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.96	1.311243	1.300591		-0.8	30
1,2,4-Trimethylbenzene	A	5.00	6.18	0.9101206	1.124133		23.5	30
1,3,5-Trimethylbenzene	A	5.00	6.43	0.9305716	1.195887		28.5	30
Vinyl Acetate	A	5.00	2.66	1.456769	0.7755735		-46.8	30 *
Vinyl Chloride	A	5.00	5.46	0.6700674	0.7319713		9.2	30
m&p-Xylene	A	10.0	12.8	0.9901728	1.262822		27.5	30
o-Xylene	A	5.00	6.13	0.9006378	1.104489		22.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK
EPA TO-15
S079426-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.41	0.9559325	1.034556		8.2	30
Benzene	A	5.00	5.46	0.7293615	0.7968819		9.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022

Phone: 413-525-2332
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CHAIN OF CUSTODY RECORD (AIR)

39 Spruce Street
East Longmeadow, MA 01028

Page _____ of _____

Pace Analytical
22K0521
Clean Air

Address:

Phone:

Project Location:

Project Number:

Project Manager:

Pace Quote Name/Number:

Invoice Recipient:

Sampled By:

7-Day ☐ 10-Day ☒
Due Date:

1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Format: PDF ☐ EXCEL ☐

Other: ☐

CLP Like Data Pkg Required: ☐

Email To:

Fax To #:

Lab Use	Client Use	Collection Data	Duration	Flow Rate	Matrix	Volume
Pace Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	m ³ /min L/min	Code	Liters m ³
1	UW-1	10-27-13 14:39	10-28-13 12:57	1358		
2	DW1-1	1500	1407 1387			
3	DW2-1	1625	1449 1344			
4	INTS-1	1645	1538 1373			
5	DW1-Duplicate	1500	1407 1387			
		1542	1449 1387			

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

Relinquished by: (signature)	Date/Time: 11-1-27
Received by: (signature)	Date/Time: 11/2
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

ANALYSIS REQUESTED

"Hg

Lab Receipt Pressure

Final Pressure

Initial Pressure

Please fill out completely, sign, date and retain the yellow copy for your records

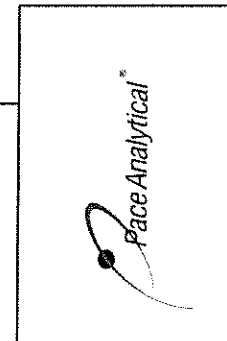
Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to Con-Test's Air Media Agreement

Summa Can ID

Flow Controller ID

-28	-6	24	2156	3542	9042
-30	-10	25	1025	3360	9042
-27	-9	10	2044	3543	2691
-30	-10	24	1804	3063	9021
-28	-9	10	1722	3486	9051



NEIAC and AIHA-LAP, LLC Accredited

Other

Chromatogram ☐ AIHA-LAP, LLC ☐

PCB ONLY

Soxhlet ☐ Non Soxhlet ☐

Municipality ☐ WRTA ☐ MWRA ☐ School ☐ MBTA ☐

Government ☐ Federal ☐ City ☐

21 J ☐ Brownfield ☐

(<https://www.fedex.com/en-us/home.html>)



FedEx® Tracking



DELIVERED

Wednesday

11/2/2022 at 9:40 am

Signed for by: R.PETRAITIS

↓ Obtain Proof of delivery

DELIVERY STATUS

Delivered

↓ Shipment is 1 of 3 pieces

✉ Get Status Updates

TRACKING ID

538089136418

FROM
PALATINE, IL US

Label Created
11/1/2022 4:47 PM

PACKAGE RECEIVED BY FEDEX
SCHAUMBURG, IL
11/1/2022 7:25 PM

IN TRANSIT
WINDSOR LOCKS, CT
11/2/2022 8:13 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
11/2/2022 8:21 AM

DELIVERED
EAST LONGMEADOW, MA US

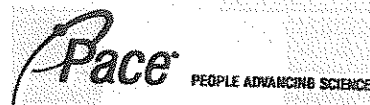
DELIVERED
11/2/2022 at 9:40 AM

↓ View travel history

Manage Delivery



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East Longmeadow, MA. 01028
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www.pacelabs.com



Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air
Received By UR Date 11/2 Time 940
How Were the samples received? In Cooler On Ice No Ice
In Box T Ambient Melted Ice
Were samples within Temperature Compliance? Within By Gun # Actual Temp -
2-6°C By Blank # Actual Temp -
Was Custody Seal In tact? MA Were Samples Tampered with? MA
Was COC Relinquished? T Does Chain Agree With Samples? T
Are there any loose caps/valves on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC Include all Pertinent Information? Client? T Analysis? F Sampler Name? T
Project? T ID's? T Collection Dates/Times? T
Are Sample Labels filled out and legible? F Who was notified?
Are there Rushes? F Samples are received within holding time?
Proper Media Used? T Individually Certified Cans? F
Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans	5	6L	5	24 hr	Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s					Tedlar		

Can #'s	Reg #'s						
2156	3542						
1025	3360						
2044	3543						
1804	3063						
1722	3486						
Unused Media	Pufs/TO-17's						

Comments:

Analysis taken from set up project

December 3, 2022

Dr. Volker Schmid
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CC BH
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22K1956

Enclosed are results of analyses for samples as received by the laboratory on November 11, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Dr. Volker Schmid

REPORT DATE: 12/3/2022

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22K1956

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CC BH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
R02-INT1	22K1956-01	Air		EPA TO-15	
R02-INT2	22K1956-02	Air		EPA TO-15	
R02-DW1	22K1956-03	Air		EPA TO-15	
R02-DW2	22K1956-04	Air		EPA TO-15	
R02-DW2-D	22K1956-05	Air		EPA TO-15	
R02-UW	22K1956-06	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15**Qualifications:**

V-05
Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**1,2,4-Trichlorobenzene**

22K1956-01[R02-INT1], B324570-BLK1, B324570-BS1, S080135-CCV1

Hexachlorobutadiene

22K1956-01[R02-INT1], B324570-BLK1, B324570-BS1, S080135-CCV1

Naphthalene

22K1956-01[R02-INT1], B324570-BLK1, B324570-BS1, S080135-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Tod E. Kopycinski
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-INT1
Sample ID: 22K1956-01
Sample Matrix: Air
Sampled: 11/9/2022 09:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1298
Canister Size: 6 liter
Flow Controller ID: 3717
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): 0
Receipt Vacuum(in Hg): +1.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	6.5	1.4		15	3.3	0.702	11/30/22 9:20		CMR
Benzene	49	0.50		160	1.6	10	11/30/22 8:32		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	11/30/22 9:20		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	11/30/22 9:20		CMR
Bromoform	ND	0.035		ND	0.36	0.702	11/30/22 9:20		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
1,3-Butadiene	0.97	0.035		2.2	0.078	0.702	11/30/22 9:20		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	11/30/22 9:20		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	11/30/22 9:20		CMR
Carbon Tetrachloride	0.068	0.035		0.43	0.22	0.702	11/30/22 9:20		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	11/30/22 9:20		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	11/30/22 9:20		CMR
Chloroform	ND	0.035		ND	0.17	0.702	11/30/22 9:20		CMR
Chloromethane	0.47	0.070		0.97	0.14	0.702	11/30/22 9:20		CMR
Cyclohexane	0.091	0.035		0.31	0.12	0.702	11/30/22 9:20		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	11/30/22 9:20		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	11/30/22 9:20		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	11/30/22 9:20		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	11/30/22 9:20		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	11/30/22 9:20		CMR
Dichlorodifluoromethane (Freon 12)	0.31	0.035		1.5	0.17	0.702	11/30/22 9:20		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	11/30/22 9:20		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	11/30/22 9:20		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	11/30/22 9:20		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	11/30/22 9:20		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	11/30/22 9:20		CMR
Ethanol	3.6	1.4		6.8	2.6	0.702	11/30/22 9:20		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	11/30/22 9:20		CMR
Ethylbenzene	0.11	0.035		0.50	0.15	0.702	11/30/22 9:20		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	11/30/22 9:20		CMR
Heptane	0.11	0.035		0.44	0.14	0.702	11/30/22 9:20		CMR
Hexachlorobutadiene	ND	0.035	V-05	ND	0.37	0.702	11/30/22 9:20		CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-INT1
Sample ID: 22K1956-01
Sample Matrix: Air
Sampled: 11/9/2022 09:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 1298
Canister Size: 6 liter
Flow Controller ID: 3717
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): 0
Receipt Vacuum(in Hg): +1.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	11/30/22 9:20		CMR
2-Hexanone (MBK)	0.070	0.035		0.29	0.14	0.702	11/30/22 9:20		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	11/30/22 9:20		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	11/30/22 9:20		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	11/30/22 9:20		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	11/30/22 9:20		CMR
Naphthalene	28	0.035	V-05	150	0.18	0.702	11/30/22 9:20		CMR
Propene	8.2	1.4		14	2.4	0.702	11/30/22 9:20		CMR
Styrene	1.7	0.035		7.1	0.15	0.702	11/30/22 9:20		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	11/30/22 9:20		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	11/30/22 9:20		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	11/30/22 9:20		CMR
Toluene	11	0.035		40	0.13	0.702	11/30/22 9:20		CMR
1,2,4-Trichlorobenzene	ND	0.035	V-05	ND	0.26	0.702	11/30/22 9:20		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	11/30/22 9:20		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	11/30/22 9:20		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	11/30/22 9:20		CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.4	0.79	0.702	11/30/22 9:20		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	11/30/22 9:20		CMR
1,2,4-Trimethylbenzene	0.60	0.035		2.9	0.17	0.702	11/30/22 9:20		CMR
1,3,5-Trimethylbenzene	0.37	0.035		1.8	0.17	0.702	11/30/22 9:20		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	11/30/22 9:20		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	11/30/22 9:20		CMR
m&p-Xylene	3.5	0.070		15	0.30	0.702	11/30/22 9:20		CMR
o-Xylene	0.77	0.035		3.3	0.15	0.702	11/30/22 9:20		CMR
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	112			70-130			11/30/22 8:32		
4-Bromofluorobenzene (1)	114			70-130			11/30/22 9:20		

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/11/2022
Field Sample #: R02-INT2
Sample ID: 22K1956-02
 Sample Matrix: Air
 Sampled: 11/9/2022 09:55

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1216
 Canister Size: 6 liter
 Flow Controller ID: 3718
 Sample Type: 24 hr

Work Order: 22K1956
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -5.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	4.7	1.4		11	3.3	0.702	12/1/22 20:17	CMR
Benzene	11	0.035		35	0.11	0.702	12/1/22 20:17	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/22 20:17	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/22 20:17	CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/1/22 20:17	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
1,3-Butadiene	0.12	0.035		0.25	0.078	0.702	12/1/22 20:17	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/1/22 20:17	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/1/22 20:17	CMR
Carbon Tetrachloride	0.065	0.035		0.41	0.22	0.702	12/1/22 20:17	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/22 20:17	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/22 20:17	CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/1/22 20:17	CMR
Chloromethane	0.42	0.070		0.87	0.14	0.702	12/1/22 20:17	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/1/22 20:17	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/22 20:17	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/22 20:17	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 20:17	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 20:17	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 20:17	CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	12/1/22 20:17	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/22 20:17	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 20:17	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 20:17	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/22 20:17	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/22 20:17	CMR
Ethanol	3.7	1.4		7.0	2.6	0.702	12/1/22 20:17	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/1/22 20:17	CMR
Ethylbenzene	0.035	0.035		0.15	0.15	0.702	12/1/22 20:17	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/1/22 20:17	CMR
Heptane	0.041	0.035		0.17	0.14	0.702	12/1/22 20:17	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/22 20:17	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-INT2
Sample ID: 22K1956-02
Sample Matrix: Air
Sampled: 11/9/2022 09:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 1216
Canister Size: 6 liter
Flow Controller ID: 3718
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.702	12/1/22 20:17	CMR
2-Hexanone (MBK)	0.10	0.035		0.43	0.14	0.702	12/1/22 20:17	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/1/22 20:17	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/22 20:17	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/1/22 20:17	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/22 20:17	CMR
Naphthalene	3.1	0.035		16	0.18	0.702	12/1/22 20:17	CMR
Propene	ND	1.4		ND	2.4	0.702	12/1/22 20:17	CMR
Styrene	0.34	0.035		1.4	0.15	0.702	12/1/22 20:17	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/22 20:17	CMR
Tetrachloroethylene	0.086	0.035		0.59	0.24	0.702	12/1/22 20:17	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/1/22 20:17	CMR
Toluene	2.2	0.035		8.2	0.13	0.702	12/1/22 20:17	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/22 20:17	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 20:17	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 20:17	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/1/22 20:17	CMR
Trichlorofluoromethane (Freon 11)	0.21	0.14		1.2	0.79	0.702	12/1/22 20:17	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/22 20:17	CMR
1,2,4-Trimethylbenzene	0.10	0.035		0.49	0.17	0.702	12/1/22 20:17	CMR
1,3,5-Trimethylbenzene	0.051	0.035		0.25	0.17	0.702	12/1/22 20:17	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/1/22 20:17	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/22 20:17	CMR
m&p-Xylene	0.59	0.070		2.6	0.30	0.702	12/1/22 20:17	CMR
o-Xylene	0.13	0.035		0.56	0.15	0.702	12/1/22 20:17	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	12/1/22 20:17

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-DW1
Sample ID: 22K1956-03
Sample Matrix: Air
Sampled: 11/9/2022 10:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2229
Canister Size: 6 liter
Flow Controller ID: 3734
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	6.2	1.4		15	3.3	0.702	12/1/22 21:05		CMR
Benzene	0.87	0.035		2.8	0.11	0.702	12/1/22 21:05		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/22 21:05		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/22 21:05		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/1/22 21:05		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
1,3-Butadiene	0.036	0.035		0.081	0.078	0.702	12/1/22 21:05		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/1/22 21:05		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/1/22 21:05		CMR
Carbon Tetrachloride	0.065	0.035		0.41	0.22	0.702	12/1/22 21:05		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/22 21:05		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/22 21:05		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/1/22 21:05		CMR
Chloromethane	0.41	0.070		0.85	0.14	0.702	12/1/22 21:05		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/1/22 21:05		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/22 21:05		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/22 21:05		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:05		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:05		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:05		CMR
Dichlorodifluoromethane (Freon 12)	0.25	0.035		1.2	0.17	0.702	12/1/22 21:05		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/22 21:05		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 21:05		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 21:05		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/22 21:05		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/22 21:05		CMR
Ethanol	3.7	1.4		7.0	2.6	0.702	12/1/22 21:05		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/1/22 21:05		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/1/22 21:05		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/1/22 21:05		CMR
Heptane	0.036	0.035		0.15	0.14	0.702	12/1/22 21:05		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/22 21:05		CMR

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/11/2022
Field Sample #: R02-DW1
Sample ID: 22K1956-03
 Sample Matrix: Air
 Sampled: 11/9/2022 10:33

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2229
 Canister Size: 6 liter
 Flow Controller ID: 3734
 Sample Type: 24 hr

Work Order: 22K1956
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -5.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/1/22 21:05		CMR
2-Hexanone (MBK)	0.10	0.035		0.42	0.14	0.702	12/1/22 21:05		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/1/22 21:05		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/22 21:05		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/1/22 21:05		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/22 21:05		CMR
Naphthalene	0.13	0.035		0.66	0.18	0.702	12/1/22 21:05		CMR
Propene	ND	1.4		ND	2.4	0.702	12/1/22 21:05		CMR
Styrene	ND	0.035		ND	0.15	0.702	12/1/22 21:05		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/22 21:05		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/1/22 21:05		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/1/22 21:05		CMR
Toluene	0.17	0.035		0.64	0.13	0.702	12/1/22 21:05		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/22 21:05		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 21:05		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 21:05		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/1/22 21:05		CMR
Trichlorofluoromethane (Freon 11)	0.21	0.14		1.2	0.79	0.702	12/1/22 21:05		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/22 21:05		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 21:05		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 21:05		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/1/22 21:05		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/22 21:05		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/1/22 21:05		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/1/22 21:05		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	12/1/22 21:05

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-DW2
Sample ID: 22K1956-04
Sample Matrix: Air
Sampled: 11/9/2022 11:14

Sample Description/Location:
Sub Description/Location:
Canister ID: 2000
Canister Size: 6 liter
Flow Controller ID: 3483
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	4.9	1.4		12	3.3	0.702	12/1/22 21:52	CMR
Benzene	0.098	0.035		0.31	0.11	0.702	12/1/22 21:52	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/22 21:52	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/22 21:52	CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/1/22 21:52	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/1/22 21:52	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/1/22 21:52	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/1/22 21:52	CMR
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	12/1/22 21:52	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/22 21:52	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/22 21:52	CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/1/22 21:52	CMR
Chloromethane	0.43	0.070		0.89	0.14	0.702	12/1/22 21:52	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/1/22 21:52	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/22 21:52	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/22 21:52	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:52	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:52	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 21:52	CMR
Dichlorodifluoromethane (Freon 12)	0.23	0.035		1.1	0.17	0.702	12/1/22 21:52	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 21:52	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/22 21:52	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 21:52	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 21:52	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/22 21:52	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/22 21:52	CMR
Ethanol	3.8	1.4		7.1	2.6	0.702	12/1/22 21:52	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/1/22 21:52	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/1/22 21:52	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/1/22 21:52	CMR
Heptane	0.048	0.035		0.20	0.14	0.702	12/1/22 21:52	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/22 21:52	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-DW2
Sample ID: 22K1956-04
Sample Matrix: Air
Sampled: 11/9/2022 11:14

Sample Description/Location:
Sub Description/Location:
Canister ID: 2000
Canister Size: 6 liter
Flow Controller ID: 3483
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/1/22	21:52	CMR
2-Hexanone (MBK)	0.098	0.035		0.40	0.14	0.702	12/1/22	21:52	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/1/22	21:52	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/22	21:52	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/1/22	21:52	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/22	21:52	CMR
Naphthalene	ND	0.035		ND	0.18	0.702	12/1/22	21:52	CMR
Propene	ND	1.4		ND	2.4	0.702	12/1/22	21:52	CMR
Styrene	ND	0.035		ND	0.15	0.702	12/1/22	21:52	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/22	21:52	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/1/22	21:52	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/1/22	21:52	CMR
Toluene	0.065	0.035		0.25	0.13	0.702	12/1/22	21:52	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/22	21:52	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22	21:52	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22	21:52	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/1/22	21:52	CMR
Trichlorofluoromethane (Freon 11)	0.22	0.14		1.2	0.79	0.702	12/1/22	21:52	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/22	21:52	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22	21:52	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22	21:52	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/1/22	21:52	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/22	21:52	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/1/22	21:52	CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/1/22	21:52	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	12/1/22 21:52

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ANALYTICAL RESULTS

Project Location: CC BH
 Date Received: 11/11/2022
Field Sample #: R02-DW2-D
Sample ID: 22K1956-05
 Sample Matrix: Air
 Sampled: 11/9/2022 11:14

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1979
 Canister Size: 6 liter
 Flow Controller ID: 3476
 Sample Type: 24 hr

Work Order: 22K1956
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.2
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	7.0	1.4		17	3.3	0.702	12/1/22 22:40	CMR
Benzene	0.10	0.035		0.33	0.11	0.702	12/1/22 22:40	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/22 22:40	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/22 22:40	CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/1/22 22:40	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/1/22 22:40	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/1/22 22:40	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/1/22 22:40	CMR
Carbon Tetrachloride	0.062	0.035		0.39	0.22	0.702	12/1/22 22:40	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/22 22:40	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/22 22:40	CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/1/22 22:40	CMR
Chloromethane	0.45	0.070		0.92	0.14	0.702	12/1/22 22:40	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/1/22 22:40	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/22 22:40	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/22 22:40	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 22:40	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 22:40	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22 22:40	CMR
Dichlorodifluoromethane (Freon 12)	0.24	0.035		1.2	0.17	0.702	12/1/22 22:40	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22 22:40	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/22 22:40	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 22:40	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22 22:40	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/22 22:40	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/22 22:40	CMR
Ethanol	4.4	1.4		8.4	2.6	0.702	12/1/22 22:40	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/1/22 22:40	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/1/22 22:40	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/1/22 22:40	CMR
Heptane	0.039	0.035		0.16	0.14	0.702	12/1/22 22:40	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/22 22:40	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
 Date Received: 11/11/2022
Field Sample #: R02-DW2-D
Sample ID: 22K1956-05
 Sample Matrix: Air
 Sampled: 11/9/2022 11:14

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1979
 Canister Size: 6 liter
 Flow Controller ID: 3476
 Sample Type: 24 hr

Work Order: 22K1956
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.2
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.702	12/1/22 22:40	CMR
2-Hexanone (MBK)	0.13	0.035		0.51	0.14	0.702	12/1/22 22:40	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/1/22 22:40	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/22 22:40	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/1/22 22:40	CMR
4-Methyl-2-pentanone (MIBK)	0.038	0.035		0.16	0.14	0.702	12/1/22 22:40	CMR
Naphthalene	ND	0.035		ND	0.18	0.702	12/1/22 22:40	CMR
Propene	ND	1.4		ND	2.4	0.702	12/1/22 22:40	CMR
Styrene	ND	0.035		ND	0.15	0.702	12/1/22 22:40	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/22 22:40	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/1/22 22:40	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/1/22 22:40	CMR
Toluene	0.063	0.035		0.24	0.13	0.702	12/1/22 22:40	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/22 22:40	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 22:40	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 22:40	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/1/22 22:40	CMR
Trichlorofluoromethane (Freon 11)	0.23	0.14		1.3	0.79	0.702	12/1/22 22:40	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/22 22:40	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 22:40	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 22:40	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/1/22 22:40	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/22 22:40	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/1/22 22:40	CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/1/22 22:40	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	110	70-130	12/1/22 22:40

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-UW
Sample ID: 22K1956-06
Sample Matrix: Air
Sampled: 11/9/2022 11:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 1657
Canister Size: 6 liter
Flow Controller ID: 3733
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.5	1.4		5.8	3.3	0.702	12/1/22	23:27	CMR
Benzene	0.091	0.035		0.29	0.11	0.702	12/1/22	23:27	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/1/22	23:27	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/1/22	23:27	CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/1/22	23:27	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/1/22	23:27	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/1/22	23:27	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/1/22	23:27	CMR
Carbon Tetrachloride	0.062	0.035		0.39	0.22	0.702	12/1/22	23:27	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/1/22	23:27	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/1/22	23:27	CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/1/22	23:27	CMR
Chloromethane	0.45	0.070		0.92	0.14	0.702	12/1/22	23:27	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/1/22	23:27	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/1/22	23:27	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/1/22	23:27	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22	23:27	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22	23:27	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/1/22	23:27	CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	12/1/22	23:27	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/1/22	23:27	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22	23:27	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/1/22	23:27	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/1/22	23:27	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/1/22	23:27	CMR
Ethanol	3.2	1.4		6.1	2.6	0.702	12/1/22	23:27	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/1/22	23:27	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/1/22	23:27	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/1/22	23:27	CMR
Heptane	ND	0.035		ND	0.14	0.702	12/1/22	23:27	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/1/22	23:27	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/11/2022
Field Sample #: R02-UW
Sample ID: 22K1956-06
Sample Matrix: Air
Sampled: 11/9/2022 11:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 1657
Canister Size: 6 liter
Flow Controller ID: 3733
Sample Type: 24 hr

Work Order: 22K1956
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/1/22 23:27		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	12/1/22 23:27		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/1/22 23:27		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/1/22 23:27		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/1/22 23:27		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/1/22 23:27		CMR
Naphthalene	ND	0.035		ND	0.18	0.702	12/1/22 23:27		CMR
Propene	ND	1.4		ND	2.4	0.702	12/1/22 23:27		CMR
Styrene	ND	0.035		ND	0.15	0.702	12/1/22 23:27		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/1/22 23:27		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/1/22 23:27		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/1/22 23:27		CMR
Toluene	0.065	0.035		0.25	0.13	0.702	12/1/22 23:27		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/1/22 23:27		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 23:27		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/1/22 23:27		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/1/22 23:27		CMR
Trichlorofluoromethane (Freon 11)	0.23	0.14		1.3	0.79	0.702	12/1/22 23:27		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/1/22 23:27		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 23:27		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/1/22 23:27		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/1/22 23:27		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/1/22 23:27		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/1/22 23:27		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/1/22 23:27		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	110	70-130	12/1/22 23:27

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Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K1956-01 [R02-INT1]	B324570	1.5	1	N/A	1000	400	855	11/29/22
22K1956-01RE1 [R02-INT1]	B324570	1.5	1	N/A	1000	400	60	11/29/22

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K1956-02 [R02-INT2]	B324721	1.5	1	N/A	1000	400	855	12/01/22
22K1956-03 [R02-DW1]	B324721	1.5	1	N/A	1000	400	855	12/01/22
22K1956-04 [R02-DW2]	B324721	1.5	1	N/A	1000	400	855	12/01/22
22K1956-05 [R02-DW2-D]	B324721	1.5	1	N/A	1000	400	855	12/01/22
22K1956-06 [R02-UW]	B324721	1.5	1	N/A	1000	400	855	12/01/22

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result		Limits		Limit	
Batch B324570 - TO-15 Prep											
Blank (B324570-BLK1)					Prepared & Analyzed: 11/29/22						
Acetone	ND	1.4									
Benzene	ND	0.035									
Benzyl chloride	ND	0.035									
Bromodichloromethane	ND	0.035									
Bromoform	ND	0.035									
Bromomethane	ND	0.035									
1,3-Butadiene	ND	0.035									
2-Butanone (MEK)	ND	1.4									
Carbon Disulfide	ND	0.35									
Carbon Tetrachloride	ND	0.035									
Chlorobenzene	ND	0.035									
Chloroethane	ND	0.035									
Chloroform	ND	0.035									
Chloromethane	ND	0.070									
Cyclohexane	ND	0.035									
Dibromochloromethane	ND	0.035									
1,2-Dibromoethane (EDB)	ND	0.035									
1,2-Dichlorobenzene	ND	0.035									
1,3-Dichlorobenzene	ND	0.035									
1,4-Dichlorobenzene	ND	0.035									
Dichlorodifluoromethane (Freon 12)	ND	0.035									
1,1-Dichloroethane	ND	0.035									
1,2-Dichloroethane	ND	0.035									
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,2-Dichloropropane	ND	0.035									
cis-1,3-Dichloropropene	ND	0.035									
trans-1,3-Dichloropropene	ND	0.035									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035									
1,4-Dioxane	ND	0.35									
Ethanol	ND	1.4									
Ethyl Acetate	ND	0.35									
Ethylbenzene	ND	0.035									
4-Ethyltoluene	ND	0.035									
Heptane	ND	0.035									
Hexachlorobutadiene	ND	0.035									V-0
Hexane	ND	1.4									
2-Hexanone (MBK)	ND	0.035									
Isopropanol	ND	1.4									
Methyl tert-Butyl Ether (MTBE)	ND	0.035									
Methylene Chloride	ND	0.35									
4-Methyl-2-pentanone (MIBK)	ND	0.035									
Naphthalene	ND	0.035									V-0
Propene	ND	1.4									
Styrene	ND	0.035									

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B324570 - TO-15 Prep
Blank (B324570-BLK1)

Prepared & Analyzed: 11/29/22

1,1,2,2-Tetrachloroethane	ND	0.035								
Tetrachloroethylene	ND	0.035								
Tetrahydrofuran	ND	0.35								
Toluene	ND	0.035								
1,2,4-Trichlorobenzene	ND	0.035								V-05
1,1,1-Trichloroethane	ND	0.035								
1,1,2-Trichloroethane	ND	0.035								
Trichloroethylene	ND	0.035								
Trichlorofluoromethane (Freon 11)	ND	0.14								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14								
1,2,4-Trimethylbenzene	ND	0.035								
1,3,5-Trimethylbenzene	ND	0.035								
Vinyl Acetate	ND	0.70								
Vinyl Chloride	ND	0.035								
m&p-Xylene	ND	0.070								
o-Xylene	ND	0.035								

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.40</i>				<i>8.00</i>		<i>105</i>	<i>70-130</i>		
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LCS (B324570-BS1)

Prepared & Analyzed: 11/29/22

Acetone	5.47				5.00		109	70-130		
Benzene	4.52				5.00		90.4	70-130		
Benzyl chloride	5.26				5.00		105	70-130		
Bromodichloromethane	4.47				5.00		89.5	70-130		
Bromoform	5.15				5.00		103	70-130		
Bromomethane	5.01				5.00		100	70-130		
1,3-Butadiene	4.86				5.00		97.2	70-130		
2-Butanone (MEK)	4.68				5.00		93.5	70-130		
Carbon Disulfide	4.74				5.00		94.8	70-130		
Carbon Tetrachloride	4.67				5.00		93.4	70-130		
Chlorobenzene	4.42				5.00		88.5	70-130		
Chloroethane	5.33				5.00		107	70-130		
Chloroform	4.63				5.00		92.5	70-130		
Chloromethane	4.74				5.00		94.9	70-130		
Cyclohexane	4.59				5.00		91.8	70-130		
Dibromochloromethane	4.77				5.00		95.4	70-130		
1,2-Dibromoethane (EDB)	4.37				5.00		87.4	70-130		
1,2-Dichlorobenzene	5.04				5.00		101	70-130		
1,3-Dichlorobenzene	5.24				5.00		105	70-130		
1,4-Dichlorobenzene	5.23				5.00		105	70-130		
Dichlorodifluoromethane (Freon 12)	5.08				5.00		102	70-130		
1,1-Dichloroethane	4.77				5.00		95.4	70-130		
1,2-Dichloroethane	4.80				5.00		95.9	70-130		
1,1-Dichloroethylene	5.01				5.00		100	70-130		
cis-1,2-Dichloroethylene	4.57				5.00		91.4	70-130		
trans-1,2-Dichloroethylene	4.60				5.00		92.0	70-130		
1,2-Dichloropropane	4.64				5.00		92.9	70-130		

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							
Batch B324570 - TO-15 Prep											
LCS (B324570-BS1)					Prepared & Analyzed: 11/29/22						
cis-1,3-Dichloropropene	4.46				5.00		89.2	70-130			
trans-1,3-Dichloropropene	4.57				5.00		91.4	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.88				5.00		97.7	70-130			
1,4-Dioxane	4.42				5.00		88.4	70-130			
Ethanol	3.93				5.00		78.6	70-130			
Ethyl Acetate	4.84				5.00		96.7	70-130			
Ethylbenzene	4.55				5.00		91.0	70-130			
4-Ethyltoluene	4.92				5.00		98.3	70-130			
Heptane	4.69				5.00		93.8	70-130			
Hexachlorobutadiene	4.49				5.00		89.9	70-130			V-05
Hexane	5.12				5.00		102	70-130			
2-Hexanone (MBK)	4.55				5.00		91.1	70-130			
Isopropanol	4.45				5.00		88.9	70-130			
Methyl tert-Butyl Ether (MTBE)	4.60				5.00		92.0	70-130			
Methylene Chloride	4.20				5.00		84.1	70-130			
4-Methyl-2-pentanone (MIBK)	4.70				5.00		94.0	70-130			
Naphthalene	4.45				5.00		89.0	70-130			V-05
Propene	4.45				5.00		89.0	70-130			
Styrene	4.80				5.00		95.9	70-130			
1,1,2,2-Tetrachloroethane	4.55				5.00		90.9	70-130			
Tetrachloroethylene	4.62				5.00		92.4	70-130			
Tetrahydrofuran	4.79				5.00		95.8	70-130			
Toluene	4.43				5.00		88.7	70-130			
1,2,4-Trichlorobenzene	4.18				5.00		83.6	70-130			V-05
1,1,1-Trichloroethane	4.29				5.00		85.8	70-130			
1,1,2-Trichloroethane	4.39				5.00		87.7	70-130			
Trichloroethylene	4.40				5.00		87.9	70-130			
Trichlorofluoromethane (Freon 11)	5.57				5.00		111	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.58				5.00		91.5	70-130			
1,2,4-Trimethylbenzene	4.90				5.00		97.9	70-130			
1,3,5-Trimethylbenzene	4.88				5.00		97.5	70-130			
Vinyl Acetate	4.09				5.00		81.9	70-130			
Vinyl Chloride	5.18				5.00		104	70-130			
m&p-Xylene	9.51				10.0		95.1	70-130			
o-Xylene	4.79				5.00		95.8	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.22				8.00		115	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC		RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	

Batch B324721 - TO-15 Prep
Blank (B324721-BLK1)

Prepared & Analyzed: 12/01/22

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B324721 - TO-15 Prep
Blank (B324721-BLK1)

Prepared & Analyzed: 12/01/22

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.62</i>	<i>8.00</i>	<i>108</i>	<i>70-130</i>
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LCS (B324721-BS1)

Prepared & Analyzed: 12/01/22

Acetone	5.67	5.00	113	70-130
Benzene	4.69	5.00	93.7	70-130
Benzyl chloride	5.36	5.00	107	70-130
Bromodichloromethane	4.73	5.00	94.6	70-130
Bromoform	5.25	5.00	105	70-130
Bromomethane	5.13	5.00	103	70-130
1,3-Butadiene	4.89	5.00	97.7	70-130
2-Butanone (MEK)	4.66	5.00	93.2	70-130
Carbon Disulfide	4.59	5.00	91.8	70-130
Carbon Tetrachloride	4.88	5.00	97.6	70-130
Chlorobenzene	4.49	5.00	89.8	70-130
Chloroethane	5.41	5.00	108	70-130
Chloroform	4.53	5.00	90.6	70-130
Chloromethane	4.79	5.00	95.8	70-130
Cyclohexane	4.61	5.00	92.3	70-130
Dibromochloromethane	4.89	5.00	97.7	70-130
1,2-Dibromoethane (EDB)	4.43	5.00	88.6	70-130
1,2-Dichlorobenzene	5.01	5.00	100	70-130
1,3-Dichlorobenzene	5.19	5.00	104	70-130
1,4-Dichlorobenzene	5.15	5.00	103	70-130
Dichlorodifluoromethane (Freon 12)	4.94	5.00	98.9	70-130
1,1-Dichloroethane	4.66	5.00	93.2	70-130
1,2-Dichloroethane	4.77	5.00	95.5	70-130
1,1-Dichloroethylene	4.88	5.00	97.6	70-130
cis-1,2-Dichloroethylene	4.42	5.00	88.5	70-130
trans-1,2-Dichloroethylene	4.47	5.00	89.4	70-130
1,2-Dichloropropane	4.92	5.00	98.3	70-130

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual	
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD		
Batch B324721 - TO-15 Prep											
LCS (B324721-BS1)					Prepared & Analyzed: 12/01/22						
cis-1,3-Dichloropropene	4.60				5.00		92.0	70-130			
trans-1,3-Dichloropropene	4.71				5.00		94.2	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.82				5.00		96.5	70-130			
1,4-Dioxane	4.36				5.00		87.2	70-130			
Ethanol	3.88				5.00		77.6	70-130			
Ethyl Acetate	4.68				5.00		93.6	70-130			
Ethylbenzene	4.63				5.00		92.6	70-130			
4-Ethyltoluene	4.94				5.00		98.7	70-130			
Heptane	5.00				5.00		100	70-130			
Hexachlorobutadiene	4.55				5.00		91.1	70-130			
Hexane	5.19				5.00		104	70-130			
2-Hexanone (MBK)	4.87				5.00		97.4	70-130			
Isopropanol	4.43				5.00		88.6	70-130			
Methyl tert-Butyl Ether (MTBE)	4.29				5.00		85.8	70-130			
Methylene Chloride	4.21				5.00		84.2	70-130			
4-Methyl-2-pentanone (MIBK)	5.09				5.00		102	70-130			
Naphthalene	4.43				5.00		88.6	70-130			
Propene	4.48				5.00		89.6	70-130			
Styrene	4.75				5.00		95.0	70-130			
1,1,2,2-Tetrachloroethane	4.70				5.00		94.1	70-130			
Tetrachloroethylene	4.61				5.00		92.3	70-130			
Tetrahydrofuran	4.49				5.00		89.7	70-130			
Toluene	4.48				5.00		89.7	70-130			
1,2,4-Trichlorobenzene	4.16				5.00		83.2	70-130			
1,1,1-Trichloroethane	4.47				5.00		89.4	70-130			
1,1,2-Trichloroethane	4.49				5.00		89.8	70-130			
Trichloroethylene	4.62				5.00		92.3	70-130			
Trichlorofluoromethane (Freon 11)	5.60				5.00		112	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.41				5.00		88.2	70-130			
1,2,4-Trimethylbenzene	4.92				5.00		98.4	70-130			
1,3,5-Trimethylbenzene	4.92				5.00		98.3	70-130			
Vinyl Acetate	4.05				5.00		81.0	70-130			
Vinyl Chloride	5.17				5.00		103	70-130			
m&p-Xylene	9.64				10.0		96.4	70-130			
o-Xylene	4.86				5.00		97.3	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.07				8.00		113	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S076501-ICV1)			Lab File ID: G22A256016.D			Analyzed: 09/13/22 22:00			
Bromochloromethane (1)	1141026	8.307	1123386	8.307	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2751702	10.081	2650535	10.081	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2471195	14.446	2407851	14.446	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S080135-CCV1)			Lab File ID: G22A333004.D			Analyzed: 11/29/22 13:38			
Bromochloromethane (1)	1075989	8.307	1123386	8.307	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2607413	10.081	2650535	10.081	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2437061	14.446	2407851	14.446	101	60 - 140	0.0000	+/-0.50	
LCS (B324570-BS1)			Lab File ID: G22A333005.D			Analyzed: 11/29/22 14:18			
Bromochloromethane (1)	1073214	8.307	1075989	8.307	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2629953	10.081	2607413	10.081	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2440307	14.446	2437061	14.446	100	60 - 140	0.0000	+/-0.50	
Blank (B324570-BLK1)			Lab File ID: G22A333012.D			Analyzed: 11/29/22 19:13			
Bromochloromethane (1)	888787	8.307	1075989	8.307	83	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1860692	10.081	2607413	10.081	71	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1747214	14.446	2437061	14.446	72	60 - 140	0.0000	+/-0.50	
R02-INT1 (22K1956-01RE1)			Lab File ID: G22A333031.D			Analyzed: 11/30/22 08:32			
Bromochloromethane (1)	947614	8.313	1075989	8.307	88	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2182407	10.081	2607413	10.081	84	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2024919	14.446	2437061	14.446	83	60 - 140	0.0000	+/-0.50	
R02-INT1 (22K1956-01)			Lab File ID: G22A333032.D			Analyzed: 11/30/22 09:20			
Bromochloromethane (1)	1002069	8.307	1075989	8.307	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2371093	10.075	2607413	10.081	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2222085	14.44	2437061	14.446	91	60 - 140	-0.0060	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S080166-CCV1)			Lab File ID: G22A333004.D			Analyzed: 12/01/22 12:02			
Bromochloromethane (1)	966123	8.3	1123386	8.307	86	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2158301	10.075	2650535	10.081	81	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1993074	14.446	2407851	14.446	83	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B324721-BS1) Lab File ID: G22A335005.D Analyzed: 12/01/22 12:42									
Bromochloromethane (1)	985806	8.307	966123	8.3	102	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2226666	10.081	2158301	10.075	103	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2075165	14.446	1993074	14.446	104	60 - 140	0.0000	+/-0.50	
Blank (B324721-BLK1) Lab File ID: G22A335010.D Analyzed: 12/01/22 16:10									
Bromochloromethane (1)	892798	8.313	966123	8.3	92	60 - 140	0.0130	+/-0.50	
1,4-Difluorobenzene (1)	1894238	10.081	2158301	10.075	88	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1753529	14.446	1993074	14.446	88	60 - 140	0.0000	+/-0.50	
R02-INT2 (22K1956-02) Lab File ID: G22A335016.D Analyzed: 12/01/22 20:17									
Bromochloromethane (1)	1061269	8.3	966123	8.3	110	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2480536	10.075	2158301	10.075	115	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2317081	14.44	1993074	14.446	116	60 - 140	-0.0060	+/-0.50	
R02-DW1 (22K1956-03) Lab File ID: G22A335017.D Analyzed: 12/01/22 21:05									
Bromochloromethane (1)	1056279	8.3	966123	8.3	109	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2484829	10.074	2158301	10.075	115	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	2303776	14.439	1993074	14.446	116	60 - 140	-0.0070	+/-0.50	
R02-DW2 (22K1956-04) Lab File ID: G22A335018.D Analyzed: 12/01/22 21:52									
Bromochloromethane (1)	1028382	8.307	966123	8.3	106	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2394103	10.075	2158301	10.075	111	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2227453	14.44	1993074	14.446	112	60 - 140	-0.0060	+/-0.50	
R02-DW2-D (22K1956-05) Lab File ID: G22A335019.D Analyzed: 12/01/22 22:40									
Bromochloromethane (1)	1017348	8.307	966123	8.3	105	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2349163	10.075	2158301	10.075	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2211282	14.446	1993074	14.446	111	60 - 140	0.0000	+/-0.50	
R02-UW (22K1956-06) Lab File ID: G22A335020.D Analyzed: 12/01/22 23:27									
Bromochloromethane (1)	975685	8.307	966123	8.3	101	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2185028	10.081	2158301	10.075	101	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2040653	14.446	1993074	14.446	102	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S080135-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.15	1.084004	1.115681		2.9	30
Benzene	A	5.00	4.30	0.9129288	0.7859591		-13.9	30
Benzyl chloride	A	5.00	3.83	1.030942	0.7899292		-23.4	30
Bromodichloromethane	A	5.00	4.20	0.6953811	0.5837872		-16.0	30
Bromoform	A	5.00	4.39	0.5656468	0.496738		-12.2	30
Bromomethane	A	5.00	4.76	0.6009459	0.5715954		-4.9	30
1,3-Butadiene	A	5.00	4.82	0.5443004	0.5242284		-3.7	30
2-Butanone (MEK)	A	5.00	4.21	1.507683	1.268719		-15.8	30
Carbon Disulfide	A	5.00	4.21	2.02748	1.707006		-15.8	30
Carbon Tetrachloride	A	5.00	4.46	0.5479998	0.4890174		-10.8	30
Chlorobenzene	A	5.00	3.97	0.8809329	0.6997891		-20.6	30
Chloroethane	A	5.00	4.95	0.3452967	0.341941		-1.0	30
Chloroform	A	5.00	4.34	1.561184	1.356408		-13.1	30
Chloromethane	A	5.00	4.52	0.6821899	0.6167022		-9.6	30
Cyclohexane	A	5.00	4.20	0.3600845	0.3028449		-15.9	30
Dibromochloromethane	A	5.00	4.31	0.6396581	0.5510139		-13.9	30
1,2-Dibromoethane (EDB)	A	5.00	3.97	0.6171207	0.4895805		-20.7	30
1,2-Dichlorobenzene	A	5.00	3.74	0.6937094	0.5188558		-25.2	30
1,3-Dichlorobenzene	A	5.00	4.11	0.7409581	0.6088731		-17.8	30
1,4-Dichlorobenzene	A	5.00	4.04	0.7218155	0.5839401		-19.1	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.76	1.62808	1.548356		-4.9	30
1,1-Dichloroethane	A	5.00	4.38	1.342742	1.174842		-12.5	30
1,2-Dichloroethane	A	5.00	4.44	0.9627523	0.854263		-11.3	30
1,1-Dichloroethylene	A	5.00	4.59	1.140142	1.047495		-8.1	30
cis-1,2-Dichloroethylene	A	5.00	4.27	0.9670963	0.8267341		-14.5	30
trans-1,2-Dichloroethylene	A	5.00	4.32	1.001825	0.8654349		-13.6	30
1,2-Dichloropropane	A	5.00	4.33	0.3567989	0.3088143		-13.4	30
cis-1,3-Dichloropropene	A	5.00	4.28	0.5092852	0.435417		-14.5	30
trans-1,3-Dichloropropene	A	5.00	4.15	0.4570981	0.3797014		-16.9	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	4.84	1.73998	1.684318		-3.2	30
1,4-Dioxane	A	5.00	3.64	0.1857641	0.1353016		-27.2	30
Ethanol	A	5.00	4.24	0.2343264	0.1985983		-15.2	30
Ethyl Acetate	A	5.00	4.61	0.2308163	0.2128438		-7.8	30
Ethylbenzene	A	5.00	4.09	1.455024	1.191518		-18.1	30
4-Ethyltoluene	A	5.00	4.12	1.413771	1.164964		-17.6	30
Heptane	A	5.00	4.43	0.2850308	0.2523967		-11.4	30
Hexachlorobutadiene	A	5.00	2.88	0.4677459	0.2697925		-42.3	30 *
Hexane	A	5.00	4.78	0.8985394	0.8063904		-4.4	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S080135-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	3.97	0.7712864	0.6128772		-20.5	30
Isopropanol	A	5.00	4.66	1.338902	1.247574		-6.8	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.21	1.834723	1.544828		-15.8	30
Methylene Chloride	A	5.00	3.98	0.9597215	0.7644227		-20.3	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.27	0.7726854	0.6600786		-14.6	30
Naphthalene	A	5.00	2.54	1.092246	0.5543851		-49.2	30 *
Propene	A	5.00	4.27	0.5941328	0.5069197		-14.7	30
Styrene	A	5.00	4.21	0.7890752	0.6641462		-15.8	30
1,1,2,2-Tetrachloroethane	A	5.00	3.67	0.9851261	0.7228661		-26.6	30
Tetrachloroethylene	A	5.00	4.26	0.457194	0.389217		-14.9	30
Tetrahydrofuran	A	5.00	4.38	0.2957092	0.2592131		-12.3	30
Toluene	A	5.00	4.10	1.15399	0.9465244		-18.0	30
1,2,4-Trichlorobenzene	A	5.00	2.55	0.4973623	0.2536045		-49.0	30 *
1,1,1-Trichloroethane	A	5.00	4.20	0.5975698	0.5024591		-15.9	30
1,1,2-Trichloroethane	A	5.00	3.93	0.4162703	0.327053		-21.4	30
Trichloroethylene	A	5.00	4.18	0.3947958	0.3301614		-16.4	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.23	1.463327	1.530368		4.6	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.24	1.432547	1.214295		-15.2	30
1,2,4-Trimethylbenzene	A	5.00	4.04	1.156019	0.9330898		-19.3	30
1,3,5-Trimethylbenzene	A	5.00	4.08	1.190388	0.9714035		-18.4	30
Vinyl Acetate	A	5.00	3.55	1.986739	1.41144		-29.0	30
Vinyl Chloride	A	5.00	4.92	0.7142115	0.7022064		-1.7	30
m&p-Xylene	A	10.0	8.52	1.129066	0.9622229		-14.8	30
o-Xylene	A	5.00	4.23	1.138955	0.9631043		-15.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S080166-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.63	1.084004	1.219873		12.5	30
Benzene	A	5.00	4.57	0.9129288	0.8337269		-8.7	30
Benzyl chloride	A	5.00	5.36	1.030942	1.105042		7.2	30
Bromodichloromethane	A	5.00	4.63	0.6953811	0.6435284		-7.5	30
Bromoform	A	5.00	5.20	0.5656468	0.5888327		4.1	30
Bromomethane	A	5.00	4.98	0.6009459	0.5983304		-0.4	30
1,3-Butadiene	A	5.00	4.96	0.5443004	0.5404595		-0.7	30
2-Butanone (MEK)	A	5.00	4.52	1.507683	1.362622		-9.6	30
Carbon Disulfide	A	5.00	4.24	2.02748	1.720218		-15.2	30
Carbon Tetrachloride	A	5.00	4.81	0.5479998	0.5269797		-3.8	30
Chlorobenzene	A	5.00	4.40	0.8809329	0.774287		-12.1	30
Chloroethane	A	5.00	5.13	0.3452967	0.354494		2.7	30
Chloroform	A	5.00	4.39	1.561184	1.369656		-12.3	30
Chloromethane	A	5.00	4.79	0.6821899	0.6529918		-4.3	30
Cyclohexane	A	5.00	4.36	0.3600845	0.314348		-12.7	30
Dibromochloromethane	A	5.00	4.85	0.6396581	0.6201556		-3.0	30
1,2-Dibromoethane (EDB)	A	5.00	4.50	0.6171207	0.5552589		-10.0	30
1,2-Dichlorobenzene	A	5.00	4.98	0.6937094	0.6906292		-0.4	30
1,3-Dichlorobenzene	A	5.00	5.24	0.7409581	0.7759993		4.7	30
1,4-Dichlorobenzene	A	5.00	5.16	0.7218155	0.7443409		3.1	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.85	1.62808	1.580216		-2.9	30
1,1-Dichloroethane	A	5.00	4.39	1.342742	1.180088		-12.1	30
1,2-Dichloroethane	A	5.00	4.57	0.9627523	0.8801165		-8.6	30
1,1-Dichloroethylene	A	5.00	5.14	1.140142	1.171775		2.8	30
cis-1,2-Dichloroethylene	A	5.00	4.31	0.9670963	0.834004		-13.8	30
trans-1,2-Dichloroethylene	A	5.00	4.31	1.001825	0.8637608		-13.8	30
1,2-Dichloropropane	A	5.00	4.71	0.3567989	0.3363231		-5.7	30
cis-1,3-Dichloropropene	A	5.00	4.66	0.5092852	0.4743568		-6.9	30
trans-1,3-Dichloropropene	A	5.00	4.66	0.4570981	0.4257971		-6.8	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	4.99	1.73998	1.736988		-0.2	30
1,4-Dioxane	A	5.00	4.37	0.1857641	0.1623455		-12.6	30
Ethanol	A	5.00	4.88	0.2343264	0.2286599		-2.4	30
Ethyl Acetate	A	5.00	4.86	0.2308163	0.2243988		-2.8	30
Ethylbenzene	A	5.00	4.53	1.455024	1.317284		-9.5	30
4-Ethyltoluene	A	5.00	4.80	1.413771	1.358045		-3.9	30
Heptane	A	5.00	4.88	0.2850308	0.2780417		-2.5	30
Hexachlorobutadiene	A	5.00	5.37	0.4677459	0.502448		7.4	30
Hexane	A	5.00	4.96	0.8985394	0.8373576		-0.8	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S080166-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.03	0.7712864	0.7763156		0.7	30
Isopropanol	A	5.00	5.19	1.338902	1.389797		3.8	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.12	1.834723	1.512993		-17.5	30
Methylene Chloride	A	5.00	4.37	0.9597215	0.8395701		-12.5	30
4-Methyl-2-pentanone (MIBK)	A	5.00	5.08	0.7726854	0.7850612		1.6	30
Naphthalene	A	5.00	5.52	1.092246	1.205353		10.4	30
Propene	A	5.00	4.51	0.5941328	0.5357695		-9.8	30
Styrene	A	5.00	4.71	0.7890752	0.7429007		-5.9	30
1,1,2,2-Tetrachloroethane	A	5.00	4.74	0.9851261	0.9339093		-5.2	30
Tetrachloroethylene	A	5.00	4.56	0.457194	0.4167793		-8.8	30
Tetrahydrofuran	A	5.00	4.36	0.2957092	0.2575407		-12.9	30
Toluene	A	5.00	4.40	1.15399	1.015966		-12.0	30
1,2,4-Trichlorobenzene	A	5.00	5.14	0.4973623	0.5109093		2.7	30
1,1,1-Trichloroethane	A	5.00	4.54	0.5975698	0.5427751		-9.2	30
1,1,2-Trichloroethane	A	5.00	4.38	0.4162703	0.3642253		-12.5	30
Trichloroethylene	A	5.00	4.53	0.3947958	0.3577451		-9.4	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.41	1.463327	1.58432		8.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.25	1.432547	1.218916		-14.9	30
1,2,4-Trimethylbenzene	A	5.00	4.88	1.156019	1.129003		-2.3	30
1,3,5-Trimethylbenzene	A	5.00	4.87	1.190388	1.159817		-2.6	30
Vinyl Acetate	A	5.00	3.64	1.986739	1.447191		-27.2	30
Vinyl Chloride	A	5.00	5.06	0.7142115	0.7232354		1.3	30
m&p-Xylene	A	10.0	9.58	1.129066	1.081934		-4.2	30
o-Xylene	A	5.00	4.80	1.138955	1.094092		-3.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022

Phone: 413-525-2332
Fax: 413-525-6405
www.pacelabs.com

CHAIN OF CUSTODY RECORD (AIR)

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Pace Analytical
22K1956
Clean Air

Address: 500 W Wood St Palatine IL 60067

Phone: 800 553 5511

Project Location: 8th St BH Fenwick Isl

Project Number: 14777

Project Manager: Rachel

Pace Quote Name/Number:

Invoice Recipient:

Sampled By: SD, DP

7-Day <input type="checkbox"/>	10-Day <input checked="" type="checkbox"/>
Due Date:	
1-Day <input type="checkbox"/>	3-Day <input type="checkbox"/>
2-Day <input type="checkbox"/>	4-Day <input type="checkbox"/>
Format: PDF <input type="checkbox"/> EXCEL <input type="checkbox"/>	
Other:	
CLP Like Data Pkg Required: <input type="checkbox"/>	
Email To:	
Fax To #:	

ANALYSIS REQUESTED	
"Hg	
Lab Receipt Pressure	
Final Pressure	
Initial Pressure	
Please fill out completely, sign, date and retain the yellow copy for your records	
Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	
For summa canister and flow controller information please refer to Con-Test's Air Media Agreement	
Summa Can ID	Flow Controller ID

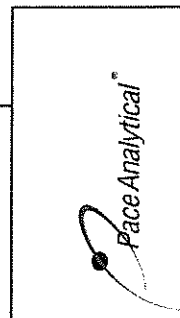
Lab Use	Client Use	Collection Data	Duration	Flow Rate	Matrix	Volume
Pace Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	m ³ /min L/min	Code	Liters m ³
1	R02-INT1	11/8/22 9:43	11/8/22 9:54			
2	R02-INT2	11/8/22 10:08	11/8/22 10:33			
3	R02-DWL	11/8/22 11:36	11/8/22 11:54			
4	R02-DWL	11/8/22 11:54	11/8/22 12:40			
5	R02-DWL-D					
6	R02-UW					

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

Relinquished by: (signature)	Date/Time: 5:27pm 11-9-22
Received by: (signature)	Date/Time: 11/11/22
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:



Project Entity		Project Entity	
<input type="checkbox"/> Government	<input type="checkbox"/> Municipality	<input type="checkbox"/> MWRA	<input type="checkbox"/> WRTA
<input type="checkbox"/> Federal	<input type="checkbox"/> 21 J	<input type="checkbox"/> School	<input type="checkbox"/> MBTA
<input type="checkbox"/> City	<input type="checkbox"/> Brownfield		
Other		Other	
NELAC and AIHA-LAP, LLC Accredited		PCB ONLY	
		<input type="checkbox"/> Soxhlet	
		<input type="checkbox"/> Non Soxhlet	

(https://www.fedex.com/en-us/home.html)



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Friday

11/11/2022 at 9:20 am

Signed for by: L.RIOS

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DELIVERY STATUS

Delivered

↓ Shipment is 1 of 3 pieces

TRACKING ID

538089136933

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PACKAGE RECEIVED BY FEDEX

SCHAUMBURG, IL

11/10/2022 7:52 PM

IN TRANSIT

WINDSOR LOCKS, CT

11/11/2022 7:53 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

11/11/2022 8:01 AM

DELIVERED

EAST LONGMEADOW, MA US

DELIVERED

11/11/2022 at 9:20 AM

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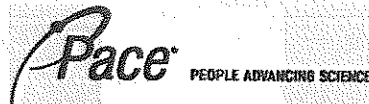
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SUBMIT

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East Longmeadow, MA. 01028
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Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client clean Air

Received By AL Date 11/11 Time 920

How Were the samples received? In Cooler On Ice No Ice

In Box T Ambient Melted Ice

Were samples within Temperature Compliance? Within By Gun # Actual Temp -

2-6°C By Blank # Actual Temp -

Was Custody Seal In tact? MM Were Samples Tampered with? MM

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC Include all Pertinent Information? Client? T Analysis? T Sampler Name? +

Project? T ID's? T Collection Dates/Times? T

Are Sample Labels filled out and legible?

Are there Rushes? F Who was notified?

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? F

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	<u>6</u>	<u>6L</u>	<u>6</u>	<u>24hr</u>	Nut/Ferrule	<u>6</u>	IC Train	<u> </u>
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s	Reg #'s							
<u>1258</u>	<u>3712</u>							
<u>1216</u>	<u>3718</u>							
<u>2229</u>	<u>3734</u>							
<u>2000</u>	<u>3483</u>							
<u>1975</u>	<u>3476</u>							
<u>1657</u>	<u>3733</u>							
Unused Media	Pufs/TO-17's							

Comments:

December 15, 2022

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CC BH
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22K3525

Enclosed are results of analyses for samples as received by the laboratory on November 28, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 12/15/2022

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22K3525

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CC BH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
R03_INT2	22K3525-01	Air		EPA TO-15	
R03_INT1	22K3525-02	Air		EPA TO-15	
R03_DW1	22K3525-03	Air		EPA TO-15	
R03_DWZ-1	22K3525-04	Air		EPA TO-15	
R03_DWZ-2	22K3525-05	Air		EPA TO-15	
R03_UW	22K3525-06	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15**Qualifications:****B**

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:**Naphthalene**

22K3525-02RE1[R03_INT1], B325901-BS1

B-07

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Naphthalene**

22K3525-02RE1[R03_INT1], B325901-BLK1

L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2,4-Trichlorobenzene**

22K3525-01[R03_INT2], 22K3525-02[R03_INT1], 22K3525-03[R03_DW1], 22K3525-04[R03_DWZ-1], 22K3525-05[R03_DWZ-2], 22K3525-06[R03_UW], B325701-BLK1, B325701-BS1

Hexachlorobutadiene

22K3525-01[R03_INT2], 22K3525-02[R03_INT1], 22K3525-03[R03_DW1], 22K3525-04[R03_DWZ-1], 22K3525-05[R03_DWZ-2], 22K3525-06[R03_UW], B325701-BLK1, B325701-BS1

Naphthalene

22K3525-01[R03_INT2], 22K3525-02RE1[R03_INT1], 22K3525-03[R03_DW1], 22K3525-04[R03_DWZ-1], 22K3525-05[R03_DWZ-2], 22K3525-06[R03_UW], B325701-BLK1, B325701-BS1, B325901-BLK1, B325901-BS1

V-34

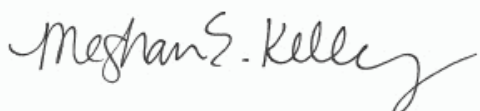
Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**Hexachlorobutadiene**

22K3525-01[R03_INT2], 22K3525-02[R03_INT1], 22K3525-03[R03_DW1], 22K3525-04[R03_DWZ-1], 22K3525-05[R03_DWZ-2], 22K3525-06[R03_UW], B325701-BLK1, B325701-BS1, S080626-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_INT2
Sample ID: 22K3525-01
 Sample Matrix: Air
 Sampled: 11/23/2022 10:46

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2184
 Canister Size: 6 liter
 Flow Controller ID: 3523
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -9.9
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	6.4	1.4		15	3.3	0.698	12/6/22 18:41		CMR
Benzene	32	0.035		100	0.11	0.698	12/6/22 18:41		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.698	12/6/22 18:41		CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	12/6/22 18:41		CMR
Bromoform	ND	0.035		ND	0.36	0.698	12/6/22 18:41		CMR
Bromomethane	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	12/6/22 18:41		CMR
2-Butanone (MEK)	1.4	1.4		4.2	4.1	0.698	12/6/22 18:41		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	12/6/22 18:41		CMR
Carbon Tetrachloride	0.073	0.035		0.46	0.22	0.698	12/6/22 18:41		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	12/6/22 18:41		CMR
Chloroethane	ND	0.035		ND	0.092	0.698	12/6/22 18:41		CMR
Chloroform	ND	0.035		ND	0.17	0.698	12/6/22 18:41		CMR
Chloromethane	0.50	0.070		1.0	0.14	0.698	12/6/22 18:41		CMR
Cyclohexane	0.12	0.035		0.41	0.12	0.698	12/6/22 18:41		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	12/6/22 18:41		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	12/6/22 18:41		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 18:41		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 18:41		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 18:41		CMR
Dichlorodifluoromethane (Freon 12)	0.63	0.035		3.1	0.17	0.698	12/6/22 18:41		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 18:41		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	12/6/22 18:41		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 18:41		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 18:41		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	12/6/22 18:41		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	12/6/22 18:41		CMR
Ethanol	7.1	1.4		13	2.6	0.698	12/6/22 18:41		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	12/6/22 18:41		CMR
Ethylbenzene	0.092	0.035		0.40	0.15	0.698	12/6/22 18:41		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	12/6/22 18:41		CMR
Heptane	0.10	0.035		0.42	0.14	0.698	12/6/22 18:41		CMR
Hexachlorobutadiene	ND	0.035	L-03, V-34	ND	0.37	0.698	12/6/22 18:41		CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/28/2022
Field Sample #: R03_INT2
Sample ID: 22K3525-01
Sample Matrix: Air
Sampled: 11/23/2022 10:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2184
Canister Size: 6 liter
Flow Controller ID: 3523
Sample Type: 24 hr

Work Order: 22K3525
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.698	12/6/22 18:41		CMR
2-Hexanone (MBK)	0.17	0.070		0.69	0.29	0.698	12/6/22 18:41		CMR
Isopropanol	ND	1.4		ND	3.4	0.698	12/6/22 18:41		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	12/6/22 18:41		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	12/6/22 18:41		CMR
4-Methyl-2-pentanone (MIBK)	0.040	0.035		0.16	0.14	0.698	12/6/22 18:41		CMR
Naphthalene	5.7	0.035	L-03	30	0.18	0.698	12/6/22 18:41		CMR
Propene	ND	1.4		ND	2.4	0.698	12/6/22 18:41		CMR
Styrene	0.89	0.035		3.8	0.15	0.698	12/6/22 18:41		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	12/6/22 18:41		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	12/6/22 18:41		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	12/6/22 18:41		CMR
Toluene	5.4	0.035		21	0.13	0.698	12/6/22 18:41		CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.698	12/6/22 18:41		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 18:41		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 18:41		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	12/6/22 18:41		CMR
Trichlorofluoromethane (Freon 11)	0.26	0.14		1.5	0.78	0.698	12/6/22 18:41		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	12/6/22 18:41		CMR
1,2,4-Trimethylbenzene	0.25	0.035		1.2	0.17	0.698	12/6/22 18:41		CMR
1,3,5-Trimethylbenzene	0.18	0.035		0.89	0.17	0.698	12/6/22 18:41		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.698	12/6/22 18:41		CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	12/6/22 18:41		CMR
m&p-Xylene	1.6	0.070		7.1	0.30	0.698	12/6/22 18:41		CMR
o-Xylene	0.39	0.035		1.7	0.15	0.698	12/6/22 18:41		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.0	70-130	12/6/22 18:41

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_INT1
Sample ID: 22K3525-02
 Sample Matrix: Air
 Sampled: 11/23/2022 11:09

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2175
 Canister Size: 6 liter
 Flow Controller ID: 3327
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	6.2	1.4		15	3.3	0.698	12/6/22 19:12		CMR
Benzene	280	0.50		910	1.6	10	12/14/22 14:29		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.698	12/6/22 19:12		CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	12/6/22 19:12		CMR
Bromoform	ND	0.035		ND	0.36	0.698	12/6/22 19:12		CMR
Bromomethane	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
1,3-Butadiene	2.2	0.035		4.8	0.077	0.698	12/6/22 19:12		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	12/6/22 19:12		CMR
Carbon Disulfide	0.92	0.35		2.9	1.1	0.698	12/6/22 19:12		CMR
Carbon Tetrachloride	0.061	0.035		0.39	0.22	0.698	12/6/22 19:12		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	12/6/22 19:12		CMR
Chloroethane	ND	0.035		ND	0.092	0.698	12/6/22 19:12		CMR
Chloroform	ND	0.035		ND	0.17	0.698	12/6/22 19:12		CMR
Chloromethane	0.49	0.070		1.0	0.14	0.698	12/6/22 19:12		CMR
Cyclohexane	0.23	0.035		0.78	0.12	0.698	12/6/22 19:12		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	12/6/22 19:12		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	12/6/22 19:12		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:12		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:12		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:12		CMR
Dichlorodifluoromethane (Freon 12)	0.54	0.035		2.7	0.17	0.698	12/6/22 19:12		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:12		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	12/6/22 19:12		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 19:12		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 19:12		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	12/6/22 19:12		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	12/6/22 19:12		CMR
Ethanol	6.6	1.4		12	2.6	0.698	12/6/22 19:12		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	12/6/22 19:12		CMR
Ethylbenzene	0.44	0.035		1.9	0.15	0.698	12/6/22 19:12		CMR
4-Ethyltoluene	0.082	0.035		0.40	0.17	0.698	12/6/22 19:12		CMR
Heptane	0.17	0.035		0.69	0.14	0.698	12/6/22 19:12		CMR
Hexachlorobutadiene	0.13	0.035	L-03, V-34	1.3	0.37	0.698	12/6/22 19:12		CMR

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_INT1
Sample ID: 22K3525-02
 Sample Matrix: Air
 Sampled: 11/23/2022 11:09

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2175
 Canister Size: 6 liter
 Flow Controller ID: 3327
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.698	12/6/22 19:12		CMR
2-Hexanone (MBK)	ND	0.070		ND	0.29	0.698	12/6/22 19:12		CMR
Isopropanol	ND	1.4		ND	3.4	0.698	12/6/22 19:12		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	12/6/22 19:12		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	12/6/22 19:12		CMR
4-Methyl-2-pentanone (MIBK)	0.036	0.035		0.15	0.14	0.698	12/6/22 19:12		CMR
Naphthalene	91	0.50	B, B-07, L-03	480	2.6	10	12/14/22 14:29		CMR
Propene	14	1.4		24	2.4	0.698	12/6/22 19:12		CMR
Styrene	11	0.035		46	0.15	0.698	12/6/22 19:12		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	12/6/22 19:12		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	12/6/22 19:12		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	12/6/22 19:12		CMR
Toluene	42	0.50		160	1.9	10	12/14/22 14:29		CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.698	12/6/22 19:12		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 19:12		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 19:12		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	12/6/22 19:12		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.78	0.698	12/6/22 19:12		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	12/6/22 19:12		CMR
1,2,4-Trimethylbenzene	2.6	0.035		13	0.17	0.698	12/6/22 19:12		CMR
1,3,5-Trimethylbenzene	2.0	0.035		9.6	0.17	0.698	12/6/22 19:12		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.698	12/6/22 19:12		CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	12/6/22 19:12		CMR
m&p-Xylene	15	0.070		66	0.30	0.698	12/6/22 19:12		CMR
o-Xylene	3.5	0.035		15	0.15	0.698	12/6/22 19:12		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.9	70-130	12/14/22 14:29
4-Bromofluorobenzene (1)	101	70-130	12/6/22 19:12

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/28/2022
Field Sample #: R03_DW1
Sample ID: 22K3525-03
Sample Matrix: Air
Sampled: 11/23/2022 11:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2016
Canister Size: 6 liter
Flow Controller ID: 3462
Sample Type: 24 hr

Work Order: 22K3525
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	6.5	1.4		15	3.3	0.698	12/6/22 19:44		CMR
Benzene	0.26	0.035		0.84	0.11	0.698	12/6/22 19:44		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.698	12/6/22 19:44		CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	12/6/22 19:44		CMR
Bromoform	ND	0.035		ND	0.36	0.698	12/6/22 19:44		CMR
Bromomethane	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	12/6/22 19:44		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	12/6/22 19:44		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	12/6/22 19:44		CMR
Carbon Tetrachloride	0.074	0.035		0.47	0.22	0.698	12/6/22 19:44		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	12/6/22 19:44		CMR
Chloroethane	ND	0.035		ND	0.092	0.698	12/6/22 19:44		CMR
Chloroform	ND	0.035		ND	0.17	0.698	12/6/22 19:44		CMR
Chloromethane	0.49	0.070		1.0	0.14	0.698	12/6/22 19:44		CMR
Cyclohexane	0.068	0.035		0.24	0.12	0.698	12/6/22 19:44		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	12/6/22 19:44		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	12/6/22 19:44		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:44		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:44		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 19:44		CMR
Dichlorodifluoromethane (Freon 12)	0.60	0.035		3.0	0.17	0.698	12/6/22 19:44		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 19:44		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	12/6/22 19:44		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 19:44		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 19:44		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	12/6/22 19:44		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	12/6/22 19:44		CMR
Ethanol	5.6	1.4		10	2.6	0.698	12/6/22 19:44		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	12/6/22 19:44		CMR
Ethylbenzene	0.036	0.035		0.16	0.15	0.698	12/6/22 19:44		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	12/6/22 19:44		CMR
Heptane	0.087	0.035		0.36	0.14	0.698	12/6/22 19:44		CMR
Hexachlorobutadiene	ND	0.035	L-03, V-34	ND	0.37	0.698	12/6/22 19:44		CMR

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_DW1
Sample ID: 22K3525-03
 Sample Matrix: Air
 Sampled: 11/23/2022 11:32

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2016
 Canister Size: 6 liter
 Flow Controller ID: 3462
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -8.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	12/6/22 19:44	CMR
2-Hexanone (MBK)	ND	0.070		ND	0.29	0.698	12/6/22 19:44	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	12/6/22 19:44	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	12/6/22 19:44	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	12/6/22 19:44	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	12/6/22 19:44	CMR
Naphthalene	0.88	0.035	L-03	4.6	0.18	0.698	12/6/22 19:44	CMR
Propene	ND	1.4		ND	2.4	0.698	12/6/22 19:44	CMR
Styrene	ND	0.035		ND	0.15	0.698	12/6/22 19:44	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	12/6/22 19:44	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	12/6/22 19:44	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	12/6/22 19:44	CMR
Toluene	0.23	0.035		0.86	0.13	0.698	12/6/22 19:44	CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.698	12/6/22 19:44	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 19:44	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 19:44	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	12/6/22 19:44	CMR
Trichlorofluoromethane (Freon 11)	0.26	0.14		1.4	0.78	0.698	12/6/22 19:44	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	12/6/22 19:44	CMR
1,2,4-Trimethylbenzene	0.045	0.035		0.22	0.17	0.698	12/6/22 19:44	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	12/6/22 19:44	CMR
Vinyl Acetate	0.72	0.70		2.5	2.5	0.698	12/6/22 19:44	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	12/6/22 19:44	CMR
m&p-Xylene	0.092	0.070		0.40	0.30	0.698	12/6/22 19:44	CMR
o-Xylene	0.039	0.035		0.17	0.15	0.698	12/6/22 19:44	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.9	70-130	12/6/22 19:44

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_DWZ-1
Sample ID: 22K3525-04
 Sample Matrix: Air
 Sampled: 11/23/2022 12:06

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2010
 Canister Size: 6 liter
 Flow Controller ID: 3605
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -10.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	5.1	1.4		12	3.3	0.696	12/6/22 20:16	CMR
Benzene	0.75	0.035		2.4	0.11	0.696	12/6/22 20:16	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.696	12/6/22 20:16	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.696	12/6/22 20:16	CMR
Bromoform	ND	0.035		ND	0.36	0.696	12/6/22 20:16	CMR
Bromomethane	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.696	12/6/22 20:16	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.696	12/6/22 20:16	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.696	12/6/22 20:16	CMR
Carbon Tetrachloride	0.044	0.035		0.28	0.22	0.696	12/6/22 20:16	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.696	12/6/22 20:16	CMR
Chloroethane	ND	0.035		ND	0.092	0.696	12/6/22 20:16	CMR
Chloroform	ND	0.035		ND	0.17	0.696	12/6/22 20:16	CMR
Chloromethane	0.55	0.070		1.1	0.14	0.696	12/6/22 20:16	CMR
Cyclohexane	0.056	0.035		0.19	0.12	0.696	12/6/22 20:16	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.696	12/6/22 20:16	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.696	12/6/22 20:16	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.696	12/6/22 20:16	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.696	12/6/22 20:16	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.696	12/6/22 20:16	CMR
Dichlorodifluoromethane (Freon 12)	0.56	0.035		2.7	0.17	0.696	12/6/22 20:16	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	12/6/22 20:16	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.696	12/6/22 20:16	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	12/6/22 20:16	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	12/6/22 20:16	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.696	12/6/22 20:16	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.696	12/6/22 20:16	CMR
Ethanol	5.2	1.4		9.7	2.6	0.696	12/6/22 20:16	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.696	12/6/22 20:16	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.696	12/6/22 20:16	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.696	12/6/22 20:16	CMR
Heptane	0.082	0.035		0.34	0.14	0.696	12/6/22 20:16	CMR
Hexachlorobutadiene	ND	0.035	L-03, V-34	ND	0.37	0.696	12/6/22 20:16	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/28/2022
Field Sample #: R03_DWZ-1
Sample ID: 22K3525-04
Sample Matrix: Air
Sampled: 11/23/2022 12:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2010
Canister Size: 6 liter
Flow Controller ID: 3605
Sample Type: 24 hr

Work Order: 22K3525
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -10.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.696	12/6/22 20:16		CMR
2-Hexanone (MBK)	0.094	0.070		0.38	0.29	0.696	12/6/22 20:16		CMR
Isopropanol	ND	1.4		ND	3.4	0.696	12/6/22 20:16		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.696	12/6/22 20:16		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.696	12/6/22 20:16		CMR
4-Methyl-2-pentanone (MIBK)	0.068	0.035		0.28	0.14	0.696	12/6/22 20:16		CMR
Naphthalene	0.41	0.035	L-03	2.1	0.18	0.696	12/6/22 20:16		CMR
Propene	ND	1.4		ND	2.4	0.696	12/6/22 20:16		CMR
Styrene	ND	0.035		ND	0.15	0.696	12/6/22 20:16		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.696	12/6/22 20:16		CMR
Tetrachloroethylene	0.044	0.035		0.30	0.24	0.696	12/6/22 20:16		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.696	12/6/22 20:16		CMR
Toluene	0.23	0.035		0.85	0.13	0.696	12/6/22 20:16		CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.696	12/6/22 20:16		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.696	12/6/22 20:16		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.696	12/6/22 20:16		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.696	12/6/22 20:16		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.78	0.696	12/6/22 20:16		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.696	12/6/22 20:16		CMR
1,2,4-Trimethylbenzene	0.043	0.035		0.21	0.17	0.696	12/6/22 20:16		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.696	12/6/22 20:16		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.696	12/6/22 20:16		CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.696	12/6/22 20:16		CMR
m&p-Xylene	0.083	0.070		0.36	0.30	0.696	12/6/22 20:16		CMR
o-Xylene	0.035	0.035		0.15	0.15	0.696	12/6/22 20:16		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.6	70-130	12/6/22 20:16

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ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/28/2022
Field Sample #: R03_DWZ-2
Sample ID: 22K3525-05
Sample Matrix: Air
Sampled: 11/23/2022 12:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 1128
Canister Size: 6 liter
Flow Controller ID: 3604
Sample Type: 24 hr

Work Order: 22K3525
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	4.3	1.4		10	3.3	0.698	12/6/22 20:47	CMR
Benzene	0.71	0.035		2.3	0.11	0.698	12/6/22 20:47	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.698	12/6/22 20:47	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	12/6/22 20:47	CMR
Bromoform	ND	0.035		ND	0.36	0.698	12/6/22 20:47	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	12/6/22 20:47	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	12/6/22 20:47	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	12/6/22 20:47	CMR
Carbon Tetrachloride	0.067	0.035		0.42	0.22	0.698	12/6/22 20:47	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	12/6/22 20:47	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	12/6/22 20:47	CMR
Chloroform	ND	0.035		ND	0.17	0.698	12/6/22 20:47	CMR
Chloromethane	0.49	0.070		1.0	0.14	0.698	12/6/22 20:47	CMR
Cyclohexane	0.063	0.035		0.22	0.12	0.698	12/6/22 20:47	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	12/6/22 20:47	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	12/6/22 20:47	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 20:47	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 20:47	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 20:47	CMR
Dichlorodifluoromethane (Freon 12)	0.56	0.035		2.8	0.17	0.698	12/6/22 20:47	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	12/6/22 20:47	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 20:47	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 20:47	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	12/6/22 20:47	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	12/6/22 20:47	CMR
Ethanol	5.1	1.4		9.7	2.6	0.698	12/6/22 20:47	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	12/6/22 20:47	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.698	12/6/22 20:47	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	12/6/22 20:47	CMR
Heptane	0.082	0.035		0.33	0.14	0.698	12/6/22 20:47	CMR
Hexachlorobutadiene	ND	0.035	L-03, V-34	ND	0.37	0.698	12/6/22 20:47	CMR

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ANALYTICAL RESULTS

Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_DWZ-2
Sample ID: 22K3525-05
 Sample Matrix: Air
 Sampled: 11/23/2022 12:06

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1128
 Canister Size: 6 liter
 Flow Controller ID: 3604
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -8.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	12/6/22 20:47	CMR
2-Hexanone (MBK)	ND	0.070		ND	0.29	0.698	12/6/22 20:47	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	12/6/22 20:47	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	12/6/22 20:47	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	12/6/22 20:47	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	12/6/22 20:47	CMR
Naphthalene	0.23	0.035	L-03	1.2	0.18	0.698	12/6/22 20:47	CMR
Propene	ND	1.4		ND	2.4	0.698	12/6/22 20:47	CMR
Styrene	ND	0.035		ND	0.15	0.698	12/6/22 20:47	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	12/6/22 20:47	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	12/6/22 20:47	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	12/6/22 20:47	CMR
Toluene	0.22	0.035		0.83	0.13	0.698	12/6/22 20:47	CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.698	12/6/22 20:47	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 20:47	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 20:47	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	12/6/22 20:47	CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.4	0.78	0.698	12/6/22 20:47	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	12/6/22 20:47	CMR
1,2,4-Trimethylbenzene	0.042	0.035		0.21	0.17	0.698	12/6/22 20:47	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	12/6/22 20:47	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.698	12/6/22 20:47	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	12/6/22 20:47	CMR
m&p-Xylene	0.081	0.070		0.35	0.30	0.698	12/6/22 20:47	CMR
o-Xylene	ND	0.035		ND	0.15	0.698	12/6/22 20:47	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.6	70-130	12/6/22 20:47

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ANALYTICAL RESULTS

 Project Location: CC BH
 Date Received: 11/28/2022
Field Sample #: R03_UW
Sample ID: 22K3525-06
 Sample Matrix: Air
 Sampled: 11/23/2022 12:42

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1118
 Canister Size: 6 liter
 Flow Controller ID: 3355
 Sample Type: 24 hr

Work Order: 22K3525
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	4.7	1.4		11	3.3	0.698	12/6/22 21:18	CMR
Benzene	0.29	0.035		0.92	0.11	0.698	12/6/22 21:18	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.698	12/6/22 21:18	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.698	12/6/22 21:18	CMR
Bromoform	ND	0.035		ND	0.36	0.698	12/6/22 21:18	CMR
Bromomethane	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.698	12/6/22 21:18	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.698	12/6/22 21:18	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.698	12/6/22 21:18	CMR
Carbon Tetrachloride	0.068	0.035		0.43	0.22	0.698	12/6/22 21:18	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.698	12/6/22 21:18	CMR
Chloroethane	ND	0.035		ND	0.092	0.698	12/6/22 21:18	CMR
Chloroform	ND	0.035		ND	0.17	0.698	12/6/22 21:18	CMR
Chloromethane	0.47	0.070		0.97	0.14	0.698	12/6/22 21:18	CMR
Cyclohexane	0.052	0.035		0.18	0.12	0.698	12/6/22 21:18	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.698	12/6/22 21:18	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.698	12/6/22 21:18	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 21:18	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 21:18	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.698	12/6/22 21:18	CMR
Dichlorodifluoromethane (Freon 12)	0.57	0.035		2.8	0.17	0.698	12/6/22 21:18	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.698	12/6/22 21:18	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 21:18	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.698	12/6/22 21:18	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.698	12/6/22 21:18	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.698	12/6/22 21:18	CMR
Ethanol	5.6	1.4		10	2.6	0.698	12/6/22 21:18	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.698	12/6/22 21:18	CMR
Ethylbenzene	0.036	0.035		0.15	0.15	0.698	12/6/22 21:18	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.698	12/6/22 21:18	CMR
Heptane	0.089	0.035		0.37	0.14	0.698	12/6/22 21:18	CMR
Hexachlorobutadiene	ND	0.035	L-03, V-34	ND	0.37	0.698	12/6/22 21:18	CMR

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: CC BH
Date Received: 11/28/2022
Field Sample #: R03_UW
Sample ID: 22K3525-06
Sample Matrix: Air
Sampled: 11/23/2022 12:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 1118
Canister Size: 6 liter
Flow Controller ID: 3355
Sample Type: 24 hr

Work Order: 22K3525
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -8.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.698	12/6/22 21:18	CMR
2-Hexanone (MBK)	ND	0.070		ND	0.29	0.698	12/6/22 21:18	CMR
Isopropanol	ND	1.4		ND	3.4	0.698	12/6/22 21:18	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.698	12/6/22 21:18	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.698	12/6/22 21:18	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.698	12/6/22 21:18	CMR
Naphthalene	0.096	0.035	L-03	0.50	0.18	0.698	12/6/22 21:18	CMR
Propene	ND	1.4		ND	2.4	0.698	12/6/22 21:18	CMR
Styrene	ND	0.035		ND	0.15	0.698	12/6/22 21:18	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.698	12/6/22 21:18	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.698	12/6/22 21:18	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.698	12/6/22 21:18	CMR
Toluene	0.21	0.035		0.80	0.13	0.698	12/6/22 21:18	CMR
1,2,4-Trichlorobenzene	ND	0.035	L-03	ND	0.26	0.698	12/6/22 21:18	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 21:18	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.698	12/6/22 21:18	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.698	12/6/22 21:18	CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.3	0.78	0.698	12/6/22 21:18	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.698	12/6/22 21:18	CMR
1,2,4-Trimethylbenzene	0.037	0.035		0.18	0.17	0.698	12/6/22 21:18	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.698	12/6/22 21:18	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.698	12/6/22 21:18	CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.698	12/6/22 21:18	CMR
m&p-Xylene	0.079	0.070		0.34	0.30	0.698	12/6/22 21:18	CMR
o-Xylene	ND	0.035		ND	0.15	0.698	12/6/22 21:18	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.1	70-130	12/6/22 21:18

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K3525-01 [R03_INT2]	B325701	1.5	1	N/A	1000	200	430	12/06/22
22K3525-02 [R03_INT1]	B325701	1.5	1	N/A	1000	200	430	12/06/22
22K3525-03 [R03_DW1]	B325701	1.5	1	N/A	1000	200	430	12/06/22
22K3525-04 [R03_DWZ-1]	B325701	1.74	1	N/A	1000	200	500	12/06/22
22K3525-05 [R03_DWZ-2]	B325701	1.5	1	N/A	1000	200	430	12/06/22
22K3525-06 [R03_UW]	B325701	1.5	1	N/A	1000	200	430	12/06/22

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22K3525-02RE1 [R03_INT1]	B325901	1.5	1	N/A	1000	200	30	12/14/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	

Batch B325701 - TO-15 Prep
Blank (B325701-BLK1)

Prepared & Analyzed: 12/06/22

Acetone	ND	0.80
Benzene	ND	0.020
Benzyl chloride	ND	0.020
Bromodichloromethane	ND	0.020
Bromoform	ND	0.020
Bromomethane	ND	0.020
1,3-Butadiene	ND	0.020
2-Butanone (MEK)	ND	0.80
Carbon Disulfide	ND	0.20
Carbon Tetrachloride	ND	0.020
Chlorobenzene	ND	0.020
Chloroethane	ND	0.020
Chloroform	ND	0.020
Chloromethane	ND	0.040
Cyclohexane	ND	0.020
Dibromochloromethane	ND	0.020
1,2-Dibromoethane (EDB)	ND	0.020
1,2-Dichlorobenzene	ND	0.020
1,3-Dichlorobenzene	ND	0.020
1,4-Dichlorobenzene	ND	0.020
Dichlorodifluoromethane (Freon 12)	ND	0.020
1,1-Dichloroethane	ND	0.020
1,2-Dichloroethane	ND	0.020
1,1-Dichloroethylene	ND	0.020
cis-1,2-Dichloroethylene	ND	0.020
trans-1,2-Dichloroethylene	ND	0.020
1,2-Dichloropropane	ND	0.020
cis-1,3-Dichloropropene	ND	0.020
trans-1,3-Dichloropropene	ND	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020
1,4-Dioxane	ND	0.20
Ethanol	ND	0.80
Ethyl Acetate	ND	0.20
Ethylbenzene	ND	0.020
4-Ethyltoluene	ND	0.020
Heptane	ND	0.020
Hexachlorobutadiene	ND	0.020
Hexane	ND	0.80
2-Hexanone (MBK)	ND	0.040
Isopropanol	ND	0.80
Methyl tert-Butyl Ether (MTBE)	ND	0.020
Methylene Chloride	ND	0.20
4-Methyl-2-pentanone (MIBK)	ND	0.020
Naphthalene	ND	0.020
Propene	ND	0.80
Styrene	ND	0.020

L-03, V-34

L-03

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B325701 - TO-15 Prep
Blank (B325701-BLK1)

Prepared & Analyzed: 12/06/22

1,1,2,2-Tetrachloroethane	ND	0.020								
Tetrachloroethylene	ND	0.020								
Tetrahydrofuran	ND	0.20								
Toluene	ND	0.020								
1,2,4-Trichlorobenzene	ND	0.020								L-03
1,1,1-Trichloroethane	ND	0.020								
1,1,2-Trichloroethane	ND	0.020								
Trichloroethylene	ND	0.020								
Trichlorofluoromethane (Freon 11)	ND	0.080								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080								
1,2,4-Trimethylbenzene	ND	0.020								
1,3,5-Trimethylbenzene	ND	0.020								
Vinyl Acetate	ND	0.40								
Vinyl Chloride	ND	0.020								
m&p-Xylene	ND	0.040								
o-Xylene	ND	0.020								

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.83</i>				<i>8.00</i>		<i>97.9</i>	<i>70-130</i>		
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LCS (B325701-BS1)

Prepared & Analyzed: 12/06/22

Acetone	4.29				5.00		85.8	70-130		
Benzene	4.78				5.00		95.7	70-130		
Benzyl chloride	4.23				5.00		84.5	70-130		
Bromodichloromethane	4.78				5.00		95.5	70-130		
Bromoform	4.64				5.00		92.8	70-130		
Bromomethane	5.48				5.00		110	70-130		
1,3-Butadiene	5.01				5.00		100	70-130		
2-Butanone (MEK)	6.11				5.00		122	70-130		
Carbon Disulfide	5.69				5.00		114	70-130		
Carbon Tetrachloride	4.71				5.00		94.1	70-130		
Chlorobenzene	4.54				5.00		90.7	70-130		
Chloroethane	5.42				5.00		108	70-130		
Chloroform	5.38				5.00		108	70-130		
Chloromethane	4.60				5.00		92.1	70-130		
Cyclohexane	5.06				5.00		101	70-130		
Dibromochloromethane	4.80				5.00		96.1	70-130		
1,2-Dibromoethane (EDB)	4.61				5.00		92.2	70-130		
1,2-Dichlorobenzene	3.93				5.00		78.7	70-130		
1,3-Dichlorobenzene	4.10				5.00		81.9	70-130		
1,4-Dichlorobenzene	3.95				5.00		79.0	70-130		
Dichlorodifluoromethane (Freon 12)	5.40				5.00		108	70-130		
1,1-Dichloroethane	5.35				5.00		107	70-130		
1,2-Dichloroethane	5.06				5.00		101	70-130		
1,1-Dichloroethylene	5.29				5.00		106	70-130		
cis-1,2-Dichloroethylene	5.05				5.00		101	70-130		
trans-1,2-Dichloroethylene	5.13				5.00		103	70-130		
1,2-Dichloropropane	4.59				5.00		91.9	70-130		

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual	
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD		
Batch B325701 - TO-15 Prep											
LCS (B325701-BS1)	Prepared & Analyzed: 12/06/22										
cis-1,3-Dichloropropene	4.60				5.00		92.0	70-130			
trans-1,3-Dichloropropene	4.63				5.00		92.5	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.13				5.00		103	70-130			
1,4-Dioxane	4.73				5.00		94.6	70-130			
Ethanol	3.98				5.00		79.6	70-130			
Ethyl Acetate	4.24				5.00		84.8	70-130			
Ethylbenzene	4.71				5.00		94.1	70-130			
4-Ethyltoluene	4.48				5.00		89.6	70-130			
Heptane	4.64				5.00		92.8	70-130			
Hexachlorobutadiene	3.11				5.00		62.3 *	70-130		L-03, V-34	
Hexane	4.81				5.00		96.3	70-130			
2-Hexanone (MBK)	4.48				5.00		89.5	70-130			
Isopropanol	3.88				5.00		77.6	70-130			
Methyl tert-Butyl Ether (MTBE)	4.98				5.00		99.7	70-130			
Methylene Chloride	4.61				5.00		92.2	70-130			
4-Methyl-2-pentanone (MIBK)	4.41				5.00		88.2	70-130			
Naphthalene	3.10				5.00		61.9 *	70-130		L-03	
Propene	4.69				5.00		93.8	70-130			
Styrene	4.12				5.00		82.4	70-130			
1,1,2,2-Tetrachloroethane	4.29				5.00		85.7	70-130			
Tetrachloroethylene	4.49				5.00		89.8	70-130			
Tetrahydrofuran	4.45				5.00		89.0	70-130			
Toluene	4.74				5.00		94.8	70-130			
1,2,4-Trichlorobenzene	2.99				5.00		59.9 *	70-130		L-03	
1,1,1-Trichloroethane	4.50				5.00		90.0	70-130			
1,1,2-Trichloroethane	4.76				5.00		95.1	70-130			
Trichloroethylene	4.59				5.00		91.8	70-130			
Trichlorofluoromethane (Freon 11)	5.46				5.00		109	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.56				5.00		111	70-130			
1,2,4-Trimethylbenzene	4.40				5.00		87.9	70-130			
1,3,5-Trimethylbenzene	4.89				5.00		97.7	70-130			
Vinyl Acetate	4.53				5.00		90.6	70-130			
Vinyl Chloride	5.12				5.00		102	70-130			
m&p-Xylene	9.85				10.0		98.5	70-130			
o-Xylene	4.81				5.00		96.2	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.02</i>				<i>8.00</i>		<i>100</i>	<i>70-130</i>			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B325901 - TO-15 Prep
Blank (B325901-BLK1)

Prepared & Analyzed: 12/14/22

Benzene	ND	0.020									
Naphthalene	0.024	0.020									B-07, L-03
Toluene	ND	0.020									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.60</i>				<i>8.00</i>		<i>95.0</i>	<i>70-130</i>			

LCS (B325901-BS1)

Prepared & Analyzed: 12/14/22

Benzene	5.14				5.00		103	70-130			
Naphthalene	3.22				5.00		64.3 *	70-130			B, L-03
Toluene	5.16				5.00		103	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.84</i>				<i>8.00</i>		<i>98.0</i>	<i>70-130</i>			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S080302-ICV1)			Lab File ID: J22A0337018.D			Analyzed: 12/03/22 08:35			
Bromochloromethane (1)	460265	2.801	459868	2.801	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1200591	3.428	1177712	3.428	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1081405	5.038	1063705	5.039	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S080626-CCV1)			Lab File ID: J22A340004.D			Analyzed: 12/06/22 12:14			
Bromochloromethane (1)	395274	2.801	459868	2.801	86	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1123464	3.428	1177712	3.428	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1023540	5.038	1063705	5.039	96	60 - 140	-0.0010	+/-0.50	
LCS (B325701-BS1)			Lab File ID: J22A340005.D			Analyzed: 12/06/22 12:39			
Bromochloromethane (1)	384720	2.801	395274	2.801	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1106650	3.428	1123464	3.428	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	996328	5.043	1023540	5.038	97	60 - 140	0.0050	+/-0.50	
Blank (B325701-BLK1)			Lab File ID: J22A340010.D			Analyzed: 12/06/22 14:57			
Bromochloromethane (1)	374265	2.784	395274	2.801	95	60 - 140	-0.0170	+/-0.50	
1,4-Difluorobenzene (1)	1034234	3.416	1123464	3.428	92	60 - 140	-0.0120	+/-0.50	
Chlorobenzene-d5 (1)	944516	5.035	1023540	5.038	92	60 - 140	-0.0030	+/-0.50	
R03_INT2 (22K3525-01)			Lab File ID: J22A340012.D			Analyzed: 12/06/22 18:41			
Bromochloromethane (1)	390744	2.79	395274	2.801	99	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1080051	3.417	1123464	3.428	96	60 - 140	-0.0110	+/-0.50	
Chlorobenzene-d5 (1)	962517	5.037	1023540	5.038	94	60 - 140	-0.0010	+/-0.50	
R03_INT1 (22K3525-02)			Lab File ID: J22A340013.D			Analyzed: 12/06/22 19:12			
Bromochloromethane (1)	387568	2.79	395274	2.801	98	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1103851	3.422	1123464	3.428	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	985252	5.037	1023540	5.038	96	60 - 140	-0.0010	+/-0.50	
R03_DW1 (22K3525-03)			Lab File ID: J22A340014.D			Analyzed: 12/06/22 19:44			
Bromochloromethane (1)	388426	2.79	395274	2.801	98	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1081750	3.423	1123464	3.428	96	60 - 140	-0.0050	+/-0.50	
Chlorobenzene-d5 (1)	977430	5.038	1023540	5.038	95	60 - 140	0.0000	+/-0.50	
R03_DWZ-1 (22K3525-04)			Lab File ID: J22A340015.D			Analyzed: 12/06/22 20:16			
Bromochloromethane (1)	389325	2.79	395274	2.801	98	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1075117	3.417	1123464	3.428	96	60 - 140	-0.0110	+/-0.50	
Chlorobenzene-d5 (1)	969914	5.037	1023540	5.038	95	60 - 140	-0.0010	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
R03_DWZ-2 (22K3525-05)									
Lab File ID: J22A340016.D				Analyzed: 12/06/22 20:47					
Bromochloromethane (1)	382111	2.79	395274	2.801	97	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1045420	3.422	1123464	3.428	93	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	950330	5.037	1023540	5.038	93	60 - 140	-0.0010	+/-0.50	
R03_UW (22K3525-06)									
Lab File ID: J22A340017.D				Analyzed: 12/06/22 21:18					
Bromochloromethane (1)	390554	2.79	395274	2.801	99	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1065543	3.422	1123464	3.428	95	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	968315	5.037	1023540	5.038	95	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S080677-CCV1)									
Lab File ID: J22A348004.D				Analyzed: 12/14/22 12:12					
Bromochloromethane (1)	450596	2.801	459868	2.801	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1274643	3.428	1177712	3.428	108	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1128965	5.039	1063705	5.039	106	60 - 140	0.0000	+/-0.50	
LCS (B325901-BS1)									
Lab File ID: J22A348005.D				Analyzed: 12/14/22 12:37					
Bromochloromethane (1)	457497	2.801	450596	2.801	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1296968	3.428	1274643	3.428	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1141821	5.039	1128965	5.039	101	60 - 140	0.0000	+/-0.50	
Blank (B325901-BLK1)									
Lab File ID: J22A348008.D				Analyzed: 12/14/22 14:05					
Bromochloromethane (1)	440143	2.79	450596	2.801	98	60 - 140	-0.0110	+/-0.50	
1,4-Difluorobenzene (1)	1180452	3.422	1274643	3.428	93	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1052114	5.036	1128965	5.039	93	60 - 140	-0.0030	+/-0.50	
R03_INT1 (22K3525-02RE1)									
Lab File ID: J22A348009.D				Analyzed: 12/14/22 14:29					
Bromochloromethane (1)	458889	2.791	450596	2.801	102	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	1236534	3.422	1274643	3.428	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1084009	5.037	1128965	5.039	96	60 - 140	-0.0020	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S080626-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.55	1.032116	0.9398119		-8.9	30
Benzene	A	5.00	4.88	0.6962521	0.67945		-2.4	30
Benzyl chloride	A	5.00	5.30	0.5761045	0.6101319		5.9	30
Bromodichloromethane	A	5.00	4.93	0.567843	0.559763		-1.4	30
Bromoform	A	5.00	5.06	0.4767222	0.4826043		1.2	30
Bromomethane	A	5.00	5.62	0.5448882	0.6119664		12.3	30
1,3-Butadiene	A	5.00	5.17	0.4630172	0.4789427		3.4	30
2-Butanone (MEK)	A	5.00	4.90	1.088012	1.067217		-1.9	30
Carbon Disulfide	A	5.00	5.47	1.884119	2.061646		9.4	30
Carbon Tetrachloride	A	5.00	4.88	0.5397988	0.5263806		-2.5	30
Chlorobenzene	A	5.00	4.85	0.7450185	0.7228763		-3.0	30
Chloroethane	A	5.00	5.34	0.3310126	0.3537597		6.9	30
Chloroform	A	5.00	5.40	1.363653	1.472526		8.0	30
Chloromethane	A	5.00	4.76	0.5543863	0.5272616		-4.9	30
Cyclohexane	A	5.00	5.15	0.2817457	0.2901597		3.0	30
Dibromochloromethane	A	5.00	5.04	0.5685361	0.5732012		0.8	30
1,2-Dibromoethane (EDB)	A	5.00	4.96	0.50474	0.500503		-0.8	30
1,2-Dichlorobenzene	A	5.00	5.05	0.604848	0.6103883		0.9	30
1,3-Dichlorobenzene	A	5.00	5.30	0.655583	0.694895		6.0	30
1,4-Dichlorobenzene	A	5.00	4.92	0.6296439	0.6196002		-1.6	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.44	1.643714	1.787892		8.8	30
1,1-Dichloroethane	A	5.00	5.32	1.121121	1.19308		6.4	30
1,2-Dichloroethane	A	5.00	5.11	1.002185	1.023707		2.1	30
1,1-Dichloroethylene	A	5.00	5.26	1.17684	1.237343		5.1	30
cis-1,2-Dichloroethylene	A	5.00	5.23	0.8843401	0.924503		4.5	30
trans-1,2-Dichloroethylene	A	5.00	5.16	0.9442735	0.975283		3.3	30
1,2-Dichloropropane	A	5.00	4.64	0.2821164	0.2616693		-7.2	30
cis-1,3-Dichloropropene	A	5.00	5.01	0.400776	0.4012319		0.1	30
trans-1,3-Dichloropropene	A	5.00	4.95	0.3537848	0.3503692		-1.0	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.52	1.639508	1.811284		10.5	30
1,4-Dioxane	A	5.00	5.00	0.1415858	0.1417359		0.1	30
Ethanol	A	5.00	4.51	0.1759911	0.1585897		-9.9	30
Ethyl Acetate	A	5.00	4.68	0.1980954	0.1852204		-6.5	30
Ethylbenzene	A	5.00	5.04	1.215427	1.225643		0.8	30
4-Ethyltoluene	A	5.00	5.14	1.226482	1.261712		2.9	30
Heptane	A	5.00	4.75	0.2359411	0.2240713		-5.0	30
Hexachlorobutadiene	A	5.00	4.82	0.4402774	0.4246705		-3.5	30
Hexane	L	5.00	4.81	0.717826	0.6884136		-3.9	30

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CONTINUING CALIBRATION CHECK
EPA TO-15
S080626-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.89	0.5926727	0.5791227		-2.3	30
Isopropanol	A	5.00	4.82	1.086258	1.046209		-3.7	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.06	1.553618	1.572135		1.2	30
Methylene Chloride	A	5.00	4.59	0.8835862	0.8119249		-8.1	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.52	0.2311175	0.2088455		-9.6	30
Naphthalene	A	5.00	4.95	0.8775899	0.8694578		-0.9	30
Propene	A	5.00	4.83	0.3777909	0.364709		-3.5	30
Styrene	A	5.00	4.60	0.7316371	0.6735323		-7.9	30
1,1,2,2-Tetrachloroethane	A	5.00	4.94	0.7289953	0.7197343		-1.3	30
Tetrachloroethylene	A	5.00	4.79	0.4190246	0.401757		-4.1	30
Tetrahydrofuran	A	5.00	4.77	0.7392332	0.7055683		-4.6	30
Toluene	A	5.00	4.88	0.9595253	0.936813		-2.4	30
1,2,4-Trichlorobenzene	A	5.00	4.85	0.3518629	0.3415644		-2.9	30
1,1,1-Trichloroethane	A	5.00	4.73	0.5348868	0.5057358		-5.4	30
1,1,2-Trichloroethane	A	5.00	4.83	0.3348068	0.3233781		-3.4	30
Trichloroethylene	A	5.00	4.77	0.3387431	0.3230224		-4.6	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.48	1.707162	1.872686		9.7	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.52	1.390833	1.535579		10.4	30
1,2,4-Trimethylbenzene	A	5.00	5.29	1.010685	1.069266		5.8	30
1,3,5-Trimethylbenzene	A	5.00	5.51	0.9919636	1.093985		10.3	30
Vinyl Acetate	A	5.00	4.24	1.241368	1.051317		-15.3	30
Vinyl Chloride	A	5.00	5.20	0.632048	0.6578485		4.1	30
m&p-Xylene	A	10.0	10.6	0.9799166	1.040975		6.2	30
o-Xylene	A	5.00	5.14	0.9582822	0.9858304		2.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK
EPA TO-15
S080677-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	5.00	5.34	0.6962521	0.7438368		6.8	30
Naphthalene	A	5.00	5.14	0.8775899	0.9020184		2.8	30
Toluene	A	5.00	5.31	0.9595253	1.019088		6.2	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023

Phone: 413-525-2332
Fax: 413-525-6405
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CHAIN OF CUSTODY RECORD (AIR)

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

22K3525



Address: 500 Wood St, Pawtucket RI 02861
Phone: 800 553 5511

ICR

Project Location: CC BH

Project Number: 14777

Project Manager: R. Laak

Pace Quote Name/Number:

Invoice Recipient:

Sampled By: DP

7-Day ☐ 10-Day ☒
Due Date: _____

1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Format: PDF ☐ EXCEL ☐
Other: _____

CLP Like Data Pkg Required: ☐
Email To: _____
Fax To #: _____

ANALYSIS REQUESTED

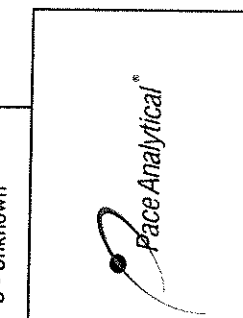
Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
		Beginning Date/Time	Ending Date/Time					Total Minutes Sampled	m ³ /min	L/min		
1	R03-INT2	11/22 12:18	11/23 10:46									
2	R03-INT1	11/23 12:54	11/23 11:07									
3	R03-DW1	11/22 13:40	11/23 11:32									
4	R03-DWZ-1	11/22 14:13	11/23 12:06									
5	R03-DWZ-2	11/22 14:51	11/23 12:42									
6	R03-UW											

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other



Special Requirements

MA MCP Required ☐
MCP Certification Form Required ☐
CT RCP Required ☐
RCP Certification Form Required ☐
Other ☐

Project Entity

Government ☐ Municipality ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Relinquished by: (signature)

Date/Time: 11/23 16:00

Received by: (signature)

Date/Time: 11/28 8:15

Relinquished by: (signature)

Date/Time:

Received by: (signature)

Date/Time:

NEIAC and AIHA-LAP, LLC Accredited

PCB ONLY ☐ Soxhlet ☐
☐ Chromatogram ☐ AIHA-LAP, LLC ☐
☐ Non Soxhlet ☐

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East Longmeadow, MA. 01028
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F: 413-525-6405
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Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air
Received By [Signature] Date 11/28 Time 8:15

How Were the samples received? In Cooler On Ice No Ice
In Box T Ambient Melted Ice
Were samples within Temperature Compliance? Within By Gun # Actual Temp -
2-6°C By Blank # Actual Temp -
Was Custody Seal In tact? NA Were Samples Tampered with? NA
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC Include all Pertinent Information? Client? T Analysis? T Sampler Name? T
Project? T ID's? T Collection Dates/Times? T
Are Sample Labels filled out and legible?
Are there Rushes? F Who was notified?
Samples are received within holding time? T
Proper Media Used? T Individually Certified Cans? F
Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans	<u>6</u>	<u>6L</u>			Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s					Tedlar		

Can #'s					Reg #'s				
2124					3523				
2125					3327				
2016					3462				
2010					3605				
1128					3604				
1118					3355				
Unused Media					Pufs/TO-17's				

Comments:

December 27, 2022

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: Burns Harbor, IN
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22L1532

Enclosed are results of analyses for samples as received by the laboratory on December 9, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 12/27/2022

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L1532

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Burns Harbor, IN

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
R04-INT2	22L1532-01	Air		EPA TO-15	
R04-INT1	22L1532-02	Air		EPA TO-15	
R04-DW1	22L1532-03	Air		EPA TO-15	
R04-DW2	22L1532-04	Air		EPA TO-15	
R04-DW2-D	22L1532-05	Air		EPA TO-15	
R04-UW	22L1532-06	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

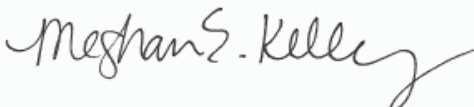
Analyte & Sample(s) Qualified:

Ethanol

22L1532-01[R04-INT2], 22L1532-02[R04-INT1], 22L1532-03[R04-DW1], 22L1532-04[R04-DW2], 22L1532-05[R04-DW2-D], 22L1532-06[R04-UW], B326868-BLK1, B326868-BS1, B326869-BLK1, B326869-BS1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
 Date Received: 12/9/2022
Field Sample #: R04-INT2
Sample ID: 22L1532-01
 Sample Matrix: Air
 Sampled: 12/7/2022 11:33

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2570
 Canister Size: 6 liter
 Flow Controller ID: 3532
 Sample Type: 24 hr

Work Order: 22L1532
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	5.2	1.4		12	3.3	0.702	12/22/22 1:34		CMR
Benzene	40	0.20		130	0.64	4	12/22/22 18:34		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 1:34		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 1:34		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 1:34		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
1,3-Butadiene	0.62	0.035		1.4	0.078	0.702	12/22/22 1:34		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 1:34		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 1:34		CMR
Carbon Tetrachloride	0.071	0.035		0.45	0.22	0.702	12/22/22 1:34		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 1:34		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 1:34		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 1:34		CMR
Chloromethane	0.44	0.070		0.90	0.14	0.702	12/22/22 1:34		CMR
Cyclohexane	0.072	0.035		0.25	0.12	0.702	12/22/22 1:34		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 1:34		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 1:34		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 1:34		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 1:34		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 1:34		CMR
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.5	0.17	0.702	12/22/22 1:34		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 1:34		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 1:34		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 1:34		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 1:34		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 1:34		CMR
Ethanol	5.0	1.4	L-03	9.4	2.6	0.702	12/22/22 1:34		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 1:34		CMR
Ethylbenzene	0.081	0.035		0.35	0.15	0.702	12/22/22 1:34		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 1:34		CMR
Heptane	0.053	0.035		0.22	0.14	0.702	12/22/22 1:34		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 1:34		CMR

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-INT2
Sample ID: 22L1532-01
Sample Matrix: Air
Sampled: 12/7/2022 11:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2570
Canister Size: 6 liter
Flow Controller ID: 3532
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22 1:34		CMR
2-Hexanone (MBK)	0.069	0.035		0.28	0.14	0.702	12/22/22 1:34		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22 1:34		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22 1:34		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22 1:34		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22 1:34		CMR
Naphthalene	46	0.20		240	1.0	4	12/22/22 18:34		CMR
Propene	4.7	1.4		8.1	2.4	0.702	12/22/22 1:34		CMR
Styrene	2.1	0.035		9.0	0.15	0.702	12/22/22 1:34		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22 1:34		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22 1:34		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22 1:34		CMR
Toluene	9.9	0.035		37	0.13	0.702	12/22/22 1:34		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22 1:34		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 1:34		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 1:34		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22 1:34		CMR
Trichlorofluoromethane (Freon 11)	0.26	0.14		1.4	0.79	0.702	12/22/22 1:34		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22 1:34		CMR
1,2,4-Trimethylbenzene	0.67	0.035		3.3	0.17	0.702	12/22/22 1:34		CMR
1,3,5-Trimethylbenzene	0.36	0.035		1.8	0.17	0.702	12/22/22 1:34		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22 1:34		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22 1:34		CMR
m&p-Xylene	3.4	0.070		15	0.30	0.702	12/22/22 1:34		CMR
o-Xylene	0.72	0.035		3.1	0.15	0.702	12/22/22 1:34		CMR
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	117			70-130			12/22/22 18:34		
4-Bromofluorobenzene (1)	116			70-130			12/22/22 1:34		

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-INT1
Sample ID: 22L1532-02
Sample Matrix: Air
Sampled: 12/7/2022 11:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 1043
Canister Size: 6 liter
Flow Controller ID: 3534
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	4.0	1.4		9.5	3.3	0.702	12/22/22 2:21		CMR
Benzene	13	0.035		42	0.11	0.702	12/22/22 2:21		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 2:21		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 2:21		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 2:21		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
1,3-Butadiene	0.20	0.035		0.45	0.078	0.702	12/22/22 2:21		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 2:21		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 2:21		CMR
Carbon Tetrachloride	0.069	0.035		0.44	0.22	0.702	12/22/22 2:21		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 2:21		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 2:21		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 2:21		CMR
Chloromethane	0.46	0.070		0.94	0.14	0.702	12/22/22 2:21		CMR
Cyclohexane	0.066	0.035		0.23	0.12	0.702	12/22/22 2:21		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 2:21		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 2:21		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 2:21		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 2:21		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 2:21		CMR
Dichlorodifluoromethane (Freon 12)	0.25	0.035		1.2	0.17	0.702	12/22/22 2:21		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 2:21		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 2:21		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 2:21		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 2:21		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 2:21		CMR
Ethanol	3.4	1.4	L-03	6.4	2.6	0.702	12/22/22 2:21		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 2:21		CMR
Ethylbenzene	0.041	0.035		0.18	0.15	0.702	12/22/22 2:21		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 2:21		CMR
Heptane	0.055	0.035		0.22	0.14	0.702	12/22/22 2:21		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 2:21		CMR

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-INT1
Sample ID: 22L1532-02
Sample Matrix: Air
Sampled: 12/7/2022 11:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 1043
Canister Size: 6 liter
Flow Controller ID: 3534
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22 2:21		CMR
2-Hexanone (MBK)	0.044	0.035		0.18	0.14	0.702	12/22/22 2:21		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22 2:21		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22 2:21		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22 2:21		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22 2:21		CMR
Naphthalene	7.7	0.035		40	0.18	0.702	12/22/22 2:21		CMR
Propene	1.6	1.4		2.8	2.4	0.702	12/22/22 2:21		CMR
Styrene	0.44	0.035		1.9	0.15	0.702	12/22/22 2:21		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22 2:21		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22 2:21		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22 2:21		CMR
Toluene	2.9	0.035		11	0.13	0.702	12/22/22 2:21		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22 2:21		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 2:21		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 2:21		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22 2:21		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	12/22/22 2:21		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22 2:21		CMR
1,2,4-Trimethylbenzene	0.14	0.035		0.67	0.17	0.702	12/22/22 2:21		CMR
1,3,5-Trimethylbenzene	0.067	0.035		0.33	0.17	0.702	12/22/22 2:21		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22 2:21		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22 2:21		CMR
m&p-Xylene	0.78	0.070		3.4	0.30	0.702	12/22/22 2:21		CMR
o-Xylene	0.17	0.035		0.72	0.15	0.702	12/22/22 2:21		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	116	70-130	12/22/22 2:21

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-DW1
Sample ID: 22L1532-03
Sample Matrix: Air
Sampled: 12/7/2022 12:17

Sample Description/Location:
Sub Description/Location:
Canister ID: 1992
Canister Size: 6 liter
Flow Controller ID: 3075
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	5.7	1.4		14	3.3	0.702	12/22/22 3:09		CMR
Benzene	0.26	0.035		0.83	0.11	0.702	12/22/22 3:09		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 3:09		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 3:09		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 3:09		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/22/22 3:09		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 3:09		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 3:09		CMR
Carbon Tetrachloride	0.069	0.035		0.44	0.22	0.702	12/22/22 3:09		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 3:09		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 3:09		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 3:09		CMR
Chloromethane	0.40	0.070		0.83	0.14	0.702	12/22/22 3:09		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/22/22 3:09		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 3:09		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 3:09		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:09		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:09		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:09		CMR
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.4	0.17	0.702	12/22/22 3:09		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 3:09		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 3:09		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 3:09		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 3:09		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 3:09		CMR
Ethanol	3.2	1.4	L-03	6.1	2.6	0.702	12/22/22 3:09		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 3:09		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/22/22 3:09		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 3:09		CMR
Heptane	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 3:09		CMR

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-DW1
Sample ID: 22L1532-03
Sample Matrix: Air
Sampled: 12/7/2022 12:17

Sample Description/Location:
Sub Description/Location:
Canister ID: 1992
Canister Size: 6 liter
Flow Controller ID: 3075
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22 3:09		CMR
2-Hexanone (MBK)	0.069	0.035		0.28	0.14	0.702	12/22/22 3:09		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22 3:09		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22 3:09		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22 3:09		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22 3:09		CMR
Naphthalene	0.096	0.035		0.50	0.18	0.702	12/22/22 3:09		CMR
Propene	ND	1.4		ND	2.4	0.702	12/22/22 3:09		CMR
Styrene	ND	0.035		ND	0.15	0.702	12/22/22 3:09		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22 3:09		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22 3:09		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22 3:09		CMR
Toluene	0.15	0.035		0.56	0.13	0.702	12/22/22 3:09		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22 3:09		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 3:09		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 3:09		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22 3:09		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	12/22/22 3:09		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22 3:09		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 3:09		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 3:09		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22 3:09		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22 3:09		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/22/22 3:09		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/22/22 3:09		CMR

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	115	70-130	12/22/22 3:09	

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
 Date Received: 12/9/2022
Field Sample #: R04-DW2
Sample ID: 22L1532-04
 Sample Matrix: Air
 Sampled: 12/7/2022 12:48

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1448
 Canister Size: 6 liter
 Flow Controller ID: 3254
 Sample Type: 24 hr

Work Order: 22L1532
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.8	1.4		6.7	3.3	0.702	12/22/22 3:57		CMR
Benzene	0.15	0.035		0.49	0.11	0.702	12/22/22 3:57		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 3:57		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 3:57		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 3:57		CMR
Bromomethane	0.048	0.035		0.19	0.14	0.702	12/22/22 3:57		CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/22/22 3:57		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 3:57		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 3:57		CMR
Carbon Tetrachloride	0.071	0.035		0.45	0.22	0.702	12/22/22 3:57		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 3:57		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 3:57		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 3:57		CMR
Chloromethane	0.45	0.070		0.93	0.14	0.702	12/22/22 3:57		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/22/22 3:57		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 3:57		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 3:57		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:57		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:57		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 3:57		CMR
Dichlorodifluoromethane (Freon 12)	0.27	0.035		1.3	0.17	0.702	12/22/22 3:57		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 3:57		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 3:57		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 3:57		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 3:57		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 3:57		CMR
Ethanol	2.1	1.4	L-03	4.0	2.6	0.702	12/22/22 3:57		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 3:57		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/22/22 3:57		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 3:57		CMR
Heptane	0.041	0.035		0.17	0.14	0.702	12/22/22 3:57		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 3:57		CMR

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-DW2
Sample ID: 22L1532-04
Sample Matrix: Air
Sampled: 12/7/2022 12:48

Sample Description/Location:
Sub Description/Location:
Canister ID: 1448
Canister Size: 6 liter
Flow Controller ID: 3254
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22 3:57		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22 3:57		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22 3:57		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22 3:57		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22 3:57		CMR
Naphthalene	ND	0.035		ND	0.18	0.702	12/22/22 3:57		CMR
Propene	ND	1.4		ND	2.4	0.702	12/22/22 3:57		CMR
Styrene	ND	0.035		ND	0.15	0.702	12/22/22 3:57		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22 3:57		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22 3:57		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22 3:57		CMR
Toluene	0.11	0.035		0.42	0.13	0.702	12/22/22 3:57		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22 3:57		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 3:57		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 3:57		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22 3:57		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	12/22/22 3:57		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22 3:57		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 3:57		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 3:57		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22 3:57		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22 3:57		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/22/22 3:57		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/22/22 3:57		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	115	70-130	12/22/22 3:57

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-DW2-D
Sample ID: 22L1532-05
Sample Matrix: Air
Sampled: 12/7/2022 12:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 1866
Canister Size: 6 liter
Flow Controller ID: 3715
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	3.6	1.4		8.6	3.3	0.702	12/22/22 4:45		CMR
Benzene	0.16	0.035		0.50	0.11	0.702	12/22/22 4:45		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 4:45		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 4:45		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 4:45		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/22/22 4:45		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 4:45		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 4:45		CMR
Carbon Tetrachloride	0.072	0.035		0.45	0.22	0.702	12/22/22 4:45		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 4:45		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 4:45		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 4:45		CMR
Chloromethane	0.47	0.070		0.97	0.14	0.702	12/22/22 4:45		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/22/22 4:45		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 4:45		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 4:45		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 4:45		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 4:45		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 4:45		CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	12/22/22 4:45		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 4:45		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 4:45		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 4:45		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 4:45		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 4:45		CMR
Ethanol	2.8	1.4	L-03	5.3	2.6	0.702	12/22/22 4:45		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 4:45		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/22/22 4:45		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 4:45		CMR
Heptane	ND	0.035		ND	0.14	0.702	12/22/22 4:45		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 4:45		CMR

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
 Date Received: 12/9/2022
Field Sample #: R04-DW2-D
Sample ID: 22L1532-05
 Sample Matrix: Air
 Sampled: 12/7/2022 12:46

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1866
 Canister Size: 6 liter
 Flow Controller ID: 3715
 Sample Type: 24 hr

Work Order: 22L1532
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22	4:45	CMR
2-Hexanone (MBK)	0.048	0.035		0.20	0.14	0.702	12/22/22	4:45	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22	4:45	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22	4:45	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22	4:45	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22	4:45	CMR
Naphthalene	ND	0.035		ND	0.18	0.702	12/22/22	4:45	CMR
Propene	ND	1.4		ND	2.4	0.702	12/22/22	4:45	CMR
Styrene	ND	0.035		ND	0.15	0.702	12/22/22	4:45	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22	4:45	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22	4:45	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22	4:45	CMR
Toluene	0.12	0.035		0.45	0.13	0.702	12/22/22	4:45	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22	4:45	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22	4:45	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22	4:45	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22	4:45	CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	12/22/22	4:45	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22	4:45	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22	4:45	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22	4:45	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22	4:45	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22	4:45	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/22/22	4:45	CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/22/22	4:45	CMR

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	112	70-130	12/22/22	4:45

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ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-UW
Sample ID: 22L1532-06
Sample Matrix: Air
Sampled: 12/7/2022 13:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 1319
Canister Size: 6 liter
Flow Controller ID: 3716
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.4	1.4		5.8	3.3	0.702	12/22/22 5:34		CMR
Benzene	0.28	0.035		0.91	0.11	0.702	12/22/22 5:34		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	12/22/22 5:34		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	12/22/22 5:34		CMR
Bromoform	ND	0.035		ND	0.36	0.702	12/22/22 5:34		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	12/22/22 5:34		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	12/22/22 5:34		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	12/22/22 5:34		CMR
Carbon Tetrachloride	0.072	0.035		0.45	0.22	0.702	12/22/22 5:34		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	12/22/22 5:34		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	12/22/22 5:34		CMR
Chloroform	ND	0.035		ND	0.17	0.702	12/22/22 5:34		CMR
Chloromethane	0.50	0.070		1.0	0.14	0.702	12/22/22 5:34		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	12/22/22 5:34		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	12/22/22 5:34		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	12/22/22 5:34		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 5:34		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 5:34		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	12/22/22 5:34		CMR
Dichlorodifluoromethane (Freon 12)	0.30	0.035		1.5	0.17	0.702	12/22/22 5:34		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	12/22/22 5:34		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 5:34		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	12/22/22 5:34		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	12/22/22 5:34		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	12/22/22 5:34		CMR
Ethanol	6.0	1.4	L-03	11	2.6	0.702	12/22/22 5:34		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	12/22/22 5:34		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	12/22/22 5:34		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	12/22/22 5:34		CMR
Heptane	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	12/22/22 5:34		CMR

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Burns Harbor, IN
Date Received: 12/9/2022
Field Sample #: R04-UW
Sample ID: 22L1532-06
Sample Matrix: Air
Sampled: 12/7/2022 13:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 1319
Canister Size: 6 liter
Flow Controller ID: 3716
Sample Type: 24 hr

Work Order: 22L1532
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	12/22/22 5:34		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	12/22/22 5:34		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	12/22/22 5:34		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	12/22/22 5:34		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	12/22/22 5:34		CMR
Naphthalene	0.044	0.035		0.23	0.18	0.702	12/22/22 5:34		CMR
Propene	ND	1.4		ND	2.4	0.702	12/22/22 5:34		CMR
Styrene	ND	0.035		ND	0.15	0.702	12/22/22 5:34		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	12/22/22 5:34		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	12/22/22 5:34		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	12/22/22 5:34		CMR
Toluene	0.15	0.035		0.57	0.13	0.702	12/22/22 5:34		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	12/22/22 5:34		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 5:34		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	12/22/22 5:34		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	12/22/22 5:34		CMR
Trichlorofluoromethane (Freon 11)	0.26	0.14		1.5	0.79	0.702	12/22/22 5:34		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	12/22/22 5:34		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 5:34		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	12/22/22 5:34		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	12/22/22 5:34		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	12/22/22 5:34		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	12/22/22 5:34		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	12/22/22 5:34		CMR

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	115	70-130	12/22/22 5:34	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22L1532-01 [R04-INT2]	B326868	1.5	1	N/A	1000	400	855	12/21/22
22L1532-02 [R04-INT1]	B326868	1.5	1	N/A	1000	400	855	12/21/22
22L1532-03 [R04-DW1]	B326868	1.5	1	N/A	1000	400	855	12/21/22
22L1532-04 [R04-DW2]	B326868	1.5	1	N/A	1000	400	855	12/21/22
22L1532-05 [R04-DW2-D]	B326868	1.5	1	N/A	1000	400	855	12/21/22
22L1532-06 [R04-UW]	B326868	1.5	1	N/A	1000	400	855	12/21/22

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22L1532-01RE1 [R04-INT2]	B326869	1.5	1	N/A	1000	400	150	12/22/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	

Batch B326868 - TO-15 Prep
Blank (B326868-BLK1)

Prepared & Analyzed: 12/21/22

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

L-03

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B326868 - TO-15 Prep
Blank (B326868-BLK1)

Prepared & Analyzed: 12/21/22

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.13</i>	<i>8.00</i>	<i>114</i>	<i>70-130</i>
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LCS (B326868-BS1)

Prepared & Analyzed: 12/21/22

Acetone	5.69	5.00	114	70-130
Benzene	4.77	5.00	95.3	70-130
Benzyl chloride	4.85	5.00	97.0	70-130
Bromodichloromethane	4.78	5.00	95.7	70-130
Bromoform	5.54	5.00	111	70-130
Bromomethane	4.96	5.00	99.2	70-130
1,3-Butadiene	4.46	5.00	89.2	70-130
2-Butanone (MEK)	4.80	5.00	96.0	70-130
Carbon Disulfide	5.29	5.00	106	70-130
Carbon Tetrachloride	5.47	5.00	109	70-130
Chlorobenzene	4.64	5.00	92.8	70-130
Chloroethane	5.11	5.00	102	70-130
Chloroform	5.34	5.00	107	70-130
Chloromethane	4.28	5.00	85.5	70-130
Cyclohexane	4.73	5.00	94.6	70-130
Dibromochloromethane	5.29	5.00	106	70-130
1,2-Dibromoethane (EDB)	4.59	5.00	91.8	70-130
1,2-Dichlorobenzene	4.63	5.00	92.6	70-130
1,3-Dichlorobenzene	5.04	5.00	101	70-130
1,4-Dichlorobenzene	4.98	5.00	99.5	70-130
Dichlorodifluoromethane (Freon 12)	5.28	5.00	106	70-130
1,1-Dichloroethane	5.25	5.00	105	70-130
1,2-Dichloroethane	5.45	5.00	109	70-130
1,1-Dichloroethylene	5.43	5.00	109	70-130
cis-1,2-Dichloroethylene	4.91	5.00	98.2	70-130
trans-1,2-Dichloroethylene	5.01	5.00	100	70-130
1,2-Dichloropropane	4.65	5.00	92.9	70-130

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B326868 - TO-15 Prep											
LCS (B326868-BS1)					Prepared & Analyzed: 12/21/22						
cis-1,3-Dichloropropene	4.54				5.00		90.8	70-130			L-03
trans-1,3-Dichloropropene	4.64				5.00		92.8	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.62				5.00		92.4	70-130			
1,4-Dioxane	4.39				5.00		87.8	70-130			
Ethanol	3.44				5.00		68.7	* 70-130			
Ethyl Acetate	5.20				5.00		104	70-130			
Ethylbenzene	4.63				5.00		92.7	70-130			
4-Ethyltoluene	4.83				5.00		96.7	70-130			
Heptane	4.60				5.00		92.1	70-130			
Hexachlorobutadiene	4.52				5.00		90.5	70-130			
Hexane	5.53				5.00		111	70-130			
2-Hexanone (MBK)	4.52				5.00		90.3	70-130			
Isopropanol	4.17				5.00		83.4	70-130			
Methyl tert-Butyl Ether (MTBE)	5.07				5.00		101	70-130			
Methylene Chloride	4.55				5.00		91.0	70-130			
4-Methyl-2-pentanone (MIBK)	4.59				5.00		91.7	70-130			
Naphthalene	3.98				5.00		79.5	70-130			
Propene	4.02				5.00		80.3	70-130			
Styrene	4.65				5.00		93.0	70-130			
1,1,2,2-Tetrachloroethane	4.40				5.00		87.9	70-130			
Tetrachloroethylene	5.07				5.00		101	70-130			
Tetrahydrofuran	4.98				5.00		99.7	70-130			
Toluene	4.62				5.00		92.3	70-130			
1,2,4-Trichlorobenzene	3.88				5.00		77.7	70-130			
1,1,1-Trichloroethane	4.79				5.00		95.8	70-130			
1,1,2-Trichloroethane	4.71				5.00		94.3	70-130			
Trichloroethylene	4.80				5.00		95.9	70-130			
Trichlorofluoromethane (Freon 11)	5.95				5.00		119	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.21				5.00		104	70-130			
1,2,4-Trimethylbenzene	4.66				5.00		93.2	70-130			
1,3,5-Trimethylbenzene	4.84				5.00		96.8	70-130			
Vinyl Acetate	4.25				5.00		85.0	70-130			
Vinyl Chloride	4.78				5.00		95.6	70-130			
m&p-Xylene	9.78				10.0		97.8	70-130			
o-Xylene	4.82				5.00		96.4	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.12				8.00		114	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B326869 - TO-15 Prep
Blank (B326869-BLK1)

Prepared & Analyzed: 12/22/22

Acetone	ND	0.80									
Benzene	ND	0.020									
Ethanol	ND	0.80									L-03
Naphthalene	ND	0.020									
Toluene	ND	0.020									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.00</i>				<i>8.00</i>		<i>113</i>	<i>70-130</i>			

LCS (B326869-BS1)

Prepared & Analyzed: 12/22/22

Acetone	5.68				5.00		114	70-130			
Benzene	4.48				5.00		89.6	70-130			
Ethanol	3.31				5.00		66.3 *	70-130			L-03
Naphthalene	3.92				5.00		78.4	70-130			
Toluene	4.43				5.00		88.6	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.28</i>				<i>8.00</i>		<i>116</i>	<i>70-130</i>			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S076501-ICV1)			Lab File ID: G22A256016.D			Analyzed: 09/13/22 22:00			
Bromochloromethane (1)	1141026	8.307	1123386	8.307	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2751702	10.081	2650535	10.081	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2471195	14.446	2407851	14.446	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S081169-CCV1)			Lab File ID: G22A355004.D			Analyzed: 12/21/22 18:47			
Bromochloromethane (1)	834718	8.301	1123386	8.307	74	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2288169	10.075	2650535	10.081	86	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2023868	14.44	2407851	14.446	84	60 - 140	-0.0060	+/-0.50	
LCS (B326868-BS1)			Lab File ID: G22A355005.D			Analyzed: 12/21/22 19:27			
Bromochloromethane (1)	786823	8.301	834718	8.301	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2014677	10.075	2288169	10.075	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1821227	14.44	2023868	14.44	90	60 - 140	0.0000	+/-0.50	
Blank (B326868-BLK1)			Lab File ID: G22A355008.D			Analyzed: 12/21/22 22:17			
Bromochloromethane (1)	793165	8.307	834718	8.301	95	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2060027	10.075	2288169	10.075	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1906271	14.44	2023868	14.44	94	60 - 140	0.0000	+/-0.50	
R04-INT2 (22L1532-01)			Lab File ID: G22A355012.D			Analyzed: 12/22/22 01:34			
Bromochloromethane (1)	798979	8.301	834718	8.301	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2196699	10.075	2288169	10.075	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2021497	14.44	2023868	14.44	100	60 - 140	0.0000	+/-0.50	
R04-INT1 (22L1532-02)			Lab File ID: G22A355013.D			Analyzed: 12/22/22 02:21			
Bromochloromethane (1)	859427	8.301	834718	8.301	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2317310	10.075	2288169	10.075	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2128864	14.44	2023868	14.44	105	60 - 140	0.0000	+/-0.50	
R04-DW1 (22L1532-03)			Lab File ID: G22A355014.D			Analyzed: 12/22/22 03:09			
Bromochloromethane (1)	870427	8.307	834718	8.301	104	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2340260	10.075	2288169	10.075	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2187309	14.44	2023868	14.44	108	60 - 140	0.0000	+/-0.50	
R04-DW2 (22L1532-04)			Lab File ID: G22A355015.D			Analyzed: 12/22/22 03:57			
Bromochloromethane (1)	825709	8.301	834718	8.301	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2190331	10.075	2288169	10.075	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2041292	14.44	2023868	14.44	101	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
R04-DW2-D (22L1532-05) Lab File ID: G22A355016.D Analyzed: 12/22/22 04:45									
Bromochloromethane (1)	795996	8.301	834718	8.301	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2060060	10.075	2288169	10.075	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1956324	14.44	2023868	14.44	97	60 - 140	0.0000	+/-0.50	
R04-UW (22L1532-06) Lab File ID: G22A355017.D Analyzed: 12/22/22 05:34									
Bromochloromethane (1)	839307	8.301	834718	8.301	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2238825	10.075	2288169	10.075	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2091865	14.44	2023868	14.44	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S081170-CCV1) Lab File ID: G22A356004.D Analyzed: 12/22/22 13:37									
Bromochloromethane (1)	1014683	8.307	1123386	8.307	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2874181	10.075	2650535	10.081	108	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2612777	14.44	2407851	14.446	109	60 - 140	-0.0060	+/-0.50	
LCS (B326869-BS1) Lab File ID: G22A356005.D Analyzed: 12/22/22 14:17									
Bromochloromethane (1)	1038719	8.301	1014683	8.307	102	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2880656	10.075	2874181	10.075	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2635540	14.44	2612777	14.44	101	60 - 140	0.0000	+/-0.50	
Blank (B326869-BLK1) Lab File ID: G22A356010.D Analyzed: 12/22/22 17:54									
Bromochloromethane (1)	849098	8.307	1014683	8.307	84	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2136926	10.075	2874181	10.075	74	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1983541	14.44	2612777	14.44	76	60 - 140	0.0000	+/-0.50	
R04-INT2 (22L1532-01RE1) Lab File ID: G22A356011.D Analyzed: 12/22/22 18:34									
Bromochloromethane (1)	894598	8.307	1014683	8.307	88	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2383157	10.075	2874181	10.075	83	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2206176	14.446	2612777	14.44	84	60 - 140	0.0060	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S081169-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	6.03	1.084004	1.307448		20.6	30
Benzene	A	5.00	4.72	0.9129288	0.8611196		-5.7	30
Benzyl chloride	A	5.00	5.36	1.030942	1.10474		7.2	30
Bromodichloromethane	A	5.00	4.82	0.6953811	0.6696862		-3.7	30
Bromoform	A	5.00	5.97	0.5656468	0.6753057		19.4	30
Bromomethane	A	5.00	5.38	0.6009459	0.6462714		7.5	30
1,3-Butadiene	A	5.00	4.86	0.5443004	0.5284736		-2.9	30
2-Butanone (MEK)	A	5.00	4.88	1.507683	1.472954		-2.3	30
Carbon Disulfide	A	5.00	5.44	2.02748	2.204895		8.8	30
Carbon Tetrachloride	A	5.00	5.51	0.5479998	0.6040106		10.2	30
Chlorobenzene	A	5.00	4.91	0.8809329	0.8650034		-1.8	30
Chloroethane	A	5.00	5.30	0.3452967	0.3658452		6.0	30
Chloroform	A	5.00	5.59	1.561184	1.74419		11.7	30
Chloromethane	A	5.00	4.44	0.6821899	0.6056522		-11.2	30
Cyclohexane	A	5.00	4.77	0.3600845	0.3436222		-4.6	30
Dibromochloromethane	A	5.00	5.54	0.6396581	0.7092075		10.9	30
1,2-Dibromoethane (EDB)	A	5.00	4.82	0.6171207	0.5942324		-3.7	30
1,2-Dichlorobenzene	A	5.00	5.21	0.6937094	0.7234124		4.3	30
1,3-Dichlorobenzene	A	5.00	5.63	0.7409581	0.83409		12.6	30
1,4-Dichlorobenzene	A	5.00	5.52	0.7218155	0.797033		10.4	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.66	1.62808	1.842653		13.2	30
1,1-Dichloroethane	A	5.00	5.43	1.342742	1.457364		8.5	30
1,2-Dichloroethane	A	5.00	5.63	0.9627523	1.084434		12.6	30
1,1-Dichloroethylene	A	5.00	5.53	1.140142	1.261375		10.6	30
cis-1,2-Dichloroethylene	A	5.00	5.12	0.9670963	0.9898088		2.3	30
trans-1,2-Dichloroethylene	A	5.00	5.22	1.001825	1.045611		4.4	30
1,2-Dichloropropane	A	5.00	4.48	0.3567989	0.3196309		-10.4	30
cis-1,3-Dichloropropene	A	5.00	4.61	0.5092852	0.4695227		-7.8	30
trans-1,3-Dichloropropene	A	5.00	4.54	0.4570981	0.4152728		-9.2	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.28	1.73998	1.837145		5.6	30
1,4-Dioxane	A	5.00	4.46	0.1857641	0.1656626		-10.8	30
Ethanol	A	5.00	4.14	0.2343264	0.1941619		-17.1	30
Ethyl Acetate	A	5.00	5.53	0.2308163	0.2551856		10.6	30
Ethylbenzene	A	5.00	4.90	1.455024	1.426665		-1.9	30
4-Ethyltoluene	A	5.00	5.13	1.413771	1.450524		2.6	30
Heptane	A	5.00	4.65	0.2850308	0.2651797		-7.0	30
Hexachlorobutadiene	A	5.00	5.86	0.4677459	0.5481282		17.2	30
Hexane	A	5.00	5.73	0.8985394	0.966414		14.6	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S081169-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.53	0.7712864	0.6988717		-9.4	30
Isopropanol	A	5.00	5.22	1.338902	1.398439		4.4	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.37	1.834723	1.971603		7.5	30
Methylene Chloride	A	5.00	4.64	0.9597215	0.8908781		-7.2	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.47	0.7726854	0.6908993		-10.6	30
Naphthalene	A	5.00	5.18	1.092246	1.132113		3.7	30
Propene	A	5.00	4.33	0.5941328	0.5147952		-13.4	30
Styrene	A	5.00	5.00	0.7890752	0.7889985		-0.01	30
1,1,2,2-Tetrachloroethane	A	5.00	4.68	0.9851261	0.9218459		-6.4	30
Tetrachloroethylene	A	5.00	5.43	0.457194	0.4962363		8.5	30
Tetrahydrofuran	A	5.00	5.12	0.2957092	0.3030619		2.5	30
Toluene	A	5.00	4.77	1.15399	1.100289		-4.7	30
1,2,4-Trichlorobenzene	A	5.00	5.15	0.4973623	0.5126279		3.1	30
1,1,1-Trichloroethane	A	5.00	5.02	0.5975698	0.5993334		0.3	30
1,1,2-Trichloroethane	A	5.00	4.76	0.4162703	0.3963278		-4.8	30
Trichloroethylene	A	5.00	4.85	0.3947958	0.3828465		-3.0	30
Trichlorofluoromethane (Freon 11)	A	5.00	6.40	1.463327	1.874457		28.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.56	1.432547	1.592051		11.1	30
1,2,4-Trimethylbenzene	A	5.00	5.14	1.156019	1.187358		2.7	30
1,3,5-Trimethylbenzene	A	5.00	5.30	1.190388	1.262424		6.1	30
Vinyl Acetate	A	5.00	4.48	1.986739	1.778306		-10.5	30
Vinyl Chloride	A	5.00	5.07	0.7142115	0.7244372		1.4	30
m&p-Xylene	A	10.0	10.4	1.129066	1.169233		3.6	30
o-Xylene	A	5.00	5.10	1.138955	1.161826		2.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK
EPA TO-15
S081170-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.86	1.084004	1.271298		17.3	30
Benzene	A	5.00	4.42	0.9129288	0.8068502		-11.6	30
Ethanol	A	5.00	4.05	0.2343264	0.1899628		-18.9	30
Naphthalene	A	5.00	4.85	1.092246	1.058649		-3.1	30
Toluene	A	5.00	4.35	1.15399	1.004697		-12.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023

Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com



221532

Company Name:

Address: 500 W Wood St Palatine IL 60067

Phone:

Project Name:

Project Location: Burns Harbor IN

Project Number: 14777

Project Manager: Rodak

Con-Test Quote Name/Number:

Invoice Recipient:

Sampled By: JD

CHAIN OF CUSTODY RECORD (AIR)

Requested Turnaround Time

Due Date:

7-Day ☒ 10-Day ☒

Rush Approval Required

1-Day ☐ 3-Day ☐2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☐ EXCEL ☐

Other:

CLP Like Data Pkg Required: ☐

Email To:

Fax To #:

Lab Use	Client Use	Collection Data		Duration		Flow Rate		Matrix	Volume
		Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m ³ /min L/min	<input type="checkbox"/>	<input type="checkbox"/>		
1	BOY-INT 2	12:42	12:52	10					
2	1 - INTS	12:53	13:03	10					
3	1 - DW1	13:04	13:14	10					
4	1 - DW2	13:15	13:25	10					
5	1 - DW 2-D	13:26	13:36	10					
6	1 - DW	13:37	13:47	10					

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

Relinquished by: (signature)	Date/Time: 12:50	12-8-22	MA	MA MCP Required	<input type="checkbox"/>	MCP Certification Form Required	<input type="checkbox"/>	CT RCP Required	<input type="checkbox"/>	RCP Certification Form Required	<input type="checkbox"/>	Other	<input type="checkbox"/>
Received by: (signature)	Date/Time: 12:15	12/8	CT	CT RCP Required	<input type="checkbox"/>	RCP Certification Form Required	<input type="checkbox"/>	Other	<input type="checkbox"/>	Other	<input type="checkbox"/>	Other	<input type="checkbox"/>
Relinquished by: (signature)	Date/Time:												
Received by: (signature)	Date/Time:												
Relinquished by: (signature)	Date/Time:												
Received by: (signature)	Date/Time:												



NELAP and AIHA-LAP, LLC Accredited

Project Entity

☐ Government☐ Federal☐ City☐ Municipality☐ 21 J☐ Brownfield☐ MWRA☐ School☐ MBTA☐ WRTA☐ Chromatogram☐ AIHA-LAP, LLC

PCB ONLY

☐ Soxhlet☐ Non Soxhlet

(https://www.fedex.com/en-us/home.html)

FedEx® Tracking



DELIVERED

Friday

12/9/2022 at 9:21 am

Signed for by: R.PETRAITIS

↓ Obtain Proof of delivery

DELIVERY STATUS

Delivered

↓ Shipment is 1 of 2 pieces

✉ Get Status Updates

TRACKING ID

538089139108

FROM

CLEAN AIR ENGINEERING
DAN PEARSON
500 W WOOD
PALATINE, IL US 60067
8479913300

Label Created

12/8/2022 3:29 PM

PACKAGE RECEIVED BY FEDEX

SCHAUMBURG, IL
12/8/2022 8:08 PM

IN TRANSIT

WINDSOR LOCKS, CT
12/9/2022 8:00 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT
12/9/2022 8:10 AM

DELIVERED

SAMPLE RECEIVING DEPT.
CON-TEST ANALYTICAL LAB.
39 SPRUCE STREET
EAST LONGMEADOW, MA US 01028
2625731223

DELIVERED

12/9/2022 at 9:21 AM

↓ View travel history

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.pacelabs.com



Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client clean AirReceived By ULDate 12/9Time 921

How Were the samples received?

In Cooler

On Ice

No Ice

In Box

Ambient

Melted Ice

Were samples within Temperature Compliance?

Within

By Gun #

Actual Temp -

2-6°C

By Blank #

Actual Temp -

Was Custody Seal In tact?

NA

Were Samples Tampered with?

NA

Was COC Relinquished?

T

Does Chain Agree With Samples?

T

Are there any loose caps/valves on any samples?

F

Is COC in ink/ Legible?

T

Were samples received within holding time?

T

Did COC Include all Pertinent Information?

Client?

T

Analysis?

T

Sampler Name?

T

Project?

T

ID's?

T

Collection Dates/Times?

T

Are Sample Labels filled out and legible?

Are there Rushes?

F

Who was notified?

Samples are received within holding time?

T

Proper Media Used?

T

Individually Certified Cans?

F

Are there Trip Blanks?

F

Is there enough Volume?

T

Summa Cans	6	61	6	24 hr	Nut/Ferrule	IC Train
Tedlar Bags					Tubing	
TO-17 Tubes					T-Connector	
Radiello					Syringe	
Pufs/TO-11s					Tedlar	

Summa Cans	6	61	6	24 hr	Nut/Ferrule	IC Train
2570					3532	
1043					3534	
1992					3075	
1448					3254	
1866					3715	
1319					3716	
Probes/Manis					Pufs/TO-11s	

Comments:

January 10, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: CCBH
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 22L3219

Enclosed are results of analyses for samples as received by the laboratory on December 22, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 1/10/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L3219

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: CCBH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO5-INT1	22L3219-01	Air		EPA TO-15	
RO5-INT2	22L3219-02	Air		EPA TO-15	
RO5-DW1	22L3219-03	Air		EPA TO-15	
RO5-DW2-D1	22L3219-04	Air		EPA TO-15	
RO5-DW2-D2	22L3219-05	Air		EPA TO-15	
RO5-UW	22L3219-06	Air		EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Propene

B328228-BLK1, B328228-BS1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Propene

B328228-BLK1, B328228-BS1, S081706-CCV1

Z-01

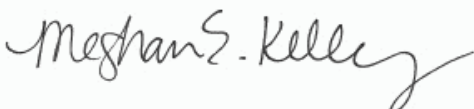
Sample had a final vacuum of zero. Flow controllers was checked and the RPD was >20%

Analyte & Samples(s) Qualified:

22L3219-06[RO5-UW]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

 Project Location: CCBH
 Date Received: 12/22/2022
 Field Sample #: RO5-INT1
 Sample ID: 22L3219-01
 Sample Matrix: Air
 Sampled: 12/21/2022 10:01

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1336
 Canister Size: 6 liter
 Flow Controller ID: 3715
 Sample Type: 24 hr

 Work Order: 22L3219
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -7.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	4.2	1.4		9.9	3.3	0.702	1/7/23 6:11	CMR
Benzene	16	0.035		51	0.11	0.702	1/7/23 6:11	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23 6:11	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23 6:11	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23 6:11	CMR
Bromomethane	0.035	0.035		0.14	0.14	0.702	1/7/23 6:11	CMR
1,3-Butadiene	0.24	0.035		0.54	0.078	0.702	1/7/23 6:11	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23 6:11	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23 6:11	CMR
Carbon Tetrachloride	0.056	0.035		0.35	0.22	0.702	1/7/23 6:11	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23 6:11	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23 6:11	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23 6:11	CMR
Chloromethane	0.60	0.070		1.2	0.14	0.702	1/7/23 6:11	CMR
Cyclohexane	0.036	0.035		0.12	0.12	0.702	1/7/23 6:11	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23 6:11	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23 6:11	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:11	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:11	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:11	CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/7/23 6:11	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 6:11	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 6:11	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:11	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:11	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:11	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23 6:11	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 6:11	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 6:11	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23 6:11	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23 6:11	CMR
Ethanol	3.6	1.4		6.7	2.6	0.702	1/7/23 6:11	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/7/23 6:11	CMR
Ethylbenzene	0.053	0.035		0.23	0.15	0.702	1/7/23 6:11	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23 6:11	CMR
Heptane	0.059	0.035		0.24	0.14	0.702	1/7/23 6:11	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23 6:11	CMR

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ANALYTICAL RESULTS

Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-INT1
Sample ID: 22L3219-01
 Sample Matrix: Air
 Sampled: 12/21/2022 10:01

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1336
 Canister Size: 6 liter
 Flow Controller ID: 3715
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -7.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 6:11		CMR
2-Hexanone (MBK)	0.053	0.035		0.22	0.14	0.702	1/7/23 6:11		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/7/23 6:11		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 6:11		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 6:11		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/7/23 6:11		CMR
Naphthalene	5.1	0.035		27	0.18	0.702	1/7/23 6:11		CMR
Propene	1.6	1.4		2.7	2.4	0.702	1/7/23 6:11		CMR
Styrene	0.50	0.035		2.1	0.15	0.702	1/7/23 6:11		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 6:11		CMR
Tetrachloroethylene	0.056	0.035		0.38	0.24	0.702	1/7/23 6:11		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 6:11		CMR
Toluene	3.3	0.035		13	0.13	0.702	1/7/23 6:11		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 6:11		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 6:11		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 6:11		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 6:11		CMR
Trichlorofluoromethane (Freon 11)	0.28	0.14		1.6	0.79	0.702	1/7/23 6:11		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.16	0.14		1.2	1.1	0.702	1/7/23 6:11		CMR
1,2,4-Trimethylbenzene	0.15	0.035		0.72	0.17	0.702	1/7/23 6:11		CMR
1,3,5-Trimethylbenzene	0.098	0.035		0.48	0.17	0.702	1/7/23 6:11		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 6:11		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 6:11		CMR
m&p-Xylene	1.0	0.070		4.3	0.30	0.702	1/7/23 6:11		CMR
o-Xylene	0.22	0.035		0.96	0.15	0.702	1/7/23 6:11		CMR

Surrogates	% Recovery	% REC Limits
4-Bromofluorobenzene (1)	114	70-130

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ANALYTICAL RESULTS

 Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-INT2
Sample ID: 22L3219-02
 Sample Matrix: Air
 Sampled: 12/21/2022 10:37

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2161
 Canister Size: 6 liter
 Flow Controller ID: 3716
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -7.9
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	5.8	1.4		14	3.3	0.702	1/7/23 6:59		CMR
Benzene	32	0.20		100	0.64	4	1/8/23 4:07		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23 6:59		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23 6:59		CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23 6:59		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
1,3-Butadiene	0.48	0.035		1.1	0.078	0.702	1/7/23 6:59		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23 6:59		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23 6:59		CMR
Carbon Tetrachloride	0.058	0.035		0.37	0.22	0.702	1/7/23 6:59		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23 6:59		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23 6:59		CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23 6:59		CMR
Chloromethane	0.53	0.070		1.1	0.14	0.702	1/7/23 6:59		CMR
Cyclohexane	0.045	0.035		0.15	0.12	0.702	1/7/23 6:59		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23 6:59		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23 6:59		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:59		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:59		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 6:59		CMR
Dichlorodifluoromethane (Freon 12)	0.24	0.035		1.2	0.17	0.702	1/7/23 6:59		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 6:59		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23 6:59		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 6:59		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 6:59		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23 6:59		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23 6:59		CMR
Ethanol	5.1	1.4		9.7	2.6	0.702	1/7/23 6:59		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/7/23 6:59		CMR
Ethylbenzene	0.096	0.035		0.42	0.15	0.702	1/7/23 6:59		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23 6:59		CMR
Heptane	0.066	0.035		0.27	0.14	0.702	1/7/23 6:59		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23 6:59		CMR

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ANALYTICAL RESULTS

Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-INT2
Sample ID: 22L3219-02
 Sample Matrix: Air
 Sampled: 12/21/2022 10:37

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2161
 Canister Size: 6 liter
 Flow Controller ID: 3716
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -7.9
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 6:59		CMR
2-Hexanone (MBK)	0.15	0.035		0.61	0.14	0.702	1/7/23 6:59		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/7/23 6:59		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 6:59		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 6:59		CMR
4-Methyl-2-pentanone (MIBK)	0.037	0.035		0.15	0.14	0.702	1/7/23 6:59		CMR
Naphthalene	39	0.20		200	1.0	4	1/8/23 4:07		CMR
Propene	2.7	1.4		4.6	2.4	0.702	1/7/23 6:59		CMR
Styrene	2.0	0.035		8.3	0.15	0.702	1/7/23 6:59		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 6:59		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/7/23 6:59		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 6:59		CMR
Toluene	8.1	0.035		30	0.13	0.702	1/7/23 6:59		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 6:59		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 6:59		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 6:59		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 6:59		CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.4	0.79	0.702	1/7/23 6:59		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/7/23 6:59		CMR
1,2,4-Trimethylbenzene	0.61	0.035		3.0	0.17	0.702	1/7/23 6:59		CMR
1,3,5-Trimethylbenzene	0.42	0.035		2.1	0.17	0.702	1/7/23 6:59		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 6:59		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 6:59		CMR
m&p-Xylene	3.1	0.070		13	0.30	0.702	1/7/23 6:59		CMR
o-Xylene	0.70	0.035		3.0	0.15	0.702	1/7/23 6:59		CMR
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	114			70-130			1/8/23 4:07		
4-Bromofluorobenzene (1)	116			70-130			1/7/23 6:59		

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ANALYTICAL RESULTS

Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-DW1
Sample ID: 22L3219-03
 Sample Matrix: Air
 Sampled: 12/21/2022 11:01

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2176
 Canister Size: 6 liter
 Flow Controller ID: 3730
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -6.9
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	3.7	1.4		8.7	3.3	0.702	1/7/23 7:47	CMR
Benzene	0.15	0.035		0.46	0.11	0.702	1/7/23 7:47	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23 7:47	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23 7:47	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23 7:47	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	1/7/23 7:47	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23 7:47	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23 7:47	CMR
Carbon Tetrachloride	ND	0.035		ND	0.22	0.702	1/7/23 7:47	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23 7:47	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23 7:47	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23 7:47	CMR
Chloromethane	0.52	0.070		1.1	0.14	0.702	1/7/23 7:47	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/7/23 7:47	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23 7:47	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23 7:47	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 7:47	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 7:47	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 7:47	CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/7/23 7:47	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23 7:47	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 7:47	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 7:47	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23 7:47	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23 7:47	CMR
Ethanol	3.9	1.4		7.4	2.6	0.702	1/7/23 7:47	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/7/23 7:47	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/7/23 7:47	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23 7:47	CMR
Heptane	0.055	0.035		0.22	0.14	0.702	1/7/23 7:47	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23 7:47	CMR

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 12/22/2022
Field Sample #: RO5-DW1
Sample ID: 22L3219-03
Sample Matrix: Air
Sampled: 12/21/2022 11:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2176
Canister Size: 6 liter
Flow Controller ID: 3730
Sample Type: 24 hr

Work Order: 22L3219
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 7:47	CMR
2-Hexanone (MBK)	0.044	0.035		0.18	0.14	0.702	1/7/23 7:47	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/7/23 7:47	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 7:47	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 7:47	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/7/23 7:47	CMR
Naphthalene	0.36	0.035		1.9	0.18	0.702	1/7/23 7:47	CMR
Propene	ND	1.4		ND	2.4	0.702	1/7/23 7:47	CMR
Styrene	ND	0.035		ND	0.15	0.702	1/7/23 7:47	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 7:47	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/7/23 7:47	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 7:47	CMR
Toluene	0.15	0.035		0.55	0.13	0.702	1/7/23 7:47	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 7:47	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 7:47	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 7:47	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 7:47	CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	1/7/23 7:47	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/7/23 7:47	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 7:47	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 7:47	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 7:47	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 7:47	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/7/23 7:47	CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/7/23 7:47	CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	114	70-130	1/7/23 7:47

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ANALYTICAL RESULTS

Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-DW2-D1
Sample ID: 22L3219-04
 Sample Matrix: Air
 Sampled: 12/21/2022 11:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2013
 Canister Size: 6 liter
 Flow Controller ID: 3435
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -6.9
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	3.4	1.4		8.1	3.3	0.702	1/7/23	8:35	CMR
Benzene	0.12	0.035		0.39	0.11	0.702	1/7/23	8:35	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23	8:35	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23	8:35	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23	8:35	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	1/7/23	8:35	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23	8:35	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23	8:35	CMR
Carbon Tetrachloride	0.056	0.035		0.35	0.22	0.702	1/7/23	8:35	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23	8:35	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23	8:35	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23	8:35	CMR
Chloromethane	0.51	0.070		1.1	0.14	0.702	1/7/23	8:35	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/7/23	8:35	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23	8:35	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23	8:35	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23	8:35	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23	8:35	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23	8:35	CMR
Dichlorodifluoromethane (Freon 12)	0.27	0.035		1.3	0.17	0.702	1/7/23	8:35	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23	8:35	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23	8:35	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23	8:35	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23	8:35	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23	8:35	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23	8:35	CMR
Ethanol	3.9	1.4		7.4	2.6	0.702	1/7/23	8:35	CMR
Ethyl Acetate	0.64	0.35		2.3	1.3	0.702	1/7/23	8:35	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/7/23	8:35	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23	8:35	CMR
Heptane	0.048	0.035		0.20	0.14	0.702	1/7/23	8:35	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23	8:35	CMR

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 12/22/2022
Field Sample #: RO5-DW2-D1
Sample ID: 22L3219-04
Sample Matrix: Air
Sampled: 12/21/2022 11:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 2013
Canister Size: 6 liter
Flow Controller ID: 3435
Sample Type: 24 hr

Work Order: 22L3219
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 8:35		CMR
2-Hexanone (MBK)	0.055	0.035		0.22	0.14	0.702	1/7/23 8:35		CMR
Isopropanol	1.6	1.4		3.9	3.4	0.702	1/7/23 8:35		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 8:35		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 8:35		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/7/23 8:35		CMR
Naphthalene	0.084	0.035		0.44	0.18	0.702	1/7/23 8:35		CMR
Propene	ND	1.4		ND	2.4	0.702	1/7/23 8:35		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/7/23 8:35		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 8:35		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/7/23 8:35		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 8:35		CMR
Toluene	0.13	0.035		0.51	0.13	0.702	1/7/23 8:35		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 8:35		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 8:35		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 8:35		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 8:35		CMR
Trichlorofluoromethane (Freon 11)	0.24	0.14		1.4	0.79	0.702	1/7/23 8:35		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/7/23 8:35		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 8:35		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 8:35		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 8:35		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 8:35		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/7/23 8:35		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/7/23 8:35		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/7/23 8:35

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ANALYTICAL RESULTS

Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-DW2-D2
Sample ID: 22L3219-05
 Sample Matrix: Air
 Sampled: 12/21/2022 11:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2017
 Canister Size: 6 liter
 Flow Controller ID: 3435
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -7.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	3.6	1.4		8.5	3.3	0.702	1/7/23 9:23		CMR
Benzene	0.12	0.035		0.40	0.11	0.702	1/7/23 9:23		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23 9:23		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23 9:23		CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23 9:23		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
1,3-Butadiene	0.037	0.035		0.082	0.078	0.702	1/7/23 9:23		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23 9:23		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23 9:23		CMR
Carbon Tetrachloride	0.056	0.035		0.35	0.22	0.702	1/7/23 9:23		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23 9:23		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23 9:23		CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23 9:23		CMR
Chloromethane	0.53	0.070		1.1	0.14	0.702	1/7/23 9:23		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/7/23 9:23		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23 9:23		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23 9:23		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 9:23		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 9:23		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 9:23		CMR
Dichlorodifluoromethane (Freon 12)	0.25	0.035		1.2	0.17	0.702	1/7/23 9:23		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23 9:23		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 9:23		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 9:23		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23 9:23		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23 9:23		CMR
Ethanol	5.4	1.4		10	2.6	0.702	1/7/23 9:23		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/7/23 9:23		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/7/23 9:23		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23 9:23		CMR
Heptane	0.042	0.035		0.17	0.14	0.702	1/7/23 9:23		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23 9:23		CMR

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 12/22/2022
Field Sample #: RO5-DW2-D2
Sample ID: 22L3219-05
Sample Matrix: Air
Sampled: 12/21/2022 11:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 2017
Canister Size: 6 liter
Flow Controller ID: 3435
Sample Type: 24 hr

Work Order: 22L3219
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -7.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 9:23		CMR
2-Hexanone (MBK)	0.051	0.035		0.21	0.14	0.702	1/7/23 9:23		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/7/23 9:23		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 9:23		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 9:23		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/7/23 9:23		CMR
Naphthalene	0.041	0.035		0.22	0.18	0.702	1/7/23 9:23		CMR
Propene	ND	1.4		ND	2.4	0.702	1/7/23 9:23		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/7/23 9:23		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 9:23		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/7/23 9:23		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 9:23		CMR
Toluene	0.13	0.035		0.48	0.13	0.702	1/7/23 9:23		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 9:23		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 9:23		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 9:23		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 9:23		CMR
Trichlorofluoromethane (Freon 11)	0.25	0.14		1.4	0.79	0.702	1/7/23 9:23		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/7/23 9:23		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 9:23		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 9:23		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 9:23		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 9:23		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/7/23 9:23		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/7/23 9:23		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/7/23 9:23

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ANALYTICAL RESULTS

 Project Location: CCBH
 Date Received: 12/22/2022
Field Sample #: RO5-UW
Sample ID: 22L3219-06
 Sample Matrix: Air
 Sampled: 12/21/2022 12:00

 Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2194
 Canister Size: 6 liter
 Flow Controller ID: 3729
 Sample Type: 24 hr

Work Order: 22L3219
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): 0
 Receipt Vacuum(in Hg): 4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Sample Flags: Z-01								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	2.7	1.4		6.3	3.3	0.702	1/7/23 10:11	CMR
Benzene	0.19	0.035		0.61	0.11	0.702	1/7/23 10:11	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/7/23 10:11	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/7/23 10:11	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/7/23 10:11	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	1/7/23 10:11	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/7/23 10:11	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/7/23 10:11	CMR
Carbon Tetrachloride	0.059	0.035		0.37	0.22	0.702	1/7/23 10:11	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/7/23 10:11	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/7/23 10:11	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/7/23 10:11	CMR
Chloromethane	0.55	0.070		1.1	0.14	0.702	1/7/23 10:11	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/7/23 10:11	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/7/23 10:11	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/7/23 10:11	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 10:11	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 10:11	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/7/23 10:11	CMR
Dichlorodifluoromethane (Freon 12)	0.34	0.035		1.7	0.17	0.702	1/7/23 10:11	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/7/23 10:11	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 10:11	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/7/23 10:11	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/7/23 10:11	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/7/23 10:11	CMR
Ethanol	3.0	1.4		5.7	2.6	0.702	1/7/23 10:11	CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/7/23 10:11	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/7/23 10:11	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/7/23 10:11	CMR
Heptane	0.044	0.035		0.18	0.14	0.702	1/7/23 10:11	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/7/23 10:11	CMR

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ANALYTICAL RESULTS

Project Location: CCBH
Date Received: 12/22/2022
Field Sample #: RO5-UW
Sample ID: 22L3219-06
Sample Matrix: Air
Sampled: 12/21/2022 12:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2194
Canister Size: 6 liter
Flow Controller ID: 3729
Sample Type: 24 hr

Work Order: 22L3219
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): 0
Receipt Vacuum(in Hg): 4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.702	1/7/23 10:11	CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/7/23 10:11	CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/7/23 10:11	CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/7/23 10:11	CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/7/23 10:11	CMR
Naphthalene	0.041	0.035		0.21	0.18	0.702	1/7/23 10:11	CMR
Propene	ND	1.4		ND	2.4	0.702	1/7/23 10:11	CMR
Styrene	ND	0.035		ND	0.15	0.702	1/7/23 10:11	CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/7/23 10:11	CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/7/23 10:11	CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/7/23 10:11	CMR
Toluene	0.15	0.035		0.57	0.13	0.702	1/7/23 10:11	CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/7/23 10:11	CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 10:11	CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/7/23 10:11	CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/7/23 10:11	CMR
Trichlorofluoromethane (Freon 11)	0.26	0.14		1.5	0.79	0.702	1/7/23 10:11	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/7/23 10:11	CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 10:11	CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/7/23 10:11	CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/7/23 10:11	CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/7/23 10:11	CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/7/23 10:11	CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/7/23 10:11	CMR

Surrogates	% Recovery	% REC Limits
4-Bromofluorobenzene (1)	112	70-130

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Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22L3219-01 [RO5-INT1]	B328214	1.5	1	N/A	1000	400	855	01/06/23
22L3219-02 [RO5-INT2]	B328214	1.5	1	N/A	1000	400	855	01/06/23
22L3219-03 [RO5-DW1]	B328214	1.5	1	N/A	1000	400	855	01/06/23
22L3219-04 [RO5-DW2-D1]	B328214	1.5	1	N/A	1000	400	855	01/06/23
22L3219-05 [RO5-DW2-D2]	B328214	1.5	1	N/A	1000	400	855	01/06/23
22L3219-06 [RO5-UW]	B328214	1.5	1	N/A	1000	400	855	01/06/23

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22L3219-02RE1 [RO5-INT2]	B328228	1.5	1	N/A	1000	400	150	01/07/23

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	

Batch B328214 - TO-15 Prep
Blank (B328214-BLK1)

Prepared & Analyzed: 01/06/23

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B328214 - TO-15 Prep
Blank (B328214-BLK1)

Prepared & Analyzed: 01/06/23

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.87</i>	<i>8.00</i>	<i>111</i>	<i>70-130</i>
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LCS (B328214-BS1)

Prepared & Analyzed: 01/06/23

Acetone	5.47	5.00	109	70-130
Benzene	4.37	5.00	87.3	70-130
Benzyl chloride	4.96	5.00	99.2	70-130
Bromodichloromethane	4.23	5.00	84.6	70-130
Bromoform	5.23	5.00	105	70-130
Bromomethane	5.88	5.00	118	70-130
1,3-Butadiene	5.50	5.00	110	70-130
2-Butanone (MEK)	4.59	5.00	91.7	70-130
Carbon Disulfide	4.97	5.00	99.4	70-130
Carbon Tetrachloride	4.43	5.00	88.6	70-130
Chlorobenzene	4.42	5.00	88.4	70-130
Chloroethane	5.87	5.00	117	70-130
Chloroform	4.89	5.00	97.8	70-130
Chloromethane	5.21	5.00	104	70-130
Cyclohexane	4.48	5.00	89.7	70-130
Dibromochloromethane	4.67	5.00	93.4	70-130
1,2-Dibromoethane (EDB)	4.32	5.00	86.5	70-130
1,2-Dichlorobenzene	5.21	5.00	104	70-130
1,3-Dichlorobenzene	5.45	5.00	109	70-130
1,4-Dichlorobenzene	5.47	5.00	109	70-130
Dichlorodifluoromethane (Freon 12)	5.42	5.00	108	70-130
1,1-Dichloroethane	4.86	5.00	97.1	70-130
1,2-Dichloroethane	5.04	5.00	101	70-130
1,1-Dichloroethylene	5.77	5.00	115	70-130
cis-1,2-Dichloroethylene	4.88	5.00	97.6	70-130
trans-1,2-Dichloroethylene	4.88	5.00	97.6	70-130
1,2-Dichloropropane	4.28	5.00	85.6	70-130

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B328214 - TO-15 Prep											
LCS (B328214-BS1)					Prepared & Analyzed: 01/06/23						
cis-1,3-Dichloropropene	4.32				5.00		86.5	70-130			
trans-1,3-Dichloropropene	4.37				5.00		87.4	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.37				5.00		107	70-130			
1,4-Dioxane	4.41				5.00		88.1	70-130			
Ethanol	4.30				5.00		85.9	70-130			
Ethyl Acetate	4.78				5.00		95.7	70-130			
Ethylbenzene	4.61				5.00		92.3	70-130			
4-Ethyltoluene	5.06				5.00		101	70-130			
Heptane	4.54				5.00		90.8	70-130			
Hexachlorobutadiene	4.66				5.00		93.1	70-130			
Hexane	5.10				5.00		102	70-130			
2-Hexanone (MBK)	4.19				5.00		83.7	70-130			
Isopropanol	4.55				5.00		90.9	70-130			
Methyl tert-Butyl Ether (MTBE)	4.78				5.00		95.6	70-130			
Methylene Chloride	4.49				5.00		89.8	70-130			
4-Methyl-2-pentanone (MIBK)	4.27				5.00		85.4	70-130			
Naphthalene	5.10				5.00		102	70-130			
Propene	3.64				5.00		72.8	70-130			
Styrene	5.02				5.00		100	70-130			
1,1,2,2-Tetrachloroethane	4.39				5.00		87.8	70-130			
Tetrachloroethylene	4.70				5.00		94.0	70-130			
Tetrahydrofuran	4.88				5.00		97.6	70-130			
Toluene	4.39				5.00		87.8	70-130			
1,2,4-Trichlorobenzene	4.60				5.00		92.1	70-130			
1,1,1-Trichloroethane	4.16				5.00		83.1	70-130			
1,1,2-Trichloroethane	4.12				5.00		82.3	70-130			
Trichloroethylene	4.50				5.00		90.1	70-130			
Trichlorofluoromethane (Freon 11)	6.07				5.00		121	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.93				5.00		98.6	70-130			
1,2,4-Trimethylbenzene	5.11				5.00		102	70-130			
1,3,5-Trimethylbenzene	5.14				5.00		103	70-130			
Vinyl Acetate	3.84				5.00		76.8	70-130			
Vinyl Chloride	5.89				5.00		118	70-130			
m&p-Xylene	9.73				10.0		97.3	70-130			
o-Xylene	5.00				5.00		100	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.52				8.00		119	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual						
	Results	RL	Results	RL													
Batch B328214 - TO-15 Prep																	
Duplicate (B328214-DUP1)	Source: 22L3219-06				Prepared: 01/06/23 Analyzed: 01/07/23												
Acetone	2.7	1.4	6.3	3.3		2.7			0.211	25							
Benzene	0.19	0.035	0.62	0.11		0.19			2.56	25							
Benzyl chloride	ND	0.035	ND	0.18		ND				25							
Bromodichloromethane	ND	0.035	ND	0.24		ND				25							
Bromoform	ND	0.035	ND	0.36		ND				25							
Bromomethane	ND	0.035	ND	0.14		ND				25							
1,3-Butadiene	ND	0.035	ND	0.078		0.033				25							
2-Butanone (MEK)	ND	1.4	ND	4.1		ND				25							
Carbon Disulfide	ND	0.35	ND	1.1		ND				25							
Carbon Tetrachloride	0.058	0.035	0.36	0.22		0.059			2.41	25							
Chlorobenzene	ND	0.035	ND	0.16		ND				25							
Chloroethane	ND	0.035	ND	0.093		ND				25							
Chloroform	ND	0.035	ND	0.17		ND				25							
Chloromethane	0.54	0.070	1.1	0.14		0.55			1.69	25							
Cyclohexane	0.025	0.035	0.087	0.12		0.025			0.00	25							
Dibromochloromethane	ND	0.035	ND	0.30		ND				25							
1,2-Dibromoethane (EDB)	ND	0.035	ND	0.27		ND				25							
1,2-Dichlorobenzene	ND	0.035	ND	0.21		ND				25							
1,3-Dichlorobenzene	ND	0.035	ND	0.21		ND				25							
1,4-Dichlorobenzene	ND	0.035	ND	0.21		ND				25							
Dichlorodifluoromethane (Freon 12)	0.32	0.035	1.6	0.17		0.34			7.64	25							
1,1-Dichloroethane	ND	0.035	ND	0.14		ND				25							
1,2-Dichloroethane	ND	0.035	ND	0.14		ND				25							
1,1-Dichloroethylene	ND	0.035	ND	0.14		ND				25							
cis-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25							
trans-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25							
1,2-Dichloropropane	ND	0.035	ND	0.16		ND				25							
cis-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25							
trans-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25							
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	ND	0.25		ND				25							
1,4-Dioxane	ND	0.35	ND	1.3		ND				25							
Ethanol	3.0	1.4	5.6	2.6		3.0			1.16	25							
Ethyl Acetate	ND	0.35	ND	1.3		ND				25							
Ethylbenzene	0.021	0.035	0.091	0.15		ND				25							
4-Ethyltoluene	ND	0.035	ND	0.17		ND				25							
Heptane	0.044	0.035	0.18	0.14		0.044			1.60	25							
Hexachlorobutadiene	ND	0.035	ND	0.37		ND				25							
Hexane	ND	1.4	ND	4.9		ND				25							
2-Hexanone (MBK)	0.019	0.035	0.078	0.14		ND				25							
Isopropanol	0.33	1.4	0.82	3.4		0.33			0.00	25							
Methyl tert-Butyl Ether (MTBE)	ND	0.035	ND	0.13		ND				25							
Methylene Chloride	ND	0.35	ND	1.2		ND				25							
4-Methyl-2-pentanone (MIBK)	ND	0.035	ND	0.14		ND				25							
Naphthalene	0.035	0.035	0.18	0.18		0.041			14.8	25							
Propene	ND	1.4	ND	2.4		ND				25							
Styrene	ND	0.035	ND	0.15		ND				25							

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B328214 - TO-15 Prep

Duplicate (B328214-DUP1)		Source: 22L3219-06				Prepared: 01/06/23 Analyzed: 01/07/23					
1,1,2,2-Tetrachloroethane	ND	0.035	ND	0.24		ND				25	
Tetrachloroethylene	ND	0.035	ND	0.24		ND				25	
Tetrahydrofuran	ND	0.35	ND	1.0		ND				25	
Toluene	0.15	0.035	0.56	0.13		0.15			0.935	25	
1,2,4-Trichlorobenzene	ND	0.035	ND	0.26		ND				25	
1,1,1-Trichloroethane	ND	0.035	ND	0.19		ND				25	
1,1,2-Trichloroethane	ND	0.035	ND	0.19		ND				25	
Trichloroethylene	ND	0.035	ND	0.19		ND				25	
Trichlorofluoromethane (Freon 11)	0.26	0.14	1.5	0.79		0.26			0.805	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.060	0.14	0.46	1.1		0.061			1.16	25	
1,2,4-Trimethylbenzene	0.021	0.035	0.10	0.17		0.021			0.00	25	
1,3,5-Trimethylbenzene	ND	0.035	ND	0.17		ND				25	
Vinyl Acetate	ND	0.70	ND	2.5		ND				25	
Vinyl Chloride	ND	0.035	ND	0.090		ND				25	
m&p-Xylene	0.060	0.070	0.26	0.30		0.059			1.18	25	
o-Xylene	0.023	0.035	0.10	0.15		0.024			2.99	25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.01</i>				<i>8.00</i>		<i>113</i>	<i>70-130</i>			

Batch B328228 - TO-15 Prep

Blank (B328228-BLK1)		Prepared & Analyzed: 01/07/23									
Acetone	ND	1.4									
Benzene	ND	0.035									
Benzyl chloride	ND	0.035									
Bromodichloromethane	ND	0.035									
Bromoform	ND	0.035									
Bromomethane	ND	0.035									
1,3-Butadiene	ND	0.035									
2-Butanone (MEK)	ND	1.4									
Carbon Disulfide	ND	0.35									
Carbon Tetrachloride	ND	0.035									
Chlorobenzene	ND	0.035									
Chloroethane	ND	0.035									
Chloroform	ND	0.035									
Chloromethane	ND	0.070									
Cyclohexane	ND	0.035									
Dibromochloromethane	ND	0.035									
1,2-Dibromoethane (EDB)	ND	0.035									
1,2-Dichlorobenzene	ND	0.035									
1,3-Dichlorobenzene	ND	0.035									
1,4-Dichlorobenzene	ND	0.035									
Dichlorodifluoromethane (Freon 12)	ND	0.035									
1,1-Dichloroethane	ND	0.035									
1,2-Dichloroethane	ND	0.035									
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result		Limits	RPD	Limit	
Batch B328228 - TO-15 Prep											
Blank (B328228-BLK1)					Prepared & Analyzed: 01/07/23						
trans-1,2-Dichloroethylene	ND	0.035									
1,2-Dichloropropane	ND	0.035									
cis-1,3-Dichloropropene	ND	0.035									
trans-1,3-Dichloropropene	ND	0.035									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035									
1,4-Dioxane	ND	0.35									
Ethanol	ND	1.4									
Ethyl Acetate	ND	0.35									
Ethylbenzene	ND	0.035									
4-Ethyltoluene	ND	0.035									
Heptane	ND	0.035									
Hexachlorobutadiene	ND	0.035									
Hexane	ND	1.4									
2-Hexanone (MBK)	ND	0.035									
Isopropanol	ND	1.4									
Methyl tert-Butyl Ether (MTBE)	ND	0.035									
Methylene Chloride	ND	0.35									
4-Methyl-2-pentanone (MIBK)	ND	0.035									
Naphthalene	ND	0.035									
Propene	ND	1.4									L-03, V-0
Styrene	ND	0.035									
1,1,2,2-Tetrachloroethane	ND	0.035									
Tetrachloroethylene	ND	0.035									
Tetrahydrofuran	ND	0.35									
Toluene	ND	0.035									
1,2,4-Trichlorobenzene	ND	0.035									
1,1,1-Trichloroethane	ND	0.035									
1,1,2-Trichloroethane	ND	0.035									
Trichloroethylene	ND	0.035									
Trichlorofluoromethane (Freon 11)	ND	0.14									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14									
1,2,4-Trimethylbenzene	ND	0.035									
1,3,5-Trimethylbenzene	ND	0.035									
Vinyl Acetate	ND	0.70									
Vinyl Chloride	ND	0.035									
m&p-Xylene	ND	0.070									
o-Xylene	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	9.17				8.00		115	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual	
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD		
Batch B328228 - TO-15 Prep											
LCS (B328228-BS1)					Prepared & Analyzed: 01/07/23						
Acetone	5.39				5.00		108	70-130			
Benzene	4.09				5.00		81.9	70-130			
Benzyl chloride	4.64				5.00		92.9	70-130			
Bromodichloromethane	4.02				5.00		80.4	70-130			
Bromoform	5.01				5.00		100	70-130			
Bromomethane	5.96				5.00		119	70-130			
1,3-Butadiene	5.48				5.00		110	70-130			
2-Butanone (MEK)	4.35				5.00		87.1	70-130			
Carbon Disulfide	4.76				5.00		95.2	70-130			
Carbon Tetrachloride	4.19				5.00		83.7	70-130			
Chlorobenzene	4.18				5.00		83.6	70-130			
Chloroethane	5.92				5.00		118	70-130			
Chloroform	4.69				5.00		93.7	70-130			
Chloromethane	5.21				5.00		104	70-130			
Cyclohexane	4.21				5.00		84.2	70-130			
Dibromochloromethane	4.44				5.00		88.9	70-130			
1,2-Dibromoethane (EDB)	4.10				5.00		82.0	70-130			
1,2-Dichlorobenzene	4.91				5.00		98.2	70-130			
1,3-Dichlorobenzene	5.18				5.00		104	70-130			
1,4-Dichlorobenzene	5.19				5.00		104	70-130			
Dichlorodifluoromethane (Freon 12)	5.30				5.00		106	70-130			
1,1-Dichloroethane	4.63				5.00		92.5	70-130			
1,2-Dichloroethane	4.78				5.00		95.6	70-130			
1,1-Dichloroethylene	5.52				5.00		110	70-130			
cis-1,2-Dichloroethylene	4.59				5.00		91.8	70-130			
trans-1,2-Dichloroethylene	4.62				5.00		92.3	70-130			
1,2-Dichloropropane	4.06				5.00		81.2	70-130			
cis-1,3-Dichloropropene	4.05				5.00		81.1	70-130			
trans-1,3-Dichloropropene	4.16				5.00		83.2	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.45				5.00		109	70-130			
1,4-Dioxane	4.14				5.00		82.7	70-130			
Ethanol	4.20				5.00		83.9	70-130			
Ethyl Acetate	4.62				5.00		92.4	70-130			
Ethylbenzene	4.33				5.00		86.6	70-130			
4-Ethyltoluene	4.77				5.00		95.3	70-130			
Heptane	4.32				5.00		86.3	70-130			
Hexachlorobutadiene	4.45				5.00		89.0	70-130			
Hexane	4.91				5.00		98.1	70-130			
2-Hexanone (MBK)	3.92				5.00		78.3	70-130			
Isopropanol	4.48				5.00		89.7	70-130			
Methyl tert-Butyl Ether (MTBE)	4.58				5.00		91.5	70-130			
Methylene Chloride	4.36				5.00		87.2	70-130			
4-Methyl-2-pentanone (MIBK)	4.02				5.00		80.4	70-130			
Naphthalene	4.72				5.00		94.4	70-130			
Propene	3.44				5.00		68.8 *	70-130			
Styrene	4.73				5.00		94.6	70-130			

L-03, V-05

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B328228 - TO-15 Prep
LCS (B328228-BS1)

Prepared & Analyzed: 01/07/23

1,1,2,2-Tetrachloroethane	4.11				5.00		82.2	70-130			
Tetrachloroethylene	4.51				5.00		90.2	70-130			
Tetrahydrofuran	4.71				5.00		94.2	70-130			
Toluene	4.15				5.00		83.0	70-130			
1,2,4-Trichlorobenzene	4.32				5.00		86.4	70-130			
1,1,1-Trichloroethane	3.93				5.00		78.7	70-130			
1,1,2-Trichloroethane	3.90				5.00		78.0	70-130			
Trichloroethylene	4.26				5.00		85.2	70-130			
Trichlorofluoromethane (Freon 11)	6.11				5.00		122	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.83				5.00		96.5	70-130			
1,2,4-Trimethylbenzene	4.81				5.00		96.2	70-130			
1,3,5-Trimethylbenzene	4.85				5.00		97.0	70-130			
Vinyl Acetate	3.69				5.00		73.8	70-130			
Vinyl Chloride	5.81				5.00		116	70-130			
m&p-Xylene	9.28				10.0		92.8	70-130			
o-Xylene	4.69				5.00		93.8	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.65</i>				<i>8.00</i>		<i>121</i>	<i>70-130</i>			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
Z-01	Sample had a final vacuum of zero. Flow controllers was checked and the RPD was >20%

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S076501-ICV1)			Lab File ID: G22A256016.D			Analyzed: 09/13/22 22:00			
Bromochloromethane (1)	1141026	8.307	1123386	8.307	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2751702	10.081	2650535	10.081	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2471195	14.446	2407851	14.446	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S081701-CCV1)			Lab File ID: G23A006004.D			Analyzed: 01/06/23 14:47			
Bromochloromethane (1)	811933	8.301	1123386	8.307	72	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2033656	10.075	2650535	10.081	77	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1940175	14.44	2407851	14.446	81	60 - 140	-0.0060	+/-0.50	
LCS (B328214-BS1)			Lab File ID: G23A006005.D			Analyzed: 01/06/23 15:26			
Bromochloromethane (1)	849260	8.3	811933	8.301	105	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2242905	10.075	2033656	10.075	110	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2127184	14.44	1940175	14.44	110	60 - 140	0.0000	+/-0.50	
Blank (B328214-BLK1)			Lab File ID: G23A006008.D			Analyzed: 01/06/23 17:34			
Bromochloromethane (1)	755819	8.307	811933	8.301	93	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	1885330	10.081	2033656	10.075	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	1779668	14.446	1940175	14.44	92	60 - 140	0.0060	+/-0.50	
RO5-INT1 (22L3219-01)			Lab File ID: G23A006024.D			Analyzed: 01/07/23 06:11			
Bromochloromethane (1)	870086	8.301	811933	8.301	107	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2434453	10.075	2033656	10.075	120	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2293042	14.44	1940175	14.44	118	60 - 140	0.0000	+/-0.50	
RO5-INT2 (22L3219-02)			Lab File ID: G23A006025.D			Analyzed: 01/07/23 06:59			
Bromochloromethane (1)	837594	8.3	811933	8.301	103	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2232299	10.075	2033656	10.075	110	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2086692	14.44	1940175	14.44	108	60 - 140	0.0000	+/-0.50	
RO5-DW1 (22L3219-03)			Lab File ID: G23A006026.D			Analyzed: 01/07/23 07:47			
Bromochloromethane (1)	840048	8.301	811933	8.301	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2228261	10.075	2033656	10.075	110	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2099947	14.44	1940175	14.44	108	60 - 140	0.0000	+/-0.50	
RO5-DW2-D1 (22L3219-04)			Lab File ID: G23A006027.D			Analyzed: 01/07/23 08:35			
Bromochloromethane (1)	845841	8.301	811933	8.301	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2201323	10.075	2033656	10.075	108	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2102247	14.44	1940175	14.44	108	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO5-DW2-D2 (22L3219-05) Lab File ID: G23A006028.D Analyzed: 01/07/23 09:23									
Bromochloromethane (1)	813845	8.301	811933	8.301	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2101074	10.075	2033656	10.075	103	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2001472	14.44	1940175	14.44	103	60 - 140	0.0000	+/-0.50	
RO5-UW (22L3219-06) Lab File ID: G23A006029.D Analyzed: 01/07/23 10:11									
Bromochloromethane (1)	821647	8.307	811933	8.301	101	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2157279	10.075	2033656	10.075	106	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2084059	14.44	1940175	14.44	107	60 - 140	0.0000	+/-0.50	
Duplicate (B328214-DUP1) Lab File ID: G23A006030.D Analyzed: 01/07/23 10:59									
Bromochloromethane (1)	800834	8.301	811933	8.301	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2067629	10.075	2033656	10.075	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1986556	14.44	1940175	14.44	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S081706-CCV1) Lab File ID: G23A007004.D Analyzed: 01/07/23 15:12									
Bromochloromethane (1)	1022563	8.307	1123386	8.307	91	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2687870	10.075	2650535	10.081	101	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2573581	14.44	2407851	14.446	107	60 - 140	-0.0060	+/-0.50	
LCS (B328228-BS1) Lab File ID: G23A007005.D Analyzed: 01/07/23 15:52									
Bromochloromethane (1)	1029197	8.301	1022563	8.307	101	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2756966	10.075	2687870	10.075	103	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2643950	14.44	2573581	14.44	103	60 - 140	0.0000	+/-0.50	
Blank (B328228-BLK1) Lab File ID: G23A007008.D Analyzed: 01/07/23 18:00									
Bromochloromethane (1)	969941	8.307	1022563	8.307	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2616555	10.075	2687870	10.075	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2488879	14.44	2573581	14.44	97	60 - 140	0.0000	+/-0.50	
RO5-INT2 (22L3219-02RE1) Lab File ID: G23A007023.D Analyzed: 01/08/23 04:07									
Bromochloromethane (1)	875591	8.307	1022563	8.307	86	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2220890	10.075	2687870	10.075	83	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2122738	14.44	2573581	14.44	82	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S081701-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.23	1.084004	1.133792		4.6	30
Benzene	A	5.00	4.14	0.9129288	0.7554662		-17.2	30
Benzyl chloride	A	5.00	4.93	1.030942	1.017422		-1.3	30
Bromodichloromethane	A	5.00	4.10	0.6953811	0.5706106		-17.9	30
Bromoform	A	5.00	4.99	0.5656468	0.5643672		-0.2	30
Bromomethane	A	5.00	5.49	0.6009459	0.6594751		9.7	30
1,3-Butadiene	A	5.00	5.28	0.5443004	0.5743213		5.5	30
2-Butanone (MEK)	A	5.00	4.25	1.507683	1.282045		-15.0	30
Carbon Disulfide	A	5.00	4.42	2.02748	1.792026		-11.6	30
Carbon Tetrachloride	A	5.00	4.33	0.5479998	0.474684		-13.4	30
Chlorobenzene	A	5.00	4.26	0.8809329	0.7507628		-14.8	30
Chloroethane	A	5.00	5.30	0.3452967	0.3660637		6.0	30
Chloroform	A	5.00	4.37	1.561184	1.364682		-12.6	30
Chloromethane	A	5.00	5.08	0.6821899	0.6925202		1.5	30
Cyclohexane	A	5.00	4.24	0.3600845	0.3054227		-15.2	30
Dibromochloromethane	A	5.00	4.44	0.6396581	0.5675133		-11.3	30
1,2-Dibromoethane (EDB)	A	5.00	4.18	0.6171207	0.5160623		-16.4	30
1,2-Dichlorobenzene	A	5.00	5.00	0.6937094	0.6944693		0.1	30
1,3-Dichlorobenzene	A	5.00	5.25	0.7409581	0.7781599		5.0	30
1,4-Dichlorobenzene	A	5.00	5.28	0.7218155	0.7620987		5.6	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.24	1.62808	1.705739		4.8	30
1,1-Dichloroethane	A	5.00	4.36	1.342742	1.172201		-12.7	30
1,2-Dichloroethane	A	5.00	4.53	0.9627523	0.8726848		-9.4	30
1,1-Dichloroethylene	A	5.00	5.55	1.140142	1.266467		11.1	30
cis-1,2-Dichloroethylene	A	5.00	4.37	0.9670963	0.845993		-12.5	30
trans-1,2-Dichloroethylene	A	5.00	4.44	1.001825	0.8902981		-11.1	30
1,2-Dichloropropane	A	5.00	4.11	0.3567989	0.2933586		-17.8	30
cis-1,3-Dichloropropene	A	5.00	4.24	0.5092852	0.4321352		-15.1	30
trans-1,3-Dichloropropene	A	5.00	4.18	0.4570981	0.3824088		-16.3	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.35	1.73998	1.862422		7.0	30
1,4-Dioxane	A	5.00	4.11	0.1857641	0.1527432		-17.8	30
Ethanol	A	5.00	4.24	0.2343264	0.1986095		-15.2	30
Ethyl Acetate	A	5.00	4.56	0.2308163	0.2105947		-8.8	30
Ethylbenzene	A	5.00	4.48	1.455024	1.304332		-10.4	30
4-Ethyltoluene	A	5.00	4.94	1.413771	1.397833		-1.1	30
Heptane	A	5.00	4.43	0.2850308	0.2527712		-11.3	30
Hexachlorobutadiene	A	5.00	4.68	0.4677459	0.4381592		-6.3	30
Hexane	A	5.00	4.74	0.8985394	0.7994256		-5.3	30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S081701-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.11	0.7712864	0.634088		-17.8	30
Isopropanol	A	5.00	5.12	1.338902	1.370679		2.4	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.45	1.834723	1.631798		-11.1	30
Methylene Chloride	A	5.00	4.30	0.9597215	0.8256681		-14.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.26	0.7726854	0.6590173		-14.7	30
Naphthalene	A	5.00	4.78	1.092246	1.043916		-4.4	30
Propene	A	5.00	3.80	0.5941328	0.4521063		-23.9	30
Styrene	A	5.00	4.82	0.7890752	0.761114		-3.5	30
1,1,2,2-Tetrachloroethane	A	5.00	4.38	0.9851261	0.8632805		-12.4	30
Tetrachloroethylene	A	5.00	4.46	0.457194	0.4075171		-10.9	30
Tetrahydrofuran	A	5.00	4.28	0.2957092	0.2531184		-14.4	30
Toluene	A	5.00	4.16	1.15399	0.9610473		-16.7	30
1,2,4-Trichlorobenzene	A	5.00	4.54	0.4973623	0.4510768		-9.3	30
1,1,1-Trichloroethane	A	5.00	4.14	0.5975698	0.4947126		-17.2	30
1,1,2-Trichloroethane	A	5.00	3.89	0.4162703	0.3236624		-22.2	30
Trichloroethylene	A	5.00	4.17	0.3947958	0.3289689		-16.7	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.74	1.463327	1.678785		14.7	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.61	1.432547	1.321999		-7.7	30
1,2,4-Trimethylbenzene	A	5.00	5.04	1.156019	1.165301		0.8	30
1,3,5-Trimethylbenzene	A	5.00	5.06	1.190388	1.204901		1.2	30
Vinyl Acetate	A	5.00	3.77	1.986739	1.497525		-24.6	30
Vinyl Chloride	A	5.00	5.39	0.7142115	0.7705148		7.9	30
m&p-Xylene	A	10.0	9.54	1.129066	1.076885		-4.6	30
o-Xylene	A	5.00	4.83	1.138955	1.100869		-3.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S081706-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.40	1.084004	1.170602		8.0	30
Benzene	A	5.00	4.06	0.9129288	0.7420871		-18.7	30
Benzyl chloride	A	5.00	4.79	1.030942	0.9882678		-4.1	30
Bromodichloromethane	A	5.00	4.05	0.6953811	0.5634719		-19.0	30
Bromoform	A	5.00	4.93	0.5656468	0.5578201		-1.4	30
Bromomethane	A	5.00	5.81	0.6009459	0.6987368		16.3	30
1,3-Butadiene	A	5.00	5.51	0.5443004	0.5994443		10.1	30
2-Butanone (MEK)	A	5.00	4.24	1.507683	1.279172		-15.2	30
Carbon Disulfide	A	5.00	4.48	2.02748	1.815665		-10.4	30
Carbon Tetrachloride	A	5.00	4.31	0.5479998	0.4722205		-13.8	30
Chlorobenzene	A	5.00	4.18	0.8809329	0.7367608		-16.4	30
Chloroethane	A	5.00	5.66	0.3452967	0.3907922		13.2	30
Chloroform	A	5.00	4.53	1.561184	1.415407		-9.3	30
Chloromethane	A	5.00	5.21	0.6821899	0.710835		4.2	30
Cyclohexane	A	5.00	4.16	0.3600845	0.299849		-16.7	30
Dibromochloromethane	A	5.00	4.44	0.6396581	0.5682529		-11.2	30
1,2-Dibromoethane (EDB)	A	5.00	4.13	0.6171207	0.5098832		-17.4	30
1,2-Dichlorobenzene	A	5.00	4.91	0.6937094	0.6809587		-1.8	30
1,3-Dichlorobenzene	A	5.00	5.18	0.7409581	0.7676457		3.6	30
1,4-Dichlorobenzene	A	5.00	5.22	0.7218155	0.7542051		4.5	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.93	1.62808	1.606741		-1.3	30
1,1-Dichloroethane	A	5.00	4.43	1.342742	1.189522		-11.4	30
1,2-Dichloroethane	A	5.00	4.62	0.9627523	0.8902869		-7.5	30
1,1-Dichloroethylene	A	5.00	5.40	1.140142	1.231203		8.0	30
cis-1,2-Dichloroethylene	A	5.00	4.51	0.9670963	0.8720065		-9.8	30
trans-1,2-Dichloroethylene	A	5.00	4.51	1.001825	0.9039701		-9.8	30
1,2-Dichloropropane	A	5.00	3.97	0.3567989	0.2832333		-20.6	30
cis-1,3-Dichloropropene	A	5.00	4.14	0.5092852	0.4213995		-17.3	30
trans-1,3-Dichloropropene	A	5.00	4.09	0.4570981	0.3739818		-18.2	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.70	1.73998	1.982626		13.9	30
1,4-Dioxane	A	5.00	4.02	0.1857641	0.1493477		-19.6	30
Ethanol	A	5.00	4.48	0.2343264	0.2097412		-10.5	30
Ethyl Acetate	A	5.00	4.78	0.2308163	0.2207379		-4.4	30
Ethylbenzene	A	5.00	4.38	1.455024	1.274086		-12.4	30
4-Ethyltoluene	A	5.00	4.82	1.413771	1.36288		-3.6	30
Heptane	A	5.00	4.27	0.2850308	0.243338		-14.6	30
Hexachlorobutadiene	A	5.00	4.56	0.4677459	0.426651		-8.8	30
Hexane	A	5.00	4.78	0.8985394	0.8071264		-4.4	30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S081706-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	3.98	0.7712864	0.614722		-20.3	30
Isopropanol	A	5.00	5.22	1.338902	1.398916		4.5	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.53	1.834723	1.661774		-9.4	30
Methylene Chloride	A	5.00	4.25	0.9597215	0.8159826		-15.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.06	0.7726854	0.6274536		-18.8	30
Naphthalene	A	5.00	4.65	1.092246	1.015138		-7.1	30
Propene	A	5.00	3.46	0.5941328	0.4112474		-30.8	30 *
Styrene	A	5.00	4.74	0.7890752	0.7479589		-5.2	30
1,1,2,2-Tetrachloroethane	A	5.00	4.24	0.9851261	0.8345595		-15.3	30
Tetrachloroethylene	A	5.00	4.47	0.457194	0.408547		-10.6	30
Tetrahydrofuran	A	5.00	4.43	0.2957092	0.2621288		-11.4	30
Toluene	A	5.00	4.11	1.15399	0.9485056		-17.8	30
1,2,4-Trichlorobenzene	A	5.00	4.40	0.4973623	0.4382146		-11.9	30
1,1,1-Trichloroethane	A	5.00	4.08	0.5975698	0.487745		-18.4	30
1,1,2-Trichloroethane	A	5.00	3.81	0.4162703	0.3173614		-23.8	30
Trichloroethylene	A	5.00	4.12	0.3947958	0.3249133		-17.7	30
Trichlorofluoromethane (Freon 11)	A	5.00	6.04	1.463327	1.768454		20.9	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.73	1.432547	1.355757		-5.4	30
1,2,4-Trimethylbenzene	A	5.00	4.90	1.156019	1.133827		-1.9	30
1,3,5-Trimethylbenzene	A	5.00	4.91	1.190388	1.169336		-1.8	30
Vinyl Acetate	A	5.00	3.82	1.986739	1.516879		-23.6	30
Vinyl Chloride	A	5.00	5.70	0.7142115	0.8140408		14.0	30
m&p-Xylene	A	10.0	9.36	1.129066	1.056621		-6.4	30
o-Xylene	A	5.00	4.71	1.138955	1.073149		-5.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023

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January 19, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: IL
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 23A0946

Enclosed are results of analyses for samples as received by the laboratory on January 10, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 1/19/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23A0946

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: IL

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO6-INT1	23A0946-01	Air		EPA TO-15	
RO6-INT2	23A0946-02	Air		EPA TO-15	
RO6-DW1	23A0946-03	Air		EPA TO-15	
RO6-DW2-D1	23A0946-04	Air		EPA TO-15	
RO6-DW2-D2	23A0946-05	Air		EPA TO-15	
RO6-UW	23A0946-06	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

R-04

Duplicate relative percent difference (RPD) is outside of control limits. RPD is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

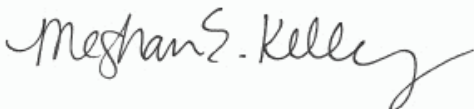
Analyte & Sample(s) Qualified:

4-Methyl-2-pentanone (MIBK)

B329051-DUP1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-INT1
Sample ID: 23A0946-01
Sample Matrix: Air
Sampled: 1/5/2023 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 1934
Canister Size: 6 liter
Flow Controller ID: 3506
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	1.7	1.4		4.1	3.3	0.702	1/16/23 20:57	CMR	
Benzene	190	0.50		600	1.6	10	1/18/23 19:04	CMR	
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/16/23 20:57	CMR	
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/16/23 20:57	CMR	
Bromoform	ND	0.035		ND	0.36	0.702	1/16/23 20:57	CMR	
Bromomethane	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
1,3-Butadiene	2.4	0.035		5.3	0.078	0.702	1/16/23 20:57	CMR	
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/16/23 20:57	CMR	
Carbon Disulfide	1.0	0.35		3.1	1.1	0.702	1/16/23 20:57	CMR	
Carbon Tetrachloride	0.069	0.035		0.43	0.22	0.702	1/16/23 20:57	CMR	
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/16/23 20:57	CMR	
Chloroethane	ND	0.035		ND	0.093	0.702	1/16/23 20:57	CMR	
Chloroform	ND	0.035		ND	0.17	0.702	1/16/23 20:57	CMR	
Chloromethane	0.45	0.070		0.92	0.14	0.702	1/16/23 20:57	CMR	
Cyclohexane	0.17	0.035		0.59	0.12	0.702	1/16/23 20:57	CMR	
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/16/23 20:57	CMR	
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/16/23 20:57	CMR	
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 20:57	CMR	
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 20:57	CMR	
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 20:57	CMR	
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/16/23 20:57	CMR	
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 20:57	CMR	
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/16/23 20:57	CMR	
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 20:57	CMR	
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 20:57	CMR	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/16/23 20:57	CMR	
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/16/23 20:57	CMR	
Ethanol	1.8	1.4		3.3	2.6	0.702	1/16/23 20:57	CMR	
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/16/23 20:57	CMR	
Ethylbenzene	0.26	0.035		1.1	0.15	0.702	1/16/23 20:57	CMR	
4-Ethyltoluene	0.058	0.035		0.29	0.17	0.702	1/16/23 20:57	CMR	
Heptane	0.11	0.035		0.46	0.14	0.702	1/16/23 20:57	CMR	
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/16/23 20:57	CMR	

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-INT1
Sample ID: 23A0946-01
Sample Matrix: Air
Sampled: 1/5/2023 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 1934
Canister Size: 6 liter
Flow Controller ID: 3506
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/16/23 20:57		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	1/16/23 20:57		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/16/23 20:57		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/16/23 20:57		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/16/23 20:57		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/16/23 20:57		CMR
Naphthalene	ND	0.035		ND	0.18	0.702	1/16/23 20:57		CMR
Propene	18	1.4		31	2.4	0.702	1/16/23 20:57		CMR
Styrene	6.0	0.035		26	0.15	0.702	1/16/23 20:57		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/16/23 20:57		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/16/23 20:57		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/16/23 20:57		CMR
Toluene	29	0.035		110	0.13	0.702	1/16/23 20:57		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/16/23 20:57		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 20:57		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 20:57		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/16/23 20:57		CMR
Trichlorofluoromethane (Freon 11)	0.19	0.14		1.1	0.79	0.702	1/16/23 20:57		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/16/23 20:57		CMR
1,2,4-Trimethylbenzene	1.6	0.035		8.1	0.17	0.702	1/16/23 20:57		CMR
1,3,5-Trimethylbenzene	1.2	0.035		5.9	0.17	0.702	1/16/23 20:57		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/16/23 20:57		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/16/23 20:57		CMR
m&p-Xylene	9.8	0.070		43	0.30	0.702	1/16/23 20:57		CMR
o-Xylene	2.2	0.035		9.3	0.15	0.702	1/16/23 20:57		CMR
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	99.6			70-130			1/18/23 19:04		
4-Bromofluorobenzene (1)	114			70-130			1/16/23 20:57		

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-INT2
Sample ID: 23A0946-02
Sample Matrix: Air
Sampled: 1/5/2023 10:28

Sample Description/Location:
Sub Description/Location:
Canister ID: 1024
Canister Size: 6 liter
Flow Controller ID: 3484
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -9.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	2.6	1.4		6.1	3.3	0.696	1/16/23 21:46	CMR
Benzene	1.3	0.035		4.0	0.11	0.696	1/16/23 21:46	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.696	1/16/23 21:46	CMR
Bromodichloromethane	ND	0.035		ND	0.23	0.696	1/16/23 21:46	CMR
Bromoform	ND	0.035		ND	0.36	0.696	1/16/23 21:46	CMR
Bromomethane	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
1,3-Butadiene	ND	0.035		ND	0.077	0.696	1/16/23 21:46	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.696	1/16/23 21:46	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.696	1/16/23 21:46	CMR
Carbon Tetrachloride	0.068	0.035		0.43	0.22	0.696	1/16/23 21:46	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.696	1/16/23 21:46	CMR
Chloroethane	ND	0.035		ND	0.092	0.696	1/16/23 21:46	CMR
Chloroform	0.036	0.035		0.18	0.17	0.696	1/16/23 21:46	CMR
Chloromethane	0.43	0.070		0.88	0.14	0.696	1/16/23 21:46	CMR
Cyclohexane	0.16	0.035		0.57	0.12	0.696	1/16/23 21:46	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.696	1/16/23 21:46	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.696	1/16/23 21:46	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.696	1/16/23 21:46	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.696	1/16/23 21:46	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.696	1/16/23 21:46	CMR
Dichlorodifluoromethane (Freon 12)	0.27	0.035		1.3	0.17	0.696	1/16/23 21:46	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.696	1/16/23 21:46	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.696	1/16/23 21:46	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	1/16/23 21:46	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.696	1/16/23 21:46	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.24	0.696	1/16/23 21:46	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.696	1/16/23 21:46	CMR
Ethanol	5.3	1.4		10.0	2.6	0.696	1/16/23 21:46	CMR
Ethyl Acetate	33	2.0		120	7.2	4	1/17/23 10:07	CMR
Ethylbenzene	0.042	0.035		0.18	0.15	0.696	1/16/23 21:46	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.696	1/16/23 21:46	CMR
Heptane	0.13	0.035		0.52	0.14	0.696	1/16/23 21:46	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.696	1/16/23 21:46	CMR

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ANALYTICAL RESULTS

Project Location: IL
 Date Received: 1/10/2023
Field Sample #: RO6-INT2
Sample ID: 23A0946-02
 Sample Matrix: Air
 Sampled: 1/5/2023 10:28

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1024
 Canister Size: 6 liter
 Flow Controller ID: 3484
 Sample Type: 24 hr

Work Order: 23A0946
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -9.1
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.696	1/16/23 21:46		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.696	1/16/23 21:46		CMR
Isopropanol	ND	1.4		ND	3.4	0.696	1/16/23 21:46		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.696	1/16/23 21:46		CMR
Methylene Chloride	0.39	0.35		1.3	1.2	0.696	1/16/23 21:46		CMR
4-Methyl-2-pentanone (MIBK)	0.039	0.035		0.16	0.14	0.696	1/16/23 21:46		CMR
Naphthalene	1.7	0.035		9.1	0.18	0.696	1/16/23 21:46		CMR
Propene	ND	1.4		ND	2.4	0.696	1/16/23 21:46		CMR
Styrene	0.059	0.035		0.25	0.15	0.696	1/16/23 21:46		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.696	1/16/23 21:46		CMR
Tetrachloroethylene	0.20	0.035		1.3	0.24	0.696	1/16/23 21:46		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.696	1/16/23 21:46		CMR
Toluene	0.90	0.035		3.4	0.13	0.696	1/16/23 21:46		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.696	1/16/23 21:46		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.696	1/16/23 21:46		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.696	1/16/23 21:46		CMR
Trichloroethylene	0.094	0.035		0.50	0.19	0.696	1/16/23 21:46		CMR
Trichlorofluoromethane (Freon 11)	0.18	0.14		1.0	0.78	0.696	1/16/23 21:46		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.696	1/16/23 21:46		CMR
1,2,4-Trimethylbenzene	0.067	0.035		0.33	0.17	0.696	1/16/23 21:46		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.696	1/16/23 21:46		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.696	1/16/23 21:46		CMR
Vinyl Chloride	ND	0.035		ND	0.089	0.696	1/16/23 21:46		CMR
m&p-Xylene	0.17	0.070		0.76	0.30	0.696	1/16/23 21:46		CMR
o-Xylene	0.067	0.035		0.29	0.15	0.696	1/16/23 21:46		CMR
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	109			70-130			1/17/23 10:07		
4-Bromofluorobenzene (1)	111			70-130			1/16/23 21:46		

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-DW1
Sample ID: 23A0946-03
Sample Matrix: Air
Sampled: 1/5/2023 10:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 1271
Canister Size: 6 liter
Flow Controller ID: 3356
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	1.9	1.4		4.5	3.3	0.702	1/16/23 22:33	CMR
Benzene	0.36	0.035		1.2	0.11	0.702	1/16/23 22:33	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/16/23 22:33	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/16/23 22:33	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/16/23 22:33	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	1/16/23 22:33	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/16/23 22:33	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/16/23 22:33	CMR
Carbon Tetrachloride	0.065	0.035		0.41	0.22	0.702	1/16/23 22:33	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/16/23 22:33	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/16/23 22:33	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/16/23 22:33	CMR
Chloromethane	0.44	0.070		0.91	0.14	0.702	1/16/23 22:33	CMR
Cyclohexane	0.039	0.035		0.13	0.12	0.702	1/16/23 22:33	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/16/23 22:33	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/16/23 22:33	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 22:33	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 22:33	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 22:33	CMR
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/16/23 22:33	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 22:33	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/16/23 22:33	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 22:33	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 22:33	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/16/23 22:33	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/16/23 22:33	CMR
Ethanol	2.1	1.4		3.9	2.6	0.702	1/16/23 22:33	CMR
Ethyl Acetate	5.4	0.35		20	1.3	0.702	1/16/23 22:33	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/16/23 22:33	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/16/23 22:33	CMR
Heptane	0.085	0.035		0.35	0.14	0.702	1/16/23 22:33	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/16/23 22:33	CMR

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ANALYTICAL RESULTS

Project Location: IL
 Date Received: 1/10/2023
Field Sample #: RO6-DW1
Sample ID: 23A0946-03
 Sample Matrix: Air
 Sampled: 1/5/2023 10:50

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1271
 Canister Size: 6 liter
 Flow Controller ID: 3356
 Sample Type: 24 hr

Work Order: 23A0946
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -8.2
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/16/23 22:33		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	1/16/23 22:33		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/16/23 22:33		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/16/23 22:33		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/16/23 22:33		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/16/23 22:33		CMR
Naphthalene	0.20	0.035		1.0	0.18	0.702	1/16/23 22:33		CMR
Propene	ND	1.4		ND	2.4	0.702	1/16/23 22:33		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/16/23 22:33		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/16/23 22:33		CMR
Tetrachloroethylene	0.053	0.035		0.36	0.24	0.702	1/16/23 22:33		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/16/23 22:33		CMR
Toluene	0.27	0.035		1.0	0.13	0.702	1/16/23 22:33		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/16/23 22:33		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 22:33		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 22:33		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/16/23 22:33		CMR
Trichlorofluoromethane (Freon 11)	0.19	0.14		1.1	0.79	0.702	1/16/23 22:33		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/16/23 22:33		CMR
1,2,4-Trimethylbenzene	0.045	0.035		0.22	0.17	0.702	1/16/23 22:33		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/16/23 22:33		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/16/23 22:33		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/16/23 22:33		CMR
m&p-Xylene	0.082	0.070		0.36	0.30	0.702	1/16/23 22:33		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/16/23 22:33		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/16/23 22:33

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-DW2-D1
Sample ID: 23A0946-04
Sample Matrix: Air
Sampled: 1/5/2023 11:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 2180
Canister Size: 6 liter
Flow Controller ID: 3593
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	1.8	1.4		4.2	3.3	0.702	1/16/23 23:21	CMR
Benzene	0.39	0.035		1.3	0.11	0.702	1/16/23 23:21	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/16/23 23:21	CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/16/23 23:21	CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/16/23 23:21	CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
1,3-Butadiene	0.039	0.035		0.087	0.078	0.702	1/16/23 23:21	CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/16/23 23:21	CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/16/23 23:21	CMR
Carbon Tetrachloride	0.066	0.035		0.41	0.22	0.702	1/16/23 23:21	CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/16/23 23:21	CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/16/23 23:21	CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/16/23 23:21	CMR
Chloromethane	0.41	0.070		0.85	0.14	0.702	1/16/23 23:21	CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/16/23 23:21	CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/16/23 23:21	CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/16/23 23:21	CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 23:21	CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 23:21	CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/16/23 23:21	CMR
Dichlorodifluoromethane (Freon 12)	0.31	0.035		1.6	0.17	0.702	1/16/23 23:21	CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/16/23 23:21	CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 23:21	CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/16/23 23:21	CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/16/23 23:21	CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/16/23 23:21	CMR
Ethanol	2.2	1.4		4.1	2.6	0.702	1/16/23 23:21	CMR
Ethyl Acetate	0.44	0.35		1.6	1.3	0.702	1/16/23 23:21	CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/16/23 23:21	CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/16/23 23:21	CMR
Heptane	ND	0.035		ND	0.14	0.702	1/16/23 23:21	CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/16/23 23:21	CMR

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-DW2-D1
Sample ID: 23A0946-04
Sample Matrix: Air
Sampled: 1/5/2023 11:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 2180
Canister Size: 6 liter
Flow Controller ID: 3593
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/16/23 23:21		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	1/16/23 23:21		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/16/23 23:21		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/16/23 23:21		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/16/23 23:21		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/16/23 23:21		CMR
Naphthalene	0.11	0.035		0.58	0.18	0.702	1/16/23 23:21		CMR
Propene	ND	1.4		ND	2.4	0.702	1/16/23 23:21		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/16/23 23:21		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/16/23 23:21		CMR
Tetrachloroethylene	0.062	0.035		0.42	0.24	0.702	1/16/23 23:21		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/16/23 23:21		CMR
Toluene	0.12	0.035		0.46	0.13	0.702	1/16/23 23:21		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/16/23 23:21		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 23:21		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/16/23 23:21		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/16/23 23:21		CMR
Trichlorofluoromethane (Freon 11)	0.20	0.14		1.1	0.79	0.702	1/16/23 23:21		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/16/23 23:21		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/16/23 23:21		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/16/23 23:21		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/16/23 23:21		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/16/23 23:21		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/16/23 23:21		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/16/23 23:21		CMR

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	114	70-130	1/16/23 23:21

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-DW2-D2
Sample ID: 23A0946-05
Sample Matrix: Air
Sampled: 1/5/2023 11:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 2148
Canister Size: 6 liter
Flow Controller ID: 3593
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -2.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.0	1.4		4.7	3.3	0.702	1/17/23 0:08		CMR
Benzene	0.41	0.035		1.3	0.11	0.702	1/17/23 0:08		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/17/23 0:08		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/17/23 0:08		CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/17/23 0:08		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
1,3-Butadiene	0.036	0.035		0.081	0.078	0.702	1/17/23 0:08		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/17/23 0:08		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/17/23 0:08		CMR
Carbon Tetrachloride	0.069	0.035		0.44	0.22	0.702	1/17/23 0:08		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/17/23 0:08		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/17/23 0:08		CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/17/23 0:08		CMR
Chloromethane	0.40	0.070		0.83	0.14	0.702	1/17/23 0:08		CMR
Cyclohexane	0.060	0.035		0.21	0.12	0.702	1/17/23 0:08		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/17/23 0:08		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/17/23 0:08		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:08		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:08		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:08		CMR
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.4	0.17	0.702	1/17/23 0:08		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/17/23 0:08		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/17/23 0:08		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/17/23 0:08		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/17/23 0:08		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/17/23 0:08		CMR
Ethanol	11	1.4		21	2.6	0.702	1/17/23 0:08		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/17/23 0:08		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/17/23 0:08		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/17/23 0:08		CMR
Heptane	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/17/23 0:08		CMR

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ANALYTICAL RESULTS

Project Location: IL
 Date Received: 1/10/2023
Field Sample #: RO6-DW2-D2
Sample ID: 23A0946-05
 Sample Matrix: Air
 Sampled: 1/5/2023 11:20

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2148
 Canister Size: 6 liter
 Flow Controller ID: 3593
 Sample Type: 24 hr

Work Order: 23A0946
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -4
 Receipt Vacuum(in Hg): -2.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/17/23 0:08		CMR
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/17/23 0:08		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/17/23 0:08		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/17/23 0:08		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/17/23 0:08		CMR
Naphthalene	0.095	0.035		0.50	0.18	0.702	1/17/23 0:08		CMR
Propene	ND	1.4		ND	2.4	0.702	1/17/23 0:08		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/17/23 0:08		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/17/23 0:08		CMR
Tetrachloroethylene	0.046	0.035		0.31	0.24	0.702	1/17/23 0:08		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/17/23 0:08		CMR
Toluene	0.12	0.035		0.44	0.13	0.702	1/17/23 0:08		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/17/23 0:08		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/17/23 0:08		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/17/23 0:08		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/17/23 0:08		CMR
Trichlorofluoromethane (Freon 11)	0.19	0.14		1.1	0.79	0.702	1/17/23 0:08		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/17/23 0:08		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/17/23 0:08		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/17/23 0:08		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/17/23 0:08		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/17/23 0:08		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/17/23 0:08		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/17/23 0:08		CMR

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	110	70-130	1/17/23	0:08

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ANALYTICAL RESULTS

Project Location: IL
Date Received: 1/10/2023
Field Sample #: RO6-UW
Sample ID: 23A0946-06
Sample Matrix: Air
Sampled: 1/5/2023 11:54

Sample Description/Location:
Sub Description/Location:
Canister ID: 1965
Canister Size: 6 liter
Flow Controller ID: 3065
Sample Type: 24 hr

Work Order: 23A0946
Initial Vacuum(in Hg): -39
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.1	1.4		5.0	3.3	0.702	1/17/23 0:56		CMR
Benzene	0.13	0.035		0.40	0.11	0.702	1/17/23 0:56		CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	1/17/23 0:56		CMR
Bromodichloromethane	ND	0.035		ND	0.24	0.702	1/17/23 0:56		CMR
Bromoform	ND	0.035		ND	0.36	0.702	1/17/23 0:56		CMR
Bromomethane	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
1,3-Butadiene	ND	0.035		ND	0.078	0.702	1/17/23 0:56		CMR
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	1/17/23 0:56		CMR
Carbon Disulfide	ND	0.35		ND	1.1	0.702	1/17/23 0:56		CMR
Carbon Tetrachloride	0.069	0.035		0.43	0.22	0.702	1/17/23 0:56		CMR
Chlorobenzene	ND	0.035		ND	0.16	0.702	1/17/23 0:56		CMR
Chloroethane	ND	0.035		ND	0.093	0.702	1/17/23 0:56		CMR
Chloroform	ND	0.035		ND	0.17	0.702	1/17/23 0:56		CMR
Chloromethane	0.39	0.070		0.81	0.14	0.702	1/17/23 0:56		CMR
Cyclohexane	ND	0.035		ND	0.12	0.702	1/17/23 0:56		CMR
Dibromochloromethane	ND	0.035		ND	0.30	0.702	1/17/23 0:56		CMR
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	1/17/23 0:56		CMR
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:56		CMR
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:56		CMR
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	1/17/23 0:56		CMR
Dichlorodifluoromethane (Freon 12)	0.28	0.035		1.4	0.17	0.702	1/17/23 0:56		CMR
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	1/17/23 0:56		CMR
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/17/23 0:56		CMR
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	1/17/23 0:56		CMR
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	1/17/23 0:56		CMR
1,4-Dioxane	ND	0.35		ND	1.3	0.702	1/17/23 0:56		CMR
Ethanol	1.4	1.4		2.6	2.6	0.702	1/17/23 0:56		CMR
Ethyl Acetate	ND	0.35		ND	1.3	0.702	1/17/23 0:56		CMR
Ethylbenzene	ND	0.035		ND	0.15	0.702	1/17/23 0:56		CMR
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	1/17/23 0:56		CMR
Heptane	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	1/17/23 0:56		CMR

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: IL
 Date Received: 1/10/2023
Field Sample #: RO6-UW
Sample ID: 23A0946-06
 Sample Matrix: Air
 Sampled: 1/5/2023 11:54

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1965
 Canister Size: 6 liter
 Flow Controller ID: 3065
 Sample Type: 24 hr

Work Order: 23A0946
 Initial Vacuum(in Hg): -39
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -6.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	1/17/23 0:56		CMR
2-Hexanone (MBK)	0.044	0.035		0.18	0.14	0.702	1/17/23 0:56		CMR
Isopropanol	ND	1.4		ND	3.4	0.702	1/17/23 0:56		CMR
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	1/17/23 0:56		CMR
Methylene Chloride	ND	0.35		ND	1.2	0.702	1/17/23 0:56		CMR
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	1/17/23 0:56		CMR
Naphthalene	ND	0.035		ND	0.18	0.702	1/17/23 0:56		CMR
Propene	ND	1.4		ND	2.4	0.702	1/17/23 0:56		CMR
Styrene	ND	0.035		ND	0.15	0.702	1/17/23 0:56		CMR
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	1/17/23 0:56		CMR
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	1/17/23 0:56		CMR
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	1/17/23 0:56		CMR
Toluene	0.056	0.035		0.21	0.13	0.702	1/17/23 0:56		CMR
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	1/17/23 0:56		CMR
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	1/17/23 0:56		CMR
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	1/17/23 0:56		CMR
Trichloroethylene	ND	0.035		ND	0.19	0.702	1/17/23 0:56		CMR
Trichlorofluoromethane (Freon 11)	0.19	0.14		1.1	0.79	0.702	1/17/23 0:56		CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	1/17/23 0:56		CMR
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/17/23 0:56		CMR
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	1/17/23 0:56		CMR
Vinyl Acetate	ND	0.70		ND	2.5	0.702	1/17/23 0:56		CMR
Vinyl Chloride	ND	0.035		ND	0.090	0.702	1/17/23 0:56		CMR
m&p-Xylene	ND	0.070		ND	0.30	0.702	1/17/23 0:56		CMR
o-Xylene	ND	0.035		ND	0.15	0.702	1/17/23 0:56		CMR

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	111	70-130	1/17/23	0:56

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Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
23A0946-01 [RO6-INT1]	B329051	1.5	1	N/A	1000	400	855	01/16/23
23A0946-02 [RO6-INT2]	B329051	1.74	1	N/A	1000	400	1000	01/16/23
23A0946-02RE1 [RO6-INT2]	B329051	1.74	1	N/A	1000	400	174	01/16/23
23A0946-03 [RO6-DW1]	B329051	1.5	1	N/A	1000	400	855	01/16/23
23A0946-04 [RO6-DW2-D1]	B329051	1.5	1	N/A	1000	400	855	01/16/23
23A0946-05 [RO6-DW2-D2]	B329051	1.5	1	N/A	1000	400	855	01/16/23
23A0946-06 [RO6-UW]	B329051	1.5	1	N/A	1000	400	855	01/16/23

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
23A0946-01RE1 [RO6-INT1]	B329197	1.5	1	N/A	1000	200	30	01/18/23

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	

Batch B329051 - TO-15 Prep
Blank (B329051-BLK1)

Prepared & Analyzed: 01/16/23

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B329051 - TO-15 Prep
Blank (B329051-BLK1)

Prepared & Analyzed: 01/16/23

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

Surrogate: 4-Bromofluorobenzene (1) 9.02 8.00 113 70-130

LCS (B329051-BS1)

Prepared & Analyzed: 01/16/23

Acetone	4.50	5.00	90.0	70-130
Benzene	5.21	5.00	104	70-130
Benzyl chloride	5.35	5.00	107	70-130
Bromodichloromethane	5.03	5.00	101	70-130
Bromoform	5.58	5.00	112	70-130
Bromomethane	4.44	5.00	88.8	70-130
1,3-Butadiene	4.00	5.00	80.0	70-130
2-Butanone (MEK)	5.08	5.00	102	70-130
Carbon Disulfide	5.50	5.00	110	70-130
Carbon Tetrachloride	5.41	5.00	108	70-130
Chlorobenzene	4.91	5.00	98.1	70-130
Chloroethane	4.40	5.00	88.1	70-130
Chloroform	5.36	5.00	107	70-130
Chloromethane	4.04	5.00	80.9	70-130
Cyclohexane	5.13	5.00	103	70-130
Dibromochloromethane	5.41	5.00	108	70-130
1,2-Dibromoethane (EDB)	4.96	5.00	99.2	70-130
1,2-Dichlorobenzene	5.19	5.00	104	70-130
1,3-Dichlorobenzene	5.32	5.00	106	70-130
1,4-Dichlorobenzene	5.36	5.00	107	70-130
Dichlorodifluoromethane (Freon 12)	5.26	5.00	105	70-130
1,1-Dichloroethane	5.44	5.00	109	70-130
1,2-Dichloroethane	5.45	5.00	109	70-130
1,1-Dichloroethylene	4.93	5.00	98.6	70-130
cis-1,2-Dichloroethylene	5.37	5.00	107	70-130
trans-1,2-Dichloroethylene	5.46	5.00	109	70-130
1,2-Dichloropropane	5.21	5.00	104	70-130

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B329051 - TO-15 Prep											
LCS (B329051-BS1)					Prepared & Analyzed: 01/16/23						
cis-1,3-Dichloropropene	5.09				5.00		102	70-130			
trans-1,3-Dichloropropene	5.14				5.00		103	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.15				5.00		82.9	70-130			
1,4-Dioxane	4.99				5.00		99.8	70-130			
Ethanol	4.57				5.00		91.4	70-130			
Ethyl Acetate	5.37				5.00		107	70-130			
Ethylbenzene	5.13				5.00		103	70-130			
4-Ethyltoluene	5.25				5.00		105	70-130			
Heptane	5.15				5.00		103	70-130			
Hexachlorobutadiene	4.98				5.00		99.6	70-130			
Hexane	5.60				5.00		112	70-130			
2-Hexanone (MBK)	4.83				5.00		96.6	70-130			
Isopropanol	3.57				5.00		71.4	70-130			
Methyl tert-Butyl Ether (MTBE)	5.19				5.00		104	70-130			
Methylene Chloride	4.55				5.00		90.9	70-130			
4-Methyl-2-pentanone (MIBK)	4.79				5.00		95.8	70-130			
Naphthalene	5.18				5.00		104	70-130			
Propene	4.85				5.00		97.1	70-130			
Styrene	5.20				5.00		104	70-130			
1,1,2,2-Tetrachloroethane	4.69				5.00		93.8	70-130			
Tetrachloroethylene	5.37				5.00		107	70-130			
Tetrahydrofuran	5.46				5.00		109	70-130			
Toluene	5.10				5.00		102	70-130			
1,2,4-Trichlorobenzene	4.83				5.00		96.7	70-130			
1,1,1-Trichloroethane	4.91				5.00		98.2	70-130			
1,1,2-Trichloroethane	5.08				5.00		102	70-130			
Trichloroethylene	5.18				5.00		104	70-130			
Trichlorofluoromethane (Freon 11)	4.81				5.00		96.1	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.18				5.00		104	70-130			
1,2,4-Trimethylbenzene	5.19				5.00		104	70-130			
1,3,5-Trimethylbenzene	5.25				5.00		105	70-130			
Vinyl Acetate	4.56				5.00		91.1	70-130			
Vinyl Chloride	4.33				5.00		86.5	70-130			
m&p-Xylene	10.4				10.0		104	70-130			
o-Xylene	5.17				5.00		103	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.03				8.00		113	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							
Batch B329051 - TO-15 Prep											
Duplicate (B329051-DUP1)	Source: 23A0946-06				Prepared: 01/16/23 Analyzed: 01/17/23						
Acetone	2.1	1.4	5.1	3.3		2.1			0.759	25	
Benzene	0.12	0.035	0.39	0.11		0.13			3.41	25	
Benzyl chloride	ND	0.035	ND	0.18		ND				25	
Bromodichloromethane	ND	0.035	ND	0.24		ND				25	
Bromoform	ND	0.035	ND	0.36		ND				25	
Bromomethane	ND	0.035	ND	0.14		ND				25	
1,3-Butadiene	ND	0.035	ND	0.078		ND				25	
2-Butanone (MEK)	ND	1.4	ND	4.1		ND				25	
Carbon Disulfide	ND	0.35	ND	1.1		ND				25	
Carbon Tetrachloride	0.068	0.035	0.43	0.22		0.069			1.03	25	
Chlorobenzene	ND	0.035	ND	0.16		ND				25	
Chloroethane	ND	0.035	ND	0.093		ND				25	
Chloroform	ND	0.035	ND	0.17		ND				25	
Chloromethane	0.40	0.070	0.83	0.14		0.39			2.82	25	
Cyclohexane	ND	0.035	ND	0.12		ND				25	
Dibromochloromethane	ND	0.035	ND	0.30		ND				25	
1,2-Dibromoethane (EDB)	ND	0.035	ND	0.27		ND				25	
1,2-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
1,3-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
1,4-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
Dichlorodifluoromethane (Freon 12)	0.23	0.035	1.1	0.17		0.28			21.2	25	
1,1-Dichloroethane	ND	0.035	ND	0.14		ND				25	
1,2-Dichloroethane	ND	0.035	ND	0.14		ND				25	
1,1-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
cis-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
trans-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
1,2-Dichloropropane	ND	0.035	ND	0.16		ND				25	
cis-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25	
trans-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	ND	0.25		ND				25	
1,4-Dioxane	ND	0.35	ND	1.3		ND				25	
Ethanol	1.4	1.4	2.6	2.6		1.4			2.12	25	
Ethyl Acetate	ND	0.35	ND	1.3		ND				25	
Ethylbenzene	ND	0.035	ND	0.15		ND				25	
4-Ethyltoluene	ND	0.035	ND	0.17		ND				25	
Heptane	ND	0.035	ND	0.14		0.023				25	
Hexachlorobutadiene	ND	0.035	ND	0.37		ND				25	
Hexane	ND	1.4	ND	4.9		ND				25	
2-Hexanone (MBK)	0.042	0.035	0.17	0.14		0.044			3.28	25	
Isopropanol	0.28	1.4	0.68	3.4		0.29			3.47	25	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	ND	0.13		ND				25	
Methylene Chloride	ND	0.35	ND	1.2		ND				25	
4-Methyl-2-pentanone (MIBK)	0.031	0.035	0.13	0.14		0.024			25.6	25	R-04
Naphthalene	0.027	0.035	0.14	0.18		0.034			22.7	25	
Propene	ND	1.4	ND	2.4		ND				25	
Styrene	ND	0.035	ND	0.15	0.070	ND				25	

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
	Results	RL	Results	RL							

Batch B329051 - TO-15 Prep

Duplicate (B329051-DUP1)		Source: 23A0946-06				Prepared: 01/16/23 Analyzed: 01/17/23					
1,1,2,2-Tetrachloroethane	ND	0.035	ND	0.24		ND				25	
Tetrachloroethylene	ND	0.035	ND	0.24		ND				25	
Tetrahydrofuran	ND	0.35	ND	1.0		ND				25	
Toluene	0.057	0.035	0.21	0.13		0.056			1.24	25	
1,2,4-Trichlorobenzene	ND	0.035	ND	0.26		ND				25	
1,1,1-Trichloroethane	ND	0.035	ND	0.19		ND				25	
1,1,2-Trichloroethane	ND	0.035	ND	0.19		ND				25	
Trichloroethylene	ND	0.035	ND	0.19		ND				25	
Trichlorofluoromethane (Freon 11)	0.20	0.14	1.1	0.79		0.19			2.15	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.062	0.14	0.47	1.1		0.066			6.59	25	
1,2,4-Trimethylbenzene	0.017	0.035	0.083	0.17		0.016			4.26	25	
1,3,5-Trimethylbenzene	ND	0.035	ND	0.17		ND				25	
Vinyl Acetate	ND	0.70	ND	2.5		0.20				25	
Vinyl Chloride	ND	0.035	ND	0.090		ND				25	
m&p-Xylene	ND	0.070	ND	0.30		ND				25	
o-Xylene	ND	0.035	ND	0.15		ND				25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.78</i>				<i>8.00</i>		<i>110</i>	<i>70-130</i>			

Batch B329197 - TO-15 Prep

Blank (B329197-BLK1)		Prepared & Analyzed: 01/18/23									
Benzene	ND	0.020									
Ethanol	ND	0.80									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.04</i>				<i>8.00</i>		<i>101</i>	<i>70-130</i>			
LCS (B329197-BS1)		Prepared & Analyzed: 01/18/23									
Benzene	4.68				5.00		93.5	70-130			
Ethanol	4.50				5.00		89.9	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.42</i>				<i>8.00</i>		<i>105</i>	<i>70-130</i>			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
R-04	Duplicate relative percent difference (RPD) is outside of control limits. RPD is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S076501-ICV1)			Lab File ID: G22A256016.D			Analyzed: 09/13/22 22:00			
Bromochloromethane (1)	1141026	8.307	1123386	8.307	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2751702	10.081	2650535	10.081	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2471195	14.446	2407851	14.446	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S080302-ICV1)			Lab File ID: J22A0337018.D			Analyzed: 12/03/22 08:35			
Bromochloromethane (1)	460265	2.801	459868	2.801	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1200591	3.428	1177712	3.428	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1081405	5.038	1063705	5.039	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S082050-CCV1)			Lab File ID: G23A016004.D			Analyzed: 01/16/23 14:30			
Bromochloromethane (1)	1122577	8.301	1123386	8.307	100	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2643614	10.075	2650535	10.081	100	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2359494	14.44	2407851	14.446	98	60 - 140	-0.0060	+/-0.50	
LCS (B329051-BS1)			Lab File ID: G23A016005.D			Analyzed: 01/16/23 15:10			
Bromochloromethane (1)	1129851	8.3	1122577	8.301	101	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2837862	10.075	2643614	10.075	107	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2555748	14.44	2359494	14.44	108	60 - 140	0.0000	+/-0.50	
Blank (B329051-BLK1)			Lab File ID: G23A016008.D			Analyzed: 01/16/23 17:17			
Bromochloromethane (1)	1146846	8.307	1122577	8.301	102	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2886741	10.075	2643614	10.075	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2593529	14.44	2359494	14.44	110	60 - 140	0.0000	+/-0.50	
RO6-INT1 (23A0946-01)			Lab File ID: G23A016013.D			Analyzed: 01/16/23 20:57			
Bromochloromethane (1)	1250726	8.307	1122577	8.301	111	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3243191	10.075	2643614	10.075	123	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2881696	14.44	2359494	14.44	122	60 - 140	0.0000	+/-0.50	
RO6-INT2 (23A0946-02)			Lab File ID: G23A016014.D			Analyzed: 01/16/23 21:46			
Bromochloromethane (1)	1215948	8.301	1122577	8.301	108	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2998227	10.075	2643614	10.075	113	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2675035	14.44	2359494	14.44	113	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
RO6-DW1 (23A0946-03) Lab File ID: G23A016015.D Analyzed: 01/16/23 22:33									
Bromochloromethane (1)	1156362	8.307	1122577	8.301	103	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2890600	10.075	2643614	10.075	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2529272	14.44	2359494	14.44	107	60 - 140	0.0000	+/-0.50	
RO6-DW2-D1 (23A0946-04) Lab File ID: G23A016016.D Analyzed: 01/16/23 23:21									
Bromochloromethane (1)	1168535	8.307	1122577	8.301	104	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3084051	10.075	2643614	10.075	117	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2821349	14.44	2359494	14.44	120	60 - 140	0.0000	+/-0.50	
RO6-DW2-D2 (23A0946-05) Lab File ID: G23A016017.D Analyzed: 01/17/23 00:08									
Bromochloromethane (1)	1073015	8.307	1122577	8.301	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2651637	10.075	2643614	10.075	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2404269	14.44	2359494	14.44	102	60 - 140	0.0000	+/-0.50	
RO6-UW (23A0946-06) Lab File ID: G23A016018.D Analyzed: 01/17/23 00:56									
Bromochloromethane (1)	1105066	8.307	1122577	8.301	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2760435	10.075	2643614	10.075	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2523808	14.44	2359494	14.44	107	60 - 140	0.0000	+/-0.50	
Duplicate (B329051-DUP1) Lab File ID: G23A016019.D Analyzed: 01/17/23 01:43									
Bromochloromethane (1)	1099899	8.307	1122577	8.301	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2707117	10.075	2643614	10.075	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2453284	14.44	2359494	14.44	104	60 - 140	0.0000	+/-0.50	
RO6-INT2 (23A0946-02RE1) Lab File ID: G23A016028.D Analyzed: 01/17/23 10:07									
Bromochloromethane (1)	1039427	8.301	1122577	8.301	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2512224	10.069	2643614	10.075	95	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2277371	14.44	2359494	14.44	97	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S082120-CCV1) Lab File ID: J23A018004.D Analyzed: 01/18/23 14:22									
Bromochloromethane (1)	288983	2.801	459868	2.801	63	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1140431	3.427	1177712	3.428	97	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	1009977	5.043	1063705	5.039	95	60 - 140	0.0040	+/-0.50	
LCS (B329197-BS1) Lab File ID: J23A018005.D Analyzed: 01/18/23 14:47									
Bromochloromethane (1)	285557	2.805	288983	2.801	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	1143049	3.432	1140431	3.427	100	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	1023691	5.043	1009977	5.043	101	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B329197-BLK1) Lab File ID: J23A018008.D Analyzed: 01/18/23 16:15									
Bromochloromethane (1)	271085	2.789	288983	2.801	94	60 - 140	-0.0120	+/-0.50	
1,4-Difluorobenzene (1)	937975	3.421	1140431	3.427	82	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	901234	5.04	1009977	5.043	89	60 - 140	-0.0030	+/-0.50	
RO6-INT1 (23A0946-01RE1) Lab File ID: J23A018015.D Analyzed: 01/18/23 19:04									
Bromochloromethane (1)	276921	2.789	288983	2.801	96	60 - 140	-0.0120	+/-0.50	
1,4-Difluorobenzene (1)	1025261	3.421	1140431	3.427	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	928422	5.035	1009977	5.043	92	60 - 140	-0.0080	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S082050-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.14	1.084004	1.115352		2.9	30
Benzene	A	5.00	5.30	0.9129288	0.9671935		5.9	30
Benzyl chloride	A	5.00	5.75	1.030942	1.185911		15.0	30
Bromodichloromethane	A	5.00	5.27	0.6953811	0.7323823		5.3	30
Bromoform	A	5.00	5.77	0.5656468	0.6531563		15.5	30
Bromomethane	A	5.00	4.87	0.6009459	0.585537		-2.6	30
1,3-Butadiene	A	5.00	4.83	0.5443004	0.5254367		-3.5	30
2-Butanone (MEK)	A	5.00	5.09	1.507683	1.5355		1.8	30
Carbon Disulfide	A	5.00	5.19	2.02748	2.104513		3.8	30
Carbon Tetrachloride	A	5.00	5.43	0.5479998	0.5946363		8.5	30
Chlorobenzene	A	5.00	5.07	0.8809329	0.8934187		1.4	30
Chloroethane	A	5.00	4.96	0.3452967	0.3427528		-0.7	30
Chloroform	A	5.00	5.13	1.561184	1.602226		2.6	30
Chloromethane	A	5.00	4.63	0.6821899	0.6320201		-7.4	30
Cyclohexane	A	5.00	5.21	0.3600845	0.3750738		4.2	30
Dibromochloromethane	A	5.00	5.53	0.6396581	0.7079186		10.7	30
1,2-Dibromoethane (EDB)	A	5.00	5.17	0.6171207	0.6379002		3.4	30
1,2-Dichlorobenzene	A	5.00	5.39	0.6937094	0.7479122		7.8	30
1,3-Dichlorobenzene	A	5.00	5.62	0.7409581	0.8322272		12.3	30
1,4-Dichlorobenzene	A	5.00	5.62	0.7218155	0.8115821		12.4	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.26	1.62808	1.713426		5.2	30
1,1-Dichloroethane	A	5.00	5.27	1.342742	1.415606		5.4	30
1,2-Dichloroethane	A	5.00	5.33	0.9627523	1.027045		6.7	30
1,1-Dichloroethylene	A	5.00	4.98	1.140142	1.136558		-0.3	30
cis-1,2-Dichloroethylene	A	5.00	5.22	0.9670963	1.009972		4.4	30
trans-1,2-Dichloroethylene	A	5.00	5.33	1.001825	1.068238		6.6	30
1,2-Dichloropropane	A	5.00	5.34	0.3567989	0.381013		6.8	30
cis-1,3-Dichloropropene	A	5.00	5.34	0.5092852	0.5443923		6.9	30
trans-1,3-Dichloropropene	A	5.00	5.25	0.4570981	0.4801839		5.1	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	4.82	1.73998	1.679078		-3.5	30
1,4-Dioxane	A	5.00	4.74	0.1857641	0.1763011		-5.1	30
Ethanol	A	5.00	4.41	0.2343264	0.2068455		-11.7	30
Ethyl Acetate	A	5.00	5.59	0.2308163	0.2582073		11.9	30
Ethylbenzene	A	5.00	5.38	1.455024	1.566036		7.6	30
4-Ethyltoluene	A	5.00	5.56	1.413771	1.572334		11.2	30
Heptane	A	5.00	5.53	0.2850308	0.3154088		10.7	30
Hexachlorobutadiene	A	5.00	5.05	0.4677459	0.4724579		1.0	30
Hexane	A	5.00	5.69	0.8985394	0.9602007		13.8	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S082050-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.44	0.7712864	0.8396783		8.9	30
Isopropanol	A	5.00	4.70	1.338902	1.258651		-6.0	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.06	1.834723	1.854946		1.1	30
Methylene Chloride	A	5.00	4.55	0.9597215	0.873741		-9.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	5.33	0.7726854	0.8239333		6.6	30
Naphthalene	A	5.00	4.97	1.092246	1.086397		-0.5	30
Propene	A	5.00	4.99	0.5941328	0.5924511		-0.3	30
Styrene	A	5.00	5.52	0.7890752	0.8710824		10.4	30
1,1,2,2-Tetrachloroethane	A	5.00	5.10	0.9851261	1.004585		2.0	30
Tetrachloroethylene	A	5.00	5.36	0.457194	0.4906062		7.3	30
Tetrahydrofuran	A	5.00	5.03	0.2957092	0.2976665		0.7	30
Toluene	A	5.00	5.30	1.15399	1.222343		5.9	30
1,2,4-Trichlorobenzene	A	5.00	4.78	0.4973623	0.4758986		-4.3	30
1,1,1-Trichloroethane	A	5.00	5.17	0.5975698	0.6178082		3.4	30
1,1,2-Trichloroethane	A	5.00	5.10	0.4162703	0.4246185		2.0	30
Trichloroethylene	A	5.00	5.18	0.3947958	0.4091429		3.6	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.18	1.463327	1.516655		3.6	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.97	1.432547	1.424323		-0.6	30
1,2,4-Trimethylbenzene	A	5.00	5.55	1.156019	1.283143		11.0	30
1,3,5-Trimethylbenzene	A	5.00	5.62	1.190388	1.339171		12.5	30
Vinyl Acetate	A	5.00	4.59	1.986739	1.825178		-8.1	30
Vinyl Chloride	A	5.00	4.96	0.7142115	0.7089217		-0.7	30
m&p-Xylene	A	10.0	11.1	1.129066	1.254976		11.2	30
o-Xylene	A	5.00	5.55	1.138955	1.263423		10.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK
EPA TO-15
S082120-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	5.00	6.32	0.6962521	0.88078		26.5	30
Ethanol	A	5.00	4.49	0.1759911	0.157983		-10.2	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

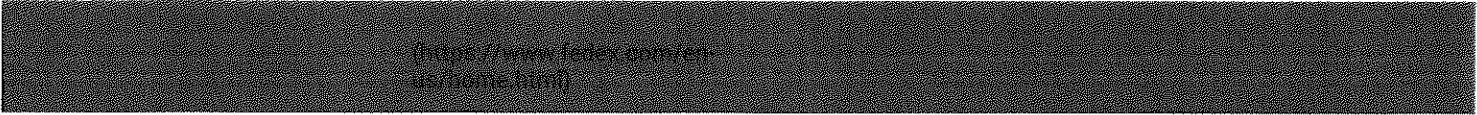
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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

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NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
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WINDSOR LOCKS, CT
1/10/2023 8:27 AM

DELIVERED
SAMPLE RECEIVING DEPT.
CON-TEST ANALYTICAL LAB.
39 SPRUCE STREET
EAST LONGMEADOW, MA US 01028
2625731223

DELIVERED
1/10/2023 at 9:21 AM

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.pacelabs.com



Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By <u>JR</u>	Date <u>1/10</u>	Time <u>921</u>
How Were the samples received?	In Cooler <u> </u>	On Ice <u> </u>
	In Box <u> </u>	Ambient <u> </u>
Were samples within Temperature Compliance?	Within 2-6°C <u> </u>	By Gun # <u> </u>
Was Custody Seal In tact?	<u>NA</u>	By Blank # <u> </u>
Was COC Relinquished ?	<u>T</u>	Were Samples Tampered with? <u>NA</u>
Are there any loose caps/valves on any samples?	<u>F</u>	Does Chain Agree With Samples? <u>T</u>
Is COC in ink/ Legible?	<u>T</u>	Were samples received within holding time? <u>T</u>
Did COC Include all Pertinent Information?	Client? <u>T</u>	Analysis? <u>T</u>
	Project? <u>T</u>	ID's? <u>T</u>
Are Sample Labels filled out and legible?		Sampler Name? <u>T</u>
Are there Rushes?	<u>F</u>	Collection Dates/Times? <u>T</u>
Samples are received within holding time?	<u>T</u>	Who was notified? <u> </u>
Proper Media Used?	<u>T</u>	Individually Certified Cans? <u>F</u>
Are there Trip Blanks?	<u>F</u>	Is there enough Volume? <u>T</u>

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans	6	6L	265	24 hr	Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s					Tedlar		

Can #'s					Reg #'s				
1934					3506				
1024					35124				
1231					3356				
2180					3513				
2148					3065				
1965									
Unused Media					Pufs/TO-17's				

Comments:

February 13, 2023

Tim Rodak
Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275

Project Location: 500 W Wood St. Palatine, IL
Client Job Number:
Project Number: 00123249 - 14777-TO-13A_TO-15
Laboratory Work Order Number: 23A2583

Enclosed are results of analyses for samples as received by the laboratory on January 26, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Albania Hernandez
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332Clean Air Engineering
110 Technology Drive
Pittsburg, PA 15275
ATTN: Tim Rodak

REPORT DATE: 2/13/2023

PURCHASE ORDER NUMBER: 03292-44-14777

PROJECT NUMBER: 00123249 - 14777-TO-13A_TO-15

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23A2583

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 500 W Wood St. Palatine, IL

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RO7-INT 1	23A2583-01	Air		EPA TO-15	
RO7-INT 2	23A2583-02	Air		EPA TO-15	
RO7-DW1	23A2583-03	Air		EPA TO-15	
RO7-DWZ-D1	23A2583-04	Air		EPA TO-15	
RO7-DWZ-D2	23A2583-05	Air		EPA TO-15	
RO7_UW	23A2583-06	Air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

L-05

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Trichlorofluoromethane (Freon 11)

23A2583-01[RO7-INT 1], 23A2583-02[RO7-INT 2], 23A2583-03[RO7-DW1], 23A2583-04[RO7-DWZ-D1], 23A2583-05[RO7-DWZ-D2], 23A2583-06[RO7_UW], B331374-BS1, B331374-DUP1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Chloromethane

23A2583-01[RO7-INT 1], 23A2583-02[RO7-INT 2], 23A2583-03[RO7-DW1], 23A2583-04[RO7-DWZ-D1], 23A2583-05[RO7-DWZ-D2], 23A2583-06[RO7_UW], B331374-BLK1, B331374-BS1, B331374-DUP1, S083176-CCV1

Ethanol

B331121-BLK1, B331121-BS1, S083062-CCV1

Z-01

Sample had a final vacuum of zero. Flow controllers have been verified to be okay, RPD was <20%

Analyte & Samples(s) Qualified:

23A2583-02[RO7-INT 2]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-INT 1
Sample ID: 23A2583-01
Sample Matrix: Air
Sampled: 1/24/2023 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2948
Canister Size: 6 liter
Flow Controller ID: 4868
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	2.1	1.4		5.0	3.3	0.702	2/7/23 22:24	SFM
Benzene	110	0.50		350	1.6	10	2/9/23 13:48	CMR
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/7/23 22:24	SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/7/23 22:24	SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/7/23 22:24	SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
1,3-Butadiene	2.1	0.035		4.7	0.078	0.702	2/7/23 22:24	SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/7/23 22:24	SFM
Carbon Disulfide	0.83	0.35		2.6	1.1	0.702	2/7/23 22:24	SFM
Carbon Tetrachloride	0.068	0.035		0.43	0.22	0.702	2/7/23 22:24	SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/7/23 22:24	SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/7/23 22:24	SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/7/23 22:24	SFM
Chloromethane	0.38	0.070	V-05	0.79	0.14	0.702	2/7/23 22:24	SFM
Cyclohexane	0.10	0.035		0.36	0.12	0.702	2/7/23 22:24	SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/7/23 22:24	SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/7/23 22:24	SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 22:24	SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 22:24	SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 22:24	SFM
Dichlorodifluoromethane (Freon 12)	0.31	0.035		1.5	0.17	0.702	2/7/23 22:24	SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 22:24	SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/7/23 22:24	SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23 22:24	SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23 22:24	SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/7/23 22:24	SFM
1,4-Dioxane	ND	0.35		ND	1.3	0.702	2/7/23 22:24	SFM
Ethanol	ND	1.4		ND	2.6	0.702	2/7/23 22:24	SFM
Ethyl Acetate	ND	0.35		ND	1.3	0.702	2/7/23 22:24	SFM
Ethylbenzene	0.13	0.035		0.55	0.15	0.702	2/7/23 22:24	SFM
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	2/7/23 22:24	SFM
Heptane	0.047	0.035		0.19	0.14	0.702	2/7/23 22:24	SFM
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	2/7/23 22:24	SFM

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-INT 1
Sample ID: 23A2583-01
Sample Matrix: Air
Sampled: 1/24/2023 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2948
Canister Size: 6 liter
Flow Controller ID: 4868
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	2/7/23 22:24		SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/7/23 22:24		SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/7/23 22:24		SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/7/23 22:24		SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/7/23 22:24		SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/7/23 22:24		SFM
Naphthalene	35	0.035		180	0.18	0.702	2/7/23 22:24		SFM
Propene	17	1.4		29	2.4	0.702	2/7/23 22:24		SFM
Styrene	3.1	0.035		13	0.15	0.702	2/7/23 22:24		SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/7/23 22:24		SFM
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	2/7/23 22:24		SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/7/23 22:24		SFM
Toluene	21	0.035		78	0.13	0.702	2/7/23 22:24		SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/7/23 22:24		SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 22:24		SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 22:24		SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/7/23 22:24		SFM
Trichlorofluoromethane (Freon 11)	0.27	0.14	L-05	1.5	0.79	0.702	2/7/23 22:24		SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/7/23 22:24		SFM
1,2,4-Trimethylbenzene	1.1	0.035		5.2	0.17	0.702	2/7/23 22:24		SFM
1,3,5-Trimethylbenzene	0.62	0.035		3.0	0.17	0.702	2/7/23 22:24		SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/7/23 22:24		SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/7/23 22:24		SFM
m&p-Xylene	6.5	0.070		28	0.30	0.702	2/7/23 22:24		SFM
o-Xylene	1.4	0.035		5.9	0.15	0.702	2/7/23 22:24		SFM
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)	115			70-130				2/9/23 13:48	
4-Bromofluorobenzene (1)	125			70-130				2/7/23 22:24	

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-INT 2
Sample ID: 23A2583-02
Sample Matrix: Air
Sampled: 1/24/2023 10:24

Sample Description/Location:
Sub Description/Location:
Canister ID: 2960
Canister Size: 6 liter
Flow Controller ID: 4846
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -2
Receipt Vacuum(in Hg): .44
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15								
Sample Flags: Z-01								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	1.5	1.4		3.6	3.3	0.702	2/7/23 23:12	SFM
Benzene	0.91	0.035		2.9	0.11	0.702	2/7/23 23:12	SFM
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/7/23 23:12	SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/7/23 23:12	SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/7/23 23:12	SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
1,3-Butadiene	ND	0.035		ND	0.078	0.702	2/7/23 23:12	SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/7/23 23:12	SFM
Carbon Disulfide	ND	0.35		ND	1.1	0.702	2/7/23 23:12	SFM
Carbon Tetrachloride	0.072	0.035		0.45	0.22	0.702	2/7/23 23:12	SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/7/23 23:12	SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/7/23 23:12	SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/7/23 23:12	SFM
Chloromethane	0.33	0.070	V-05	0.68	0.14	0.702	2/7/23 23:12	SFM
Cyclohexane	0.32	0.035		1.1	0.12	0.702	2/7/23 23:12	SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/7/23 23:12	SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/7/23 23:12	SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 23:12	SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 23:12	SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23 23:12	SFM
Dichlorodifluoromethane (Freon 12)	0.30	0.035		1.5	0.17	0.702	2/7/23 23:12	SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/7/23 23:12	SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23 23:12	SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23 23:12	SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/7/23 23:12	SFM
1,4-Dioxane	ND	0.35		ND	1.3	0.702	2/7/23 23:12	SFM
Ethanol	ND	1.4		ND	2.6	0.702	2/7/23 23:12	SFM
Ethyl Acetate	ND	0.35		ND	1.3	0.702	2/7/23 23:12	SFM
Ethylbenzene	ND	0.035		ND	0.15	0.702	2/7/23 23:12	SFM
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	2/7/23 23:12	SFM
Heptane	0.086	0.035		0.35	0.14	0.702	2/7/23 23:12	SFM
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	2/7/23 23:12	SFM

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
 Date Received: 1/26/2023
Field Sample #: RO7-INT 2
Sample ID: 23A2583-02
 Sample Matrix: Air
 Sampled: 1/24/2023 10:24

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2960
 Canister Size: 6 liter
 Flow Controller ID: 4846
 Sample Type: 24 hr

Work Order: 23A2583
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -2
 Receipt Vacuum(in Hg): .44
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	1.4		ND	4.9	0.702	2/7/23 23:12	SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/7/23 23:12	SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/7/23 23:12	SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/7/23 23:12	SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/7/23 23:12	SFM
Naphthalene	0.76	0.035		4.0	0.18	0.702	2/7/23 23:12	SFM
Propene	ND	1.4		ND	2.4	0.702	2/7/23 23:12	SFM
Styrene	ND	0.035		ND	0.15	0.702	2/7/23 23:12	SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/7/23 23:12	SFM
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	2/7/23 23:12	SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/7/23 23:12	SFM
Toluene	0.23	0.035		0.85	0.13	0.702	2/7/23 23:12	SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/7/23 23:12	SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 23:12	SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 23:12	SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/7/23 23:12	SFM
Trichlorofluoromethane (Freon 11)	0.27	0.14	L-05	1.5	0.79	0.702	2/7/23 23:12	SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/7/23 23:12	SFM
1,2,4-Trimethylbenzene	0.052	0.035		0.26	0.17	0.702	2/7/23 23:12	SFM
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/7/23 23:12	SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/7/23 23:12	SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/7/23 23:12	SFM
m&p-Xylene	0.12	0.070		0.51	0.30	0.702	2/7/23 23:12	SFM
o-Xylene	0.053	0.035		0.23	0.15	0.702	2/7/23 23:12	SFM

Surrogates	% Recovery	% REC Limits
4-Bromofluorobenzene (1)	124	70-130
		2/7/23 23:12

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-DW1
Sample ID: 23A2583-03
Sample Matrix: Air
Sampled: 1/24/2023 10:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2995
Canister Size: 6 liter
Flow Controller ID: 4848
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -3.75
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	2.3	1.4	V-05	5.5	3.3	0.702	2/7/23	23:59	SFM
Benzene	1.5	0.035		4.7	0.11	0.702	2/7/23	23:59	SFM
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/7/23	23:59	SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/7/23	23:59	SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/7/23	23:59	SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
1,3-Butadiene	ND	0.035		ND	0.078	0.702	2/7/23	23:59	SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/7/23	23:59	SFM
Carbon Disulfide	ND	0.35		ND	1.1	0.702	2/7/23	23:59	SFM
Carbon Tetrachloride	0.071	0.035		0.45	0.22	0.702	2/7/23	23:59	SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/7/23	23:59	SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/7/23	23:59	SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/7/23	23:59	SFM
Chloromethane	0.37	0.070		0.77	0.14	0.702	2/7/23	23:59	SFM
Cyclohexane	ND	0.035		ND	0.12	0.702	2/7/23	23:59	SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/7/23	23:59	SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/7/23	23:59	SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23	23:59	SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23	23:59	SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/7/23	23:59	SFM
Dichlorodifluoromethane (Freon 12)	0.28	0.035		1.4	0.17	0.702	2/7/23	23:59	SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/7/23	23:59	SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/7/23	23:59	SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23	23:59	SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/7/23	23:59	SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/7/23	23:59	SFM
1,4-Dioxane	ND	0.35	ND	1.3	0.702	2/7/23	23:59	SFM	
Ethanol	ND	1.4	ND	2.6	0.702	2/7/23	23:59	SFM	
Ethyl Acetate	ND	0.35	ND	1.3	0.702	2/7/23	23:59	SFM	
Ethylbenzene	ND	0.035	ND	0.15	0.702	2/7/23	23:59	SFM	
4-Ethyltoluene	ND	0.035	ND	0.17	0.702	2/7/23	23:59	SFM	
Heptane	0.041	0.035	0.17	0.14	0.702	2/7/23	23:59	SFM	
Hexachlorobutadiene	ND	0.035	ND	0.37	0.702	2/7/23	23:59	SFM	

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-DW1
Sample ID: 23A2583-03
Sample Matrix: Air
Sampled: 1/24/2023 10:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2995
Canister Size: 6 liter
Flow Controller ID: 4848
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -3.75
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	2/7/23 23:59		SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/7/23 23:59		SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/7/23 23:59		SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/7/23 23:59		SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/7/23 23:59		SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/7/23 23:59		SFM
Naphthalene	0.36	0.035		1.9	0.18	0.702	2/7/23 23:59		SFM
Propene	ND	1.4		ND	2.4	0.702	2/7/23 23:59		SFM
Styrene	ND	0.035		ND	0.15	0.702	2/7/23 23:59		SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/7/23 23:59		SFM
Tetrachloroethylene	0.044	0.035		0.30	0.24	0.702	2/7/23 23:59		SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/7/23 23:59		SFM
Toluene	0.35	0.035		1.3	0.13	0.702	2/7/23 23:59		SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/7/23 23:59		SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 23:59		SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/7/23 23:59		SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/7/23 23:59		SFM
Trichlorofluoromethane (Freon 11)	0.27	0.14	L-05	1.5	0.79	0.702	2/7/23 23:59		SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/7/23 23:59		SFM
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/7/23 23:59		SFM
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/7/23 23:59		SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/7/23 23:59		SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/7/23 23:59		SFM
m&p-Xylene	0.082	0.070		0.36	0.30	0.702	2/7/23 23:59		SFM
o-Xylene	ND	0.035		ND	0.15	0.702	2/7/23 23:59		SFM

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	123	70-130	2/7/23 23:59

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-DWZ-D1
Sample ID: 23A2583-04
Sample Matrix: Air
Sampled: 1/24/2023 11:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2950
Canister Size: 6 liter
Flow Controller ID: 4857
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -2.45
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	ND	1.4		ND	3.3	0.702	2/8/23	0:46	SFM
Benzene	0.28	0.035		0.91	0.11	0.702	2/8/23	0:46	SFM
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/8/23	0:46	SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/8/23	0:46	SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/8/23	0:46	SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
1,3-Butadiene	ND	0.035		ND	0.078	0.702	2/8/23	0:46	SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/8/23	0:46	SFM
Carbon Disulfide	ND	0.35		ND	1.1	0.702	2/8/23	0:46	SFM
Carbon Tetrachloride	0.075	0.035		0.47	0.22	0.702	2/8/23	0:46	SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/8/23	0:46	SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/8/23	0:46	SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/8/23	0:46	SFM
Chloromethane	0.36	0.070	V-05	0.75	0.14	0.702	2/8/23	0:46	SFM
Cyclohexane	ND	0.035		ND	0.12	0.702	2/8/23	0:46	SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/8/23	0:46	SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/8/23	0:46	SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23	0:46	SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23	0:46	SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23	0:46	SFM
Dichlorodifluoromethane (Freon 12)	0.30	0.035		1.5	0.17	0.702	2/8/23	0:46	SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/8/23	0:46	SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23	0:46	SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23	0:46	SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/8/23	0:46	SFM
1,4-Dioxane	ND	0.35		ND	1.3	0.702	2/8/23	0:46	SFM
Ethanol	1.6	1.4		3.0	2.6	0.702	2/8/23	0:46	SFM
Ethyl Acetate	ND	0.35		ND	1.3	0.702	2/8/23	0:46	SFM
Ethylbenzene	ND	0.035		ND	0.15	0.702	2/8/23	0:46	SFM
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	2/8/23	0:46	SFM
Heptane	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	2/8/23	0:46	SFM

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-DWZ-D1
Sample ID: 23A2583-04
Sample Matrix: Air
Sampled: 1/24/2023 11:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2950
Canister Size: 6 liter
Flow Controller ID: 4857
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -2.45
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	2/8/23	0:46	SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/8/23	0:46	SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/8/23	0:46	SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/8/23	0:46	SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/8/23	0:46	SFM
Naphthalene	0.044	0.035		0.23	0.18	0.702	2/8/23	0:46	SFM
Propene	ND	1.4		ND	2.4	0.702	2/8/23	0:46	SFM
Styrene	ND	0.035		ND	0.15	0.702	2/8/23	0:46	SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/8/23	0:46	SFM
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	2/8/23	0:46	SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/8/23	0:46	SFM
Toluene	0.080	0.035		0.30	0.13	0.702	2/8/23	0:46	SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/8/23	0:46	SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23	0:46	SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23	0:46	SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/8/23	0:46	SFM
Trichlorofluoromethane (Freon 11)	0.28	0.14	L-05	1.6	0.79	0.702	2/8/23	0:46	SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/8/23	0:46	SFM
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23	0:46	SFM
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23	0:46	SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/8/23	0:46	SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/8/23	0:46	SFM
m&p-Xylene	ND	0.070		ND	0.30	0.702	2/8/23	0:46	SFM
o-Xylene	ND	0.035		ND	0.15	0.702	2/8/23	0:46	SFM

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	124	70-130	2/8/23 0:46

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7-DWZ-D2
Sample ID: 23A2583-05
Sample Matrix: Air
Sampled: 1/24/2023 11:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2986
Canister Size: 6 liter
Flow Controller ID: 4857
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -2.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	ND	1.4		ND	3.3	0.702	2/8/23 2:21		SFM
Benzene	0.28	0.035		0.91	0.11	0.702	2/8/23 2:21		SFM
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/8/23 2:21		SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/8/23 2:21		SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/8/23 2:21		SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
1,3-Butadiene	ND	0.035		ND	0.078	0.702	2/8/23 2:21		SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/8/23 2:21		SFM
Carbon Disulfide	ND	0.35		ND	1.1	0.702	2/8/23 2:21		SFM
Carbon Tetrachloride	0.078	0.035		0.49	0.22	0.702	2/8/23 2:21		SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/8/23 2:21		SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/8/23 2:21		SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/8/23 2:21		SFM
Chloromethane	0.39	0.070	V-05	0.81	0.14	0.702	2/8/23 2:21		SFM
Cyclohexane	ND	0.035		ND	0.12	0.702	2/8/23 2:21		SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/8/23 2:21		SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/8/23 2:21		SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 2:21		SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 2:21		SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 2:21		SFM
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.4	0.17	0.702	2/8/23 2:21		SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/8/23 2:21		SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23 2:21		SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23 2:21		SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/8/23 2:21		SFM
1,4-Dioxane	ND	0.35		ND	1.3	0.702	2/8/23 2:21		SFM
Ethanol	1.8	1.4		3.4	2.6	0.702	2/8/23 2:21		SFM
Ethyl Acetate	0.51	0.35		1.9	1.3	0.702	2/8/23 2:21		SFM
Ethylbenzene	ND	0.035		ND	0.15	0.702	2/8/23 2:21		SFM
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	2/8/23 2:21		SFM
Heptane	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	2/8/23 2:21		SFM

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
 Date Received: 1/26/2023
Field Sample #: RO7-DWZ-D2
Sample ID: 23A2583-05
 Sample Matrix: Air
 Sampled: 1/24/2023 11:26

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2986
 Canister Size: 6 liter
 Flow Controller ID: 4857
 Sample Type: 24 hr

Work Order: 23A2583
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -2.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	2/8/23 2:21		SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/8/23 2:21		SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/8/23 2:21		SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/8/23 2:21		SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/8/23 2:21		SFM
Naphthalene	0.037	0.035		0.19	0.18	0.702	2/8/23 2:21		SFM
Propene	ND	1.4		ND	2.4	0.702	2/8/23 2:21		SFM
Styrene	ND	0.035		ND	0.15	0.702	2/8/23 2:21		SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/8/23 2:21		SFM
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	2/8/23 2:21		SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/8/23 2:21		SFM
Toluene	0.084	0.035		0.32	0.13	0.702	2/8/23 2:21		SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/8/23 2:21		SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23 2:21		SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23 2:21		SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/8/23 2:21		SFM
Trichlorofluoromethane (Freon 11)	0.27	0.14	L-05	1.5	0.79	0.702	2/8/23 2:21		SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/8/23 2:21		SFM
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23 2:21		SFM
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23 2:21		SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/8/23 2:21		SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/8/23 2:21		SFM
m&p-Xylene	ND	0.070		ND	0.30	0.702	2/8/23 2:21		SFM
o-Xylene	ND	0.035		ND	0.15	0.702	2/8/23 2:21		SFM

Surrogates	% Recovery	% REC Limits
4-Bromofluorobenzene (1)	122	70-130

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7_UW
Sample ID: 23A2583-06
Sample Matrix: Air
Sampled: 1/24/2023 12:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2934
Canister Size: 6 liter
Flow Controller ID: 4865
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -2.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	ND	1.4		ND	3.3	0.702	2/8/23 3:09		SFM
Benzene	0.099	0.035		0.32	0.11	0.702	2/8/23 3:09		SFM
Benzyl chloride	ND	0.035		ND	0.18	0.702	2/8/23 3:09		SFM
Bromodichloromethane	ND	0.035		ND	0.24	0.702	2/8/23 3:09		SFM
Bromoform	ND	0.035		ND	0.36	0.702	2/8/23 3:09		SFM
Bromomethane	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
1,3-Butadiene	ND	0.035		ND	0.078	0.702	2/8/23 3:09		SFM
2-Butanone (MEK)	ND	1.4		ND	4.1	0.702	2/8/23 3:09		SFM
Carbon Disulfide	ND	0.35		ND	1.1	0.702	2/8/23 3:09		SFM
Carbon Tetrachloride	0.074	0.035		0.47	0.22	0.702	2/8/23 3:09		SFM
Chlorobenzene	ND	0.035		ND	0.16	0.702	2/8/23 3:09		SFM
Chloroethane	ND	0.035		ND	0.093	0.702	2/8/23 3:09		SFM
Chloroform	ND	0.035		ND	0.17	0.702	2/8/23 3:09		SFM
Chloromethane	0.37	0.070	V-05	0.77	0.14	0.702	2/8/23 3:09		SFM
Cyclohexane	ND	0.035		ND	0.12	0.702	2/8/23 3:09		SFM
Dibromochloromethane	ND	0.035		ND	0.30	0.702	2/8/23 3:09		SFM
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	2/8/23 3:09		SFM
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 3:09		SFM
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 3:09		SFM
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	2/8/23 3:09		SFM
Dichlorodifluoromethane (Freon 12)	0.30	0.035		1.5	0.17	0.702	2/8/23 3:09		SFM
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	2/8/23 3:09		SFM
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23 3:09		SFM
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	2/8/23 3:09		SFM
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	2/8/23 3:09		SFM
1,4-Dioxane	ND	0.35		ND	1.3	0.702	2/8/23 3:09		SFM
Ethanol	ND	1.4		ND	2.6	0.702	2/8/23 3:09		SFM
Ethyl Acetate	ND	0.35		ND	1.3	0.702	2/8/23 3:09		SFM
Ethylbenzene	ND	0.035		ND	0.15	0.702	2/8/23 3:09		SFM
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	2/8/23 3:09		SFM
Heptane	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	2/8/23 3:09		SFM

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ANALYTICAL RESULTS

Project Location: 500 W Wood St. Palatine, IL
Date Received: 1/26/2023
Field Sample #: RO7_UW
Sample ID: 23A2583-06
Sample Matrix: Air
Sampled: 1/24/2023 12:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2934
Canister Size: 6 liter
Flow Controller ID: 4865
Sample Type: 24 hr

Work Order: 23A2583
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -2.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexane	ND	1.4		ND	4.9	0.702	2/8/23 3:09		SFM
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
Isopropanol	ND	1.4		ND	3.4	0.702	2/8/23 3:09		SFM
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	2/8/23 3:09		SFM
Methylene Chloride	ND	0.35		ND	1.2	0.702	2/8/23 3:09		SFM
4-Methyl-2-pentanone (MIBK)	ND	0.035		ND	0.14	0.702	2/8/23 3:09		SFM
Naphthalene	0.76	0.035		4.0	0.18	0.702	2/8/23 3:09		SFM
Propene	ND	1.4		ND	2.4	0.702	2/8/23 3:09		SFM
Styrene	ND	0.035		ND	0.15	0.702	2/8/23 3:09		SFM
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	2/8/23 3:09		SFM
Tetrachloroethylene	ND	0.035		ND	0.24	0.702	2/8/23 3:09		SFM
Tetrahydrofuran	ND	0.35		ND	1.0	0.702	2/8/23 3:09		SFM
Toluene	0.041	0.035		0.15	0.13	0.702	2/8/23 3:09		SFM
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	2/8/23 3:09		SFM
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23 3:09		SFM
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	2/8/23 3:09		SFM
Trichloroethylene	ND	0.035		ND	0.19	0.702	2/8/23 3:09		SFM
Trichlorofluoromethane (Freon 11)	0.27	0.14	L-05	1.5	0.79	0.702	2/8/23 3:09		SFM
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14		ND	1.1	0.702	2/8/23 3:09		SFM
1,2,4-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23 3:09		SFM
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	2/8/23 3:09		SFM
Vinyl Acetate	ND	0.70		ND	2.5	0.702	2/8/23 3:09		SFM
Vinyl Chloride	ND	0.035		ND	0.090	0.702	2/8/23 3:09		SFM
m&p-Xylene	ND	0.070		ND	0.30	0.702	2/8/23 3:09		SFM
o-Xylene	ND	0.035		ND	0.15	0.702	2/8/23 3:09		SFM

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	122	70-130	2/8/23 3:09

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Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
23A2583-01RE1 [RO7-INT 1]	B331121	1.5	1	N/A	1000	400	60	02/08/23

Prep Method: TO-15 Prep Analytical Method: EP

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
23A2583-01 [RO7-INT 1]	B331374	1.5	1	N/A	1000	400	855	02/07/23
23A2583-02 [RO7-INT 2]	B331374	1.5	1	N/A	1000	400	855	02/07/23
23A2583-03 [RO7-DW1]	B331374	1.5	1	N/A	1000	400	855	02/07/23
23A2583-04 [RO7-DWZ-D1]	B331374	1.5	1	N/A	1000	400	855	02/07/23
23A2583-05 [RO7-DWZ-D2]	B331374	1.5	1	N/A	1000	400	855	02/07/23
23A2583-06 [RO7_UW]	B331374	1.5	1	N/A	1000	400	855	02/07/23

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	

Batch B331121 - TO-15 Prep
Blank (B331121-BLK1)

Prepared & Analyzed: 02/08/23

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

V-05

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B331121 - TO-15 Prep
Blank (B331121-BLK1)

Prepared & Analyzed: 02/08/23

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>9.05</i>	<i>8.00</i>	<i>113</i>	<i>70-130</i>
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LCS (B331121-BS1)

Prepared & Analyzed: 02/08/23

Acetone	4.75	5.00	94.9	70-130
Benzene	4.69	5.00	93.8	70-130
Benzyl chloride	4.86	5.00	97.3	70-130
Bromodichloromethane	4.56	5.00	91.3	70-130
Bromoform	5.30	5.00	106	70-130
Bromomethane	4.88	5.00	97.5	70-130
1,3-Butadiene	3.81	5.00	76.1	70-130
2-Butanone (MEK)	4.86	5.00	97.2	70-130
Carbon Disulfide	5.61	5.00	112	70-130
Carbon Tetrachloride	4.98	5.00	99.7	70-130
Chlorobenzene	4.57	5.00	91.5	70-130
Chloroethane	4.45	5.00	88.9	70-130
Chloroform	5.47	5.00	109	70-130
Chloromethane	3.75	5.00	74.9	70-130
Cyclohexane	4.64	5.00	92.8	70-130
Dibromochloromethane	5.00	5.00	99.9	70-130
1,2-Dibromoethane (EDB)	4.56	5.00	91.1	70-130
1,2-Dichlorobenzene	4.80	5.00	96.0	70-130
1,3-Dichlorobenzene	5.15	5.00	103	70-130
1,4-Dichlorobenzene	5.06	5.00	101	70-130
Dichlorodifluoromethane (Freon 12)	5.09	5.00	102	70-130
1,1-Dichloroethane	5.39	5.00	108	70-130
1,2-Dichloroethane	5.37	5.00	107	70-130
1,1-Dichloroethylene	5.24	5.00	105	70-130
cis-1,2-Dichloroethylene	5.08	5.00	102	70-130
trans-1,2-Dichloroethylene	5.17	5.00	103	70-130
1,2-Dichloropropane	4.54	5.00	90.8	70-130

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B331121 - TO-15 Prep											
LCS (B331121-BS1)					Prepared & Analyzed: 02/08/23						
cis-1,3-Dichloropropene	4.48				5.00		89.5	70-130			V-05
trans-1,3-Dichloropropene	4.49				5.00		89.8	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.51				5.00		90.1	70-130			
1,4-Dioxane	4.58				5.00		91.6	70-130			
Ethanol	4.53				5.00		90.6	70-130			
Ethyl Acetate	5.49				5.00		110	70-130			
Ethylbenzene	4.60				5.00		92.1	70-130			
4-Ethyltoluene	4.79				5.00		95.8	70-130			
Heptane	4.54				5.00		90.9	70-130			
Hexachlorobutadiene	4.72				5.00		94.3	70-130			
Hexane	5.32				5.00		106	70-130			
2-Hexanone (MBK)	4.17				5.00		83.4	70-130			
Isopropanol	3.65				5.00		73.0	70-130			
Methyl tert-Butyl Ether (MTBE)	5.20				5.00		104	70-130			
Methylene Chloride	4.32				5.00		86.3	70-130			
4-Methyl-2-pentanone (MIBK)	4.20				5.00		83.9	70-130			
Naphthalene	4.47				5.00		89.3	70-130			
Propene	4.26				5.00		85.1	70-130			
Styrene	4.66				5.00		93.1	70-130			
1,1,2,2-Tetrachloroethane	4.48				5.00		89.7	70-130			
Tetrachloroethylene	4.98				5.00		99.6	70-130			
Tetrahydrofuran	5.53				5.00		111	70-130			
Toluene	4.60				5.00		91.9	70-130			
1,2,4-Trichlorobenzene	4.18				5.00		83.6	70-130			
1,1,1-Trichloroethane	4.48				5.00		89.6	70-130			
1,1,2-Trichloroethane	4.62				5.00		92.3	70-130			
Trichloroethylene	4.69				5.00		93.7	70-130			
Trichlorofluoromethane (Freon 11)	5.55				5.00		111	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.44				5.00		109	70-130			
1,2,4-Trimethylbenzene	4.68				5.00		93.5	70-130			
1,3,5-Trimethylbenzene	4.85				5.00		97.0	70-130			
Vinyl Acetate	4.25				5.00		84.9	70-130			
Vinyl Chloride	4.30				5.00		86.0	70-130			
m&p-Xylene	9.64				10.0		96.4	70-130			
o-Xylene	4.77				5.00		95.5	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.28				8.00		116	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	

Batch B331374 - TO-15 Prep
Blank (B331374-BLK1)

Prepared & Analyzed: 02/07/23

Acetone	ND	1.4
Benzene	ND	0.035
Benzyl chloride	ND	0.035
Bromodichloromethane	ND	0.035
Bromoform	ND	0.035
Bromomethane	ND	0.035
1,3-Butadiene	ND	0.035
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.35
Carbon Tetrachloride	ND	0.035
Chlorobenzene	ND	0.035
Chloroethane	ND	0.035
Chloroform	ND	0.035
Chloromethane	ND	0.070
Cyclohexane	ND	0.035
Dibromochloromethane	ND	0.035
1,2-Dibromoethane (EDB)	ND	0.035
1,2-Dichlorobenzene	ND	0.035
1,3-Dichlorobenzene	ND	0.035
1,4-Dichlorobenzene	ND	0.035
Dichlorodifluoromethane (Freon 12)	ND	0.035
1,1-Dichloroethane	ND	0.035
1,2-Dichloroethane	ND	0.035
1,1-Dichloroethylene	ND	0.035
cis-1,2-Dichloroethylene	ND	0.035
trans-1,2-Dichloroethylene	ND	0.035
1,2-Dichloropropane	ND	0.035
cis-1,3-Dichloropropene	ND	0.035
trans-1,3-Dichloropropene	ND	0.035
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035
1,4-Dioxane	ND	0.35
Ethanol	ND	1.4
Ethyl Acetate	ND	0.35
Ethylbenzene	ND	0.035
4-Ethyltoluene	ND	0.035
Heptane	ND	0.035
Hexachlorobutadiene	ND	0.035
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.035
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.035
Methylene Chloride	ND	0.35
4-Methyl-2-pentanone (MIBK)	ND	0.035
Naphthalene	ND	0.035
Propene	ND	1.4
Styrene	ND	0.035

V-05

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B331374 - TO-15 Prep
Blank (B331374-BLK1)

Prepared & Analyzed: 02/07/23

1,1,2,2-Tetrachloroethane	ND	0.035
Tetrachloroethylene	ND	0.035
Tetrahydrofuran	ND	0.35
Toluene	ND	0.035
1,2,4-Trichlorobenzene	ND	0.035
1,1,1-Trichloroethane	ND	0.035
1,1,2-Trichloroethane	ND	0.035
Trichloroethylene	ND	0.035
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.035
1,3,5-Trimethylbenzene	ND	0.035
Vinyl Acetate	ND	0.70
Vinyl Chloride	ND	0.035
m&p-Xylene	ND	0.070
o-Xylene	ND	0.035

Surrogate: 4-Bromofluorobenzene (1) 9.87 8.00 123 70-130

LCS (B331374-BS1)

Prepared & Analyzed: 02/07/23

Acetone	5.12	5.00	102	70-130
Benzene	4.32	5.00	86.3	70-130
Benzyl chloride	4.73	5.00	94.5	70-130
Bromodichloromethane	4.47	5.00	89.4	70-130
Bromoform	5.85	5.00	117	70-130
Bromomethane	5.13	5.00	103	70-130
1,3-Butadiene	3.77	5.00	75.4	70-130
2-Butanone (MEK)	4.78	5.00	95.6	70-130
Carbon Disulfide	5.78	5.00	116	70-130
Carbon Tetrachloride	5.44	5.00	109	70-130
Chlorobenzene	4.68	5.00	93.6	70-130
Chloroethane	4.41	5.00	88.3	70-130
Chloroform	6.20	5.00	124	70-130
Chloromethane	3.59	5.00	71.8	70-130
Cyclohexane	4.37	5.00	87.4	70-130
Dibromochloromethane	5.26	5.00	105	70-130
1,2-Dibromoethane (EDB)	4.49	5.00	89.8	70-130
1,2-Dichlorobenzene	5.06	5.00	101	70-130
1,3-Dichlorobenzene	5.49	5.00	110	70-130
1,4-Dichlorobenzene	5.36	5.00	107	70-130
Dichlorodifluoromethane (Freon 12)	5.92	5.00	118	70-130
1,1-Dichloroethane	5.67	5.00	113	70-130
1,2-Dichloroethane	6.40	5.00	128	70-130
1,1-Dichloroethylene	5.61	5.00	112	70-130
cis-1,2-Dichloroethylene	5.45	5.00	109	70-130
trans-1,2-Dichloroethylene	5.52	5.00	110	70-130
1,2-Dichloropropane	3.97	5.00	79.5	70-130

V-05

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B331374 - TO-15 Prep											
LCS (B331374-BS1)					Prepared & Analyzed: 02/07/23						
cis-1,3-Dichloropropene	4.14				5.00		82.7	70-130			
trans-1,3-Dichloropropene	4.30				5.00		86.1	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.88				5.00		97.6	70-130			
1,4-Dioxane	4.38				5.00		87.6	70-130			
Ethanol	4.44				5.00		88.8	70-130			
Ethyl Acetate	5.54				5.00		111	70-130			
Ethylbenzene	4.51				5.00		90.2	70-130			
4-Ethyltoluene	4.92				5.00		98.3	70-130			
Heptane	4.02				5.00		80.4	70-130			
Hexachlorobutadiene	5.59				5.00		112	70-130			
Hexane	5.72				5.00		114	70-130			
2-Hexanone (MBK)	3.66				5.00		73.2	70-130			
Isopropanol	3.77				5.00		75.4	70-130			
Methyl tert-Butyl Ether (MTBE)	5.80				5.00		116	70-130			
Methylene Chloride	4.34				5.00		86.7	70-130			
4-Methyl-2-pentanone (MIBK)	3.63				5.00		72.6	70-130			
Naphthalene	4.63				5.00		92.5	70-130			
Propene	3.98				5.00		79.6	70-130			
Styrene	4.64				5.00		92.9	70-130			
1,1,2,2-Tetrachloroethane	4.09				5.00		81.8	70-130			
Tetrachloroethylene	5.51				5.00		110	70-130			
Tetrahydrofuran	5.85				5.00		117	70-130			
Toluene	4.49				5.00		89.8	70-130			
1,2,4-Trichlorobenzene	4.68				5.00		93.6	70-130			
1,1,1-Trichloroethane	4.70				5.00		94.0	70-130			
1,1,2-Trichloroethane	4.55				5.00		90.9	70-130			
Trichloroethylene	4.68				5.00		93.6	70-130			
Trichlorofluoromethane (Freon 11)	6.73				5.00		135	* 70-130			L-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	6.21				5.00		124	70-130			
1,2,4-Trimethylbenzene	4.86				5.00		97.1	70-130			
1,3,5-Trimethylbenzene	5.03				5.00		101	70-130			
Vinyl Acetate	4.18				5.00		83.7	70-130			
Vinyl Chloride	4.26				5.00		85.3	70-130			
m&p-Xylene	9.66				10.0		96.6	70-130			
o-Xylene	4.79				5.00		95.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	9.95				8.00		124	70-130			

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC		RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result		Limits	RPD	Limit	
Batch B331374 - TO-15 Prep											
Duplicate (B331374-DUP1)		Source: 23A2583-04			Prepared: 02/07/23 Analyzed: 02/08/23						
Acetone	1.3	1.4	3.2	3.3		1.3			0.158	25	
Benzene	0.29	0.035	0.94	0.11		0.28			3.39	25	
Benzyl chloride	ND	0.035	ND	0.18		ND				25	
Bromodichloromethane	ND	0.035	ND	0.24		ND				25	
Bromoform	ND	0.035	ND	0.36		ND				25	
Bromomethane	ND	0.035	ND	0.14		ND				25	
1,3-Butadiene	ND	0.035	ND	0.078		ND				25	
2-Butanone (MEK)	ND	1.4	ND	4.1		ND				25	
Carbon Disulfide	ND	0.35	ND	1.1		ND				25	
Carbon Tetrachloride	0.073	0.035	0.46	0.22		0.075			2.84	25	
Chlorobenzene	ND	0.035	ND	0.16		ND				25	
Chloroethane	ND	0.035	ND	0.093		ND				25	
Chloroform	ND	0.035	ND	0.17		ND				25	
Chloromethane	0.38	0.070	0.79	0.14		0.36			4.52	25	V-05
Cyclohexane	ND	0.035	ND	0.12		ND				25	
Dibromochloromethane	ND	0.035	ND	0.30		ND				25	
1,2-Dibromoethane (EDB)	ND	0.035	ND	0.27		ND				25	
1,2-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
1,3-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
1,4-Dichlorobenzene	ND	0.035	ND	0.21		ND				25	
Dichlorodifluoromethane (Freon 12)	0.26	0.035	1.3	0.17		0.30			15.6	25	
1,1-Dichloroethane	ND	0.035	ND	0.14		ND				25	
1,2-Dichloroethane	ND	0.035	ND	0.14		ND				25	
1,1-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
cis-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
trans-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND				25	
1,2-Dichloropropane	ND	0.035	ND	0.16		ND				25	
cis-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25	
trans-1,3-Dichloropropene	ND	0.035	ND	0.16		ND				25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	ND	0.25		ND				25	
1,4-Dioxane	ND	0.35	ND	1.3		ND				25	
Ethanol	1.6	1.4	2.9	2.6		1.6			3.47	25	
Ethyl Acetate	0.20	0.35	0.71	1.3		0.20			0.714	25	
Ethylbenzene	ND	0.035	ND	0.15		ND				25	
4-Ethyltoluene	ND	0.035	ND	0.17		ND				25	
Heptane	ND	0.035	ND	0.14		ND				25	
Hexachlorobutadiene	ND	0.035	ND	0.37		ND				25	
Hexane	ND	1.4	ND	4.9		ND				25	
2-Hexanone (MBK)	ND	0.035	ND	0.14		ND				25	
Isopropanol	ND	1.4	ND	3.4		ND				25	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	ND	0.13		ND				25	
Methylene Chloride	ND	0.35	ND	1.2		ND				25	
4-Methyl-2-pentanone (MIBK)	ND	0.035	ND	0.14		ND				25	
Naphthalene	0.034	0.035	0.18	0.18		0.044			23.4	25	
Propene	ND	1.4	ND	2.4		ND				25	
Styrene	ND	0.035	ND	0.15	4.007	ND				25	

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B331374 - TO-15 Prep											
Duplicate (B331374-DUP1)	Source: 23A2583-04				Prepared: 02/07/23 Analyzed: 02/08/23						
1,1,2,2-Tetrachloroethane	ND	0.035	ND	0.24		ND				25	
Tetrachloroethylene	ND	0.035	ND	0.24		ND				25	
Tetrahydrofuran	ND	0.35	ND	1.0		ND				25	
Toluene	0.080	0.035	0.30	0.13		0.080			0.00	25	
1,2,4-Trichlorobenzene	ND	0.035	ND	0.26		ND				25	
1,1,1-Trichloroethane	ND	0.035	ND	0.19		ND				25	
1,1,2-Trichloroethane	ND	0.035	ND	0.19		ND				25	
Trichloroethylene	ND	0.035	ND	0.19		ND				25	
Trichlorofluoromethane (Freon 11)	0.27	0.14	1.5	0.79		0.28			3.57	25	L-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.087	0.14	0.67	1.1		0.085			2.45	25	
1,2,4-Trimethylbenzene	0.018	0.035	0.086	0.17		0.018			3.92	25	
1,3,5-Trimethylbenzene	ND	0.035	ND	0.17		ND				25	
Vinyl Acetate	ND	0.70	ND	2.5		ND				25	
Vinyl Chloride	ND	0.035	ND	0.090		ND				25	
m&p-Xylene	ND	0.070	ND	0.30		ND				25	
o-Xylene	ND	0.035	ND	0.15		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	9.86				8.00		123	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
Z-01	Sample had a final vacuum of zero. Flow controllers have been verified to be okay, RPD was <20%

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INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S076501-ICV1)			Lab File ID: G22A256016.D			Analyzed: 09/13/22 22:00			
Bromochloromethane (1)	1141026	8.307	1123386	8.307	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2751702	10.081	2650535	10.081	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2471195	14.446	2407851	14.446	103	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S083062-CCV1)			Lab File ID: G23A039004.D			Analyzed: 02/08/23 16:36			
Bromochloromethane (1)	1045651	8.3	1123386	8.307	93	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2971617	10.075	2650535	10.081	112	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2694729	14.44	2407851	14.446	112	60 - 140	-0.0060	+/-0.50	
LCS (B331121-BS1)			Lab File ID: G23A039005.D			Analyzed: 02/08/23 17:15			
Bromochloromethane (1)	1037412	8.301	1045651	8.3	99	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2903222	10.075	2971617	10.075	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2639611	14.44	2694729	14.44	98	60 - 140	0.0000	+/-0.50	
Blank (B331121-BLK1)			Lab File ID: G23A039010.D			Analyzed: 02/08/23 20:44			
Bromochloromethane (1)	1005316	8.301	1045651	8.3	96	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2779209	10.075	2971617	10.075	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2562506	14.44	2694729	14.44	95	60 - 140	0.0000	+/-0.50	
RO7-INT 1 (23A2583-01RE1)			Lab File ID: G23A039032.D			Analyzed: 02/09/23 13:48			
Bromochloromethane (1)	1055730	8.301	1045651	8.3	101	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2887740	10.069	2971617	10.075	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2655634	14.44	2694729	14.44	99	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S083176-CCV1)			Lab File ID: G23A038004.D			Analyzed: 02/07/23 17:14			
Bromochloromethane (1)	768596	8.3	1123386	8.307	68	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2440862	10.075	2650535	10.081	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2164616	14.44	2407851	14.446	90	60 - 140	-0.0060	+/-0.50	
LCS (B331374-BS1)			Lab File ID: G23A038005.D			Analyzed: 02/07/23 17:54			
Bromochloromethane (1)	805951	8.301	768596	8.3	105	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2605912	10.075	2440862	10.075	107	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2367338	14.44	2164616	14.44	109	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B331374-BLK1)									
Lab File ID: G23A038008.D					Analyzed: 02/07/23 20:02				
Bromochloromethane (1)	775993	8.307	768596	8.3	101	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2476217	10.075	2440862	10.075	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2305427	14.44	2164616	14.44	107	60 - 140	0.0000	+/-0.50	
RO7-INT 1 (23A2583-01)									
Lab File ID: G23A038011.D					Analyzed: 02/07/23 22:24				
Bromochloromethane (1)	802868	8.301	768596	8.3	104	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2635713	10.075	2440862	10.075	108	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2443922	14.44	2164616	14.44	113	60 - 140	0.0000	+/-0.50	
RO7-INT 2 (23A2583-02)									
Lab File ID: G23A038012.D					Analyzed: 02/07/23 23:12				
Bromochloromethane (1)	810862	8.307	768596	8.3	105	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2632448	10.075	2440862	10.075	108	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2497302	14.44	2164616	14.44	115	60 - 140	0.0000	+/-0.50	
RO7-DW1 (23A2583-03)									
Lab File ID: G23A038013.D					Analyzed: 02/07/23 23:59				
Bromochloromethane (1)	791305	8.301	768596	8.3	103	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2527252	10.075	2440862	10.075	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2353107	14.44	2164616	14.44	109	60 - 140	0.0000	+/-0.50	
RO7-DWZ-D1 (23A2583-04)									
Lab File ID: G23A038014.D					Analyzed: 02/08/23 00:46				
Bromochloromethane (1)	798781	8.301	768596	8.3	104	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2551496	10.075	2440862	10.075	105	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2368789	14.44	2164616	14.44	109	60 - 140	0.0000	+/-0.50	
Duplicate (B331374-DUP1)									
Lab File ID: G23A038015.D					Analyzed: 02/08/23 01:34				
Bromochloromethane (1)	774617	8.307	768596	8.3	101	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2457797	10.075	2440862	10.075	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2288965	14.44	2164616	14.44	106	60 - 140	0.0000	+/-0.50	
RO7-DWZ-D2 (23A2583-05)									
Lab File ID: G23A038016.D					Analyzed: 02/08/23 02:21				
Bromochloromethane (1)	747268	8.307	768596	8.3	97	60 - 140	0.0070	+/-0.50	
1,4-Difluorobenzene (1)	2296129	10.075	2440862	10.075	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2159281	14.44	2164616	14.44	100	60 - 140	0.0000	+/-0.50	
RO7_UW (23A2583-06)									
Lab File ID: G23A038017.D					Analyzed: 02/08/23 03:09				
Bromochloromethane (1)	747847	8.301	768596	8.3	97	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2274780	10.075	2440862	10.075	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2164554	14.44	2164616	14.44	100	60 - 140	0.0000	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S083062-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.43	1.084004	0.9597634		-11.5	30
Benzene	A	5.00	4.33	0.9129288	0.7909105		-13.4	30
Benzyl chloride	A	5.00	4.64	1.030942	0.9572263		-7.2	30
Bromodichloromethane	A	5.00	4.29	0.6953811	0.5965205		-14.2	30
Bromoform	A	5.00	4.99	0.5656468	0.5641057		-0.3	30
Bromomethane	A	5.00	4.63	0.6009459	0.5568068		-7.3	30
1,3-Butadiene	A	5.00	3.69	0.5443004	0.4014265		-26.2	30
2-Butanone (MEK)	A	5.00	4.43	1.507683	1.334547		-11.5	30
Carbon Disulfide	A	5.00	5.08	2.02748	2.061147		1.7	30
Carbon Tetrachloride	A	5.00	4.71	0.5479998	0.5166512		-5.7	30
Chlorobenzene	A	5.00	4.41	0.8809329	0.7762283		-11.9	30
Chloroethane	A	5.00	4.25	0.3452967	0.2933583		-15.0	30
Chloroform	A	5.00	5.14	1.561184	1.603753		2.7	30
Chloromethane	A	5.00	3.56	0.6821899	0.4852862		-28.9	30
Cyclohexane	A	5.00	4.35	0.3600845	0.3133066		-13.0	30
Dibromochloromethane	A	5.00	4.76	0.6396581	0.6082826		-4.9	30
1,2-Dibromoethane (EDB)	A	5.00	4.34	0.6171207	0.5353836		-13.2	30
1,2-Dichlorobenzene	A	5.00	4.60	0.6937094	0.6387118		-7.9	30
1,3-Dichlorobenzene	A	5.00	5.01	0.7409581	0.7423862		0.2	30
1,4-Dichlorobenzene	A	5.00	4.91	0.7218155	0.7093101		-1.7	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.70	1.62808	1.529229		-6.1	30
1,1-Dichloroethane	A	5.00	4.99	1.342742	1.338957		-0.3	30
1,2-Dichloroethane	A	5.00	4.99	0.9627523	0.9610763		-0.2	30
1,1-Dichloroethylene	A	5.00	4.82	1.140142	1.099516		-3.6	30
cis-1,2-Dichloroethylene	A	5.00	4.73	0.9670963	0.9153555		-5.4	30
trans-1,2-Dichloroethylene	A	5.00	4.79	1.001825	0.9595691		-4.2	30
1,2-Dichloropropane	A	5.00	4.17	0.3567989	0.2976093		-16.6	30
cis-1,3-Dichloropropene	A	5.00	4.20	0.5092852	0.4273536		-16.1	30
trans-1,3-Dichloropropene	A	5.00	4.08	0.4570981	0.372925		-18.4	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	4.52	1.73998	1.572904		-9.6	30
1,4-Dioxane	A	5.00	4.15	0.1857641	0.1543036		-16.9	30
Ethanol	A	5.00	3.45	0.2343264	0.1616065		-31.0	30 *
Ethyl Acetate	A	5.00	5.46	0.2308163	0.2519846		9.2	30
Ethylbenzene	A	5.00	4.41	1.455024	1.282741		-11.8	30
4-Ethyltoluene	A	5.00	4.61	1.413771	1.303951		-7.8	30
Heptane	A	5.00	4.27	0.2850308	0.2434623		-14.6	30
Hexachlorobutadiene	A	5.00	4.78	0.4677459	0.4470321		-4.4	30
Hexane	A	5.00	4.95	0.8985394	0.8358934		-0.9	30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S083062-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	3.92	0.7712864	0.6044678		-21.6	30
Isopropanol	A	5.00	3.86	1.338902	1.032458		-22.9	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.90	1.834723	1.797225		-2.0	30
Methylene Chloride	A	5.00	4.00	0.9597215	0.7667614		-20.1	30
4-Methyl-2-pentanone (MIBK)	A	5.00	3.94	0.7726854	0.6091374		-21.2	30
Naphthalene	A	5.00	4.06	1.092246	0.8863965		-18.8	30
Propene	A	5.00	4.03	0.5941328	0.47921		-19.3	30
Styrene	A	5.00	4.49	0.7890752	0.7080495		-10.3	30
1,1,2,2-Tetrachloroethane	A	5.00	4.28	0.9851261	0.8421976		-14.5	30
Tetrachloroethylene	A	5.00	4.74	0.457194	0.4335159		-5.2	30
Tetrahydrofuran	A	5.00	4.96	0.2957092	0.2930232		-0.9	30
Toluene	A	5.00	4.30	1.15399	0.9918367		-14.1	30
1,2,4-Trichlorobenzene	A	5.00	4.01	0.4973623	0.3989263		-19.8	30
1,1,1-Trichloroethane	A	5.00	4.35	0.5975698	0.5198285		-13.0	30
1,1,2-Trichloroethane	A	5.00	4.34	0.4162703	0.3609826		-13.3	30
Trichloroethylene	A	5.00	4.38	0.3947958	0.3456343		-12.5	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.29	1.463327	1.547785		5.8	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.16	1.432547	1.476909		3.1	30
1,2,4-Trimethylbenzene	A	5.00	4.57	1.156019	1.057402		-8.5	30
1,3,5-Trimethylbenzene	A	5.00	4.71	1.190388	1.121592		-5.8	30
Vinyl Acetate	A	5.00	3.77	1.986739	1.498998		-24.5	30
Vinyl Chloride	A	5.00	4.06	0.7142115	0.5798294		-18.8	30
m&p-Xylene	A	10.0	9.17	1.129066	1.03525		-8.3	30
o-Xylene	A	5.00	4.57	1.138955	1.040767		-8.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S083176-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.91	1.084004	1.064603		-1.8	30
Benzene	A	5.00	4.11	0.9129288	0.7509426		-17.7	30
Benzyl chloride	A	5.00	4.80	1.030942	0.9887307		-4.1	30
Bromodichloromethane	A	5.00	4.34	0.6953811	0.6032466		-13.2	30
Bromoform	A	5.00	5.68	0.5656468	0.6430938		13.7	30
Bromomethane	A	5.00	4.83	0.6009459	0.5802414		-3.4	30
1,3-Butadiene	A	5.00	3.65	0.5443004	0.3973479		-27.0	30
2-Butanone (MEK)	A	5.00	4.47	1.507683	1.347159		-10.6	30
Carbon Disulfide	A	5.00	5.23	2.02748	2.119212		4.5	30
Carbon Tetrachloride	A	5.00	5.20	0.5479998	0.5703152		4.1	30
Chlorobenzene	A	5.00	4.64	0.8809329	0.8178411		-7.2	30
Chloroethane	A	5.00	4.07	0.3452967	0.2808758		-18.7	30
Chloroform	A	5.00	5.84	1.561184	1.822327		16.7	30
Chloromethane	A	5.00	3.50	0.6821899	0.4774087		-30.0	30
Cyclohexane	A	5.00	4.12	0.3600845	0.2969653		-17.5	30
Dibromochloromethane	A	5.00	5.22	0.6396581	0.6672674		4.3	30
1,2-Dibromoethane (EDB)	A	5.00	4.50	0.6171207	0.555504		-10.0	30
1,2-Dichlorobenzene	A	5.00	5.00	0.6937094	0.6930567		-0.09	30
1,3-Dichlorobenzene	A	5.00	5.48	0.7409581	0.8119892		9.6	30
1,4-Dichlorobenzene	A	5.00	5.39	0.7218155	0.7783034		7.8	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.34	1.62808	1.73853		6.8	30
1,1-Dichloroethane	A	5.00	5.30	1.342742	1.42321		6.0	30
1,2-Dichloroethane	A	5.00	5.94	0.9627523	1.143877		18.8	30
1,1-Dichloroethylene	A	5.00	5.21	1.140142	1.187416		4.1	30
cis-1,2-Dichloroethylene	A	5.00	5.06	0.9670963	0.9780264		1.1	30
trans-1,2-Dichloroethylene	A	5.00	5.15	1.001825	1.032057		3.0	30
1,2-Dichloropropane	A	5.00	3.81	0.3567989	0.2719485		-23.8	30
cis-1,3-Dichloropropene	A	5.00	4.03	0.5092852	0.4104878		-19.4	30
trans-1,3-Dichloropropene	A	5.00	4.08	0.4570981	0.3730151		-18.4	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	4.94	1.73998	1.720867		-1.1	30
1,4-Dioxane	A	5.00	4.00	0.1857641	0.1484105		-20.1	30
Ethanol	A	5.00	3.53	0.2343264	0.1655424		-29.4	30
Ethyl Acetate	A	5.00	5.46	0.2308163	0.2517983		9.1	30
Ethylbenzene	A	5.00	4.54	1.455024	1.319859		-9.3	30
4-Ethyltoluene	A	5.00	4.92	1.413771	1.389731		-1.7	30
Heptane	A	5.00	3.90	0.2850308	0.2222697		-22.0	30
Hexachlorobutadiene	A	5.00	5.78	0.4677459	0.5405552		15.6	30
Hexane	A	5.00	5.45	0.8985394	0.9199902		9.0	30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S083176-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	3.72	0.7712864	0.5731078		-25.7	30
Isopropanol	A	5.00	4.05	1.338902	1.084979		-19.0	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.43	1.834723	1.993164		8.6	30
Methylene Chloride	A	5.00	4.10	0.9597215	0.7872099		-18.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	3.60	0.7726854	0.5560187		-28.0	30
Naphthalene	A	5.00	4.34	1.092246	0.947674		-13.2	30
Propene	A	5.00	3.87	0.5941328	0.4593435		-22.7	30
Styrene	A	5.00	4.62	0.7890752	0.7289725		-7.6	30
1,1,2,2-Tetrachloroethane	A	5.00	4.11	0.9851261	0.8101236		-17.8	30
Tetrachloroethylene	A	5.00	5.35	0.457194	0.4895006		7.1	30
Tetrahydrofuran	A	5.00	5.15	0.2957092	0.3045012		3.0	30
Toluene	A	5.00	4.36	1.15399	1.005227		-12.9	30
1,2,4-Trichlorobenzene	A	5.00	4.48	0.4973623	0.4453631		-10.5	30
1,1,1-Trichloroethane	A	5.00	4.73	0.5975698	0.5652397		-5.4	30
1,1,2-Trichloroethane	A	5.00	4.45	0.4162703	0.3705518		-11.0	30
Trichloroethylene	A	5.00	4.48	0.3947958	0.3540913		-10.3	30
Trichlorofluoromethane (Freon 11)	A	5.00	6.36	1.463327	1.862627		27.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.81	1.432547	1.664567		16.2	30
1,2,4-Trimethylbenzene	A	5.00	4.90	1.156019	1.133809		-1.9	30
1,3,5-Trimethylbenzene	A	5.00	5.09	1.190388	1.211851		1.8	30
Vinyl Acetate	A	5.00	3.73	1.986739	1.482		-25.4	30
Vinyl Chloride	A	5.00	4.05	0.7142115	0.5787238		-19.0	30
m&p-Xylene	A	10.0	9.78	1.129066	1.104017		-2.2	30
o-Xylene	A	5.00	4.77	1.138955	1.087259		-4.5	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

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Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023

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PALATINE, IL US

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PACKAGE RECEIVED BY FEDEX

SCHAUMBURG, IL

1/25/2023 7:39 PM

IN TRANSIT

WINDSOR LOCKS, CT

1/26/2023 8:20 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

1/26/2023 8:30 AM

DELIVERED

EAST LONGMEADOW, MA US

DELIVERED

1/26/2023 at 10:07 AM

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Doc# 278 Rev 7 July 2022

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Clean Air

Received By	<u>CH</u>	Date	<u>1-26-23</u>	Time	<u>10:07</u>
How Were the samples received?	In Cooler	On Ice	No Ice		
	In Box	Ambient	Melted Ice		
Were samples within Temperature Compliance?	Within 2-6°C	By Gun #	Actual Temp -		
Was Custody Seal In tact?	<u>NH</u>	By Blank #	Actual Temp -		
Was COC Relinquished?	<u>T</u>	Were Samples Tampered with?	<u>F</u>		
		Does Chain Agree With Samples?	<u>T</u>		
Are there any loose caps/valves on any samples?	<u>F</u>	Were samples received within holding time?			
Is COC in ink/ Legible?	<u>T</u>	Analysis?	<u>YES</u>	Sampler Name?	<u>T</u>
Did COC Include all Pertinent Information?	Client?	ID's?	<u>T</u>	Collection Dates/Times?	<u>T</u>
	Project?				
Are Sample Labels filled out and legible?		Who was notified?			
Are there Rushes?	<u>F</u>				
Samples are received within holding time?	<u>T</u>				
Proper Media Used?	<u>T</u>	Individually Certified Cans?	<u>F</u>		
Are there Trip Blanks?	<u>F</u>	Is there enough Volume?	<u>T</u>		

Containers:	#	Size	Regulator	Duration	Accessories:		
Summa Cans	7	6L	6	24 hrs	Nut/Ferrule		IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s					Tedlar		

Can #'s		2930		Reg #'s	4850			
2948				4868				
2960				4846				
2995				4848				
2950				4857				
2934	2986							
	2934			4865				
Unused Media				Pufs/TO-17's				

Comments:

-1.00

APPENDIX E: METEOROLOGICAL DATA

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/19/2022	10:00:00	3.8	285.4	42.9	
10/19/2022	11:00:00	4.2	287.3	45.8	
10/19/2022	12:00:00	4.1	288.5	48.5	
10/19/2022	13:00:00	5.0	284.7	49.0	
10/19/2022	14:00:00	4.5	274.8	49.4	
10/19/2022	15:00:00	4.7	262.7	48.6	
10/19/2022	16:00:00	4.1	244.4	45.6	
10/19/2022	17:00:00	3.2	236.3	42.3	
10/19/2022	18:00:00	2.4	234.1	40.2	
10/19/2022	19:00:00	2.4	233.3	38.6	
10/19/2022	20:00:00	2.0	235.9	37.3	
10/19/2022	21:00:00	2.3	232.4	36.0	
10/19/2022	22:00:00	2.7	237.9	35.8	
10/19/2022	23:00:00	2.4	231.2	34.5	
10/20/2022	0:00:00	2.6	238.2	33.8	
10/20/2022	1:00:00	2.7	240.2	33.5	
10/20/2022	2:00:00	2.6	233.5	32.8	
10/20/2022	3:00:00	2.6	224.6	32.3	
10/20/2022	4:00:00	2.6	220.6	31.4	
10/20/2022	5:00:00	2.7	226.7	31.7	
10/20/2022	6:00:00	3.1	228.5	33.3	
10/20/2022	7:00:00	2.7	218.1	35.8	
10/20/2022	8:00:00	3.1	214.9	40.1	
10/20/2022	9:00:00	3.3	227.7	46.5	
10/20/2022	10:00:00	3.1	225.8	47.7	
10/20/2022	11:00:00	3.3	216.2	51.3	
10/20/2022	12:00:00	3.8	225.0	56.7	
10/20/2022	13:00:00	3.9	241.3	57.7	
10/20/2022	14:00:00	3.7	242.0	60.5	
10/20/2022	15:00:00	2.5	228.5	62.3	
10/20/2022	16:00:00	1.7	216.9	59.6	
10/20/2022	17:00:00	0.4	111.9	51.9	
10/20/2022	18:00:00	0.6	163.7	46.6	
10/20/2022	19:00:00	1.7	177.9	49.1	
10/20/2022	20:00:00	2.5	167.2	50.4	
10/20/2022	21:00:00	2.3	168.8	48.9	
10/20/2022	22:00:00	2.0	177.5	48.1	
10/20/2022	23:00:00	2.2	178.8	47.3	
10/21/2022	0:00:00	2.4	194.2	47.2	
10/21/2022	1:00:00	2.3	202.6	47.2	
10/21/2022	2:00:00	3.2	198.9	46.9	
10/21/2022	3:00:00	3.4	192.0	46.2	
10/21/2022	4:00:00	3.0	187.4	45.3	
10/21/2022	5:00:00	2.9	190.3	44.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/21/2022	6:00:00	2.1	186.7	43.5	
10/21/2022	7:00:00	3.5	186.5	46.6	
10/21/2022	8:00:00	3.7	198.5	52.6	
10/21/2022	9:00:00	3.1	191.5	57.9	
10/21/2022	10:00:00	3.4	190.7	63.8	
10/21/2022	11:00:00	3.7	192.0	68.9	
10/21/2022	12:00:00	3.6	206.8	73.1	
10/21/2022	13:00:00	3.9	206.2	75.7	
10/21/2022	14:00:00	4.4	210.1	76.8	
10/21/2022	15:00:00	3.6	204.5	75.8	
10/21/2022	16:00:00	3.4	203.9	73.3	
10/21/2022	17:00:00	2.6	196.7	69.7	
10/21/2022	18:00:00	3.2	195.6	67.9	
10/21/2022	19:00:00	3.4	194.9	66.4	
10/21/2022	20:00:00	3.0	192.3	64.3	
10/21/2022	21:00:00	2.9	191.4	62.3	
10/21/2022	22:00:00	2.9	189.4	61.2	
10/21/2022	23:00:00	2.4	179.1	59.1	
10/22/2022	0:00:00	2.5	180.8	57.6	
10/22/2022	1:00:00	2.8	176.5	56.7	
10/22/2022	2:00:00	3.5	178.3	56.2	
10/22/2022	3:00:00	3.6	175.2	56.1	
10/22/2022	4:00:00	3.6	172.1	55.7	
10/22/2022	5:00:00	3.3	177.0	56.5	
10/22/2022	6:00:00	3.6	172.8	56.2	
10/22/2022	7:00:00	3.9	177.3	57.7	
10/22/2022	8:00:00	3.9	177.5	60.9	
10/22/2022	9:00:00	4.2	176.9	65.7	
10/22/2022	10:00:00	4.1	177.8	69.6	
10/22/2022	11:00:00	3.7	174.4	74.1	
10/22/2022	12:00:00	3.5	174.6	77.3	
10/22/2022	13:00:00	3.7	175.9	79.3	
10/22/2022	14:00:00	3.5	178.6	80.3	
10/22/2022	15:00:00	3.3	177.8	79.9	
10/22/2022	16:00:00	2.7	174.8	76.9	
10/22/2022	17:00:00	2.0	170.6	72.1	
10/22/2022	18:00:00	2.2	160.4	69.6	
10/22/2022	19:00:00	2.5	153.6	67.9	
10/22/2022	20:00:00	2.5	173.3	66.5	
10/22/2022	21:00:00	2.7	184.2	66.2	
10/22/2022	22:00:00	2.4	186.5	64.9	
10/22/2022	23:00:00	2.5	188.2	63.8	
10/23/2022	0:00:00	2.1	178.5	62.5	
10/23/2022	1:00:00	1.7	157.2	61.2	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/23/2022	2:00:00	2.1	154.2	60.5	
10/23/2022	3:00:00	2.4	157.0	60.7	
10/23/2022	4:00:00	2.2	160.3	61.1	
10/23/2022	5:00:00	1.9	151.0	60.7	
10/23/2022	6:00:00	2.2	144.9	60.2	
10/23/2022	7:00:00	2.5	153.3	62.0	
10/23/2022	8:00:00	3.4	166.0	66.4	
10/23/2022	9:00:00	4.1	181.7	69.7	
10/23/2022	10:00:00	4.4	174.1	72.6	
10/23/2022	11:00:00	4.6	173.8	75.5	
10/23/2022	12:00:00	4.6	175.4	78.6	
10/23/2022	13:00:00	4.9	180.7	79.6	
10/23/2022	14:00:00	5.1	180.1	79.2	
10/23/2022	15:00:00	4.9	167.7	78.4	
10/23/2022	16:00:00	3.6	169.6	76.0	
10/23/2022	17:00:00	3.4	161.0	73.7	
10/23/2022	18:00:00	3.1	157.8	71.9	
10/23/2022	19:00:00	2.8	162.2	70.3	
10/23/2022	20:00:00	3.0	162.7	69.3	
10/23/2022	21:00:00	3.0	158.2	68.2	
10/23/2022	22:00:00	2.8	162.7	66.6	
10/23/2022	23:00:00	2.6	164.4	65.5	
10/24/2022	0:00:00	2.0	176.9	64.9	
10/24/2022	1:00:00	1.6	158.0	62.2	
10/24/2022	2:00:00	1.9	160.3	63.3	
10/24/2022	3:00:00	2.1	150.8	63.6	
10/24/2022	4:00:00	2.7	151.0	63.6	
10/24/2022	5:00:00	2.6	152.4	63.2	
10/24/2022	6:00:00	2.9	158.6	63.0	
10/24/2022	7:00:00	3.0	167.6	64.3	
10/24/2022	8:00:00	3.5	164.1	68.4	
10/24/2022	9:00:00	3.3	184.3	69.6	
10/24/2022	10:00:00	3.2	171.2	71.2	
10/24/2022	11:00:00	3.6	184.8	74.4	
10/24/2022	12:00:00	3.4	166.7	74.1	
10/24/2022	13:00:00	3.5	160.2	74.0	
10/24/2022	14:00:00	3.3	166.2	74.1	
10/24/2022	15:00:00	4.4	173.9	75.3	
10/24/2022	16:00:00	3.3	173.7	73.5	
10/24/2022	17:00:00	3.0	160.7	72.5	
10/24/2022	18:00:00	2.7	140.1	70.9	
10/24/2022	19:00:00	2.7	155.6	69.2	
10/24/2022	20:00:00	2.5	158.5	68.5	
10/24/2022	21:00:00	2.7	159.6	67.8	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/24/2022	22:00:00	2.9	173.3	67.8	
10/24/2022	23:00:00	2.9	177.8	67.4	
10/25/2022	0:00:00	2.3	170.4	65.3	
10/25/2022	1:00:00	2.2	160.1	63.6	
10/25/2022	2:00:00	2.3	162.8	62.3	
10/25/2022	3:00:00	2.1	177.5	61.0	
10/25/2022	4:00:00	2.2	178.1	61.0	
10/25/2022	5:00:00	2.1	168.1	61.6	
10/25/2022	6:00:00	2.3	166.5	61.6	
10/25/2022	7:00:00	2.1	174.1	55.4	
10/25/2022	8:00:00	1.4	162.4	54.3	
10/25/2022	9:00:00	1.4	163.9	55.2	
10/25/2022	10:00:00	1.8	143.1	56.1	
10/25/2022	11:00:00	1.5	143.0	56.0	
10/25/2022	12:00:00	1.2	120.7	55.4	
10/25/2022	13:00:00	1.2	89.4	55.8	
10/25/2022	14:00:00	1.3	76.7	56.2	
10/25/2022	15:00:00	0.6	38.5	56.6	
10/25/2022	16:00:00	0.9	218.7	57.3	
10/25/2022	17:00:00	3.3	210.8	60.4	
10/25/2022	18:00:00	1.4	261.4	59.7	
10/25/2022	19:00:00	3.6	0.5	54.5	
10/25/2022	20:00:00	3.6	9.4	51.4	
10/25/2022	21:00:00	4.4	19.5	50.1	
10/25/2022	22:00:00	4.8	17.7	49.6	
10/25/2022	23:00:00	5.9	353.2	48.3	
10/26/2022	0:00:00	4.9	353.5	47.9	
10/26/2022	1:00:00	5.7	341.3	46.9	
10/26/2022	2:00:00	5.6	347.7	46.3	
10/26/2022	3:00:00	5.0	349.7	46.4	
10/26/2022	4:00:00	5.9	344.0	46.2	
10/26/2022	5:00:00	6.3	335.0	46.2	
10/26/2022	6:00:00	6.3	323.5	46.3	
10/26/2022	7:00:00	6.5	332.8	46.2	
10/26/2022	8:00:00	5.5	330.7	45.9	
10/26/2022	9:00:00	5.1	327.5	46.0	
10/26/2022	10:00:00	5.2	333.0	46.6	
10/26/2022	11:00:00	5.0	333.6	46.4	
10/26/2022	12:00:00	5.0	344.3	48.8	
10/26/2022	13:00:00	3.7	356.0	50.6	
10/26/2022	14:00:00	3.0	10.0	51.0	
10/26/2022	15:00:00	2.4	7.3	49.6	
10/26/2022	16:00:00	1.8	12.4	47.4	
10/26/2022	17:00:00	1.8	19.6	45.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/26/2022	18:00:00	0.6	61.7	42.8	
10/26/2022	19:00:00	0.5	134.8	41.0	
10/26/2022	20:00:00	0.3	157.6	38.4	
10/26/2022	21:00:00	0.3	175.5	36.8	
10/26/2022	22:00:00	0.2	130.4	35.9	
10/26/2022	23:00:00	0.3	89.1	34.6	
10/27/2022	0:00:00	0.5	73.8	33.8	29.5
10/27/2022	1:00:00	0.1	174.9	32.9	29.6
10/27/2022	2:00:00	0.2	111.8	32.7	29.6
10/27/2022	3:00:00	0.6	145.3	33.1	29.6
10/27/2022	4:00:00	0.9	135.4	34.6	29.6
10/27/2022	5:00:00	1.6	135.2	37.6	29.6
10/27/2022	6:00:00	1.9	141.4	38.3	29.7
10/27/2022	7:00:00	2.2	132.2	40.4	29.7
10/27/2022	8:00:00	2.5	128.5	45.2	29.7
10/27/2022	9:00:00	2.5	120.6	48.8	29.7
10/27/2022	10:00:00	1.9	105.3	51.6	29.7
10/27/2022	11:00:00	1.7	79.9	53.6	29.7
10/27/2022	12:00:00	1.8	65.6	55.5	29.7
10/27/2022	13:00:00	3.5	27.8	53.8	29.7
10/27/2022	14:00:00	3.2	36.0	52.4	29.7
10/27/2022	15:00:00	2.2	50.4	51.2	29.7
10/27/2022	16:00:00	1.0	75.2	50.2	29.7
10/27/2022	17:00:00	0.7	69.2	46.9	29.7
10/27/2022	18:00:00	0.9	66.4	43.2	29.7
10/27/2022	19:00:00	0.9	64.8	41.7	29.7
10/27/2022	20:00:00	0.7	70.7	41.1	29.7
10/27/2022	21:00:00	1.6	97.2	43.5	29.7
10/27/2022	22:00:00	2.3	103.3	45.2	29.7
10/27/2022	23:00:00	2.3	111.7	44.7	29.7
10/28/2022	0:00:00	2.2	124.3	43.2	29.7
10/28/2022	1:00:00	1.8	126.9	42.6	29.7
10/28/2022	2:00:00	1.5	121.5	42.3	29.7
10/28/2022	3:00:00	0.7	85.7	41.3	29.7
10/28/2022	4:00:00	0.3	54.2	39.0	29.7
10/28/2022	5:00:00	0.4	72.2	38.0	29.7
10/28/2022	6:00:00	0.6	62.6	37.7	29.8
10/28/2022	7:00:00	1.3	80.4	39.8	29.8
10/28/2022	8:00:00	1.8	105.8	48.3	29.8
10/28/2022	9:00:00	1.5	114.0	53.3	29.8
10/28/2022	10:00:00	0.9	135.9	58.8	29.7
10/28/2022	11:00:00	2.0	353.8	59.8	29.7
10/28/2022	12:00:00	2.9	22.3	59.2	29.7
10/28/2022	13:00:00	3.1	19.9	58.5	29.7

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/28/2022	14:00:00	3.1	25.2	58.1	29.7
10/28/2022	15:00:00	2.4	29.6	56.8	29.7
10/28/2022	16:00:00	1.9	33.1	53.5	29.7
10/28/2022	17:00:00	0.8	53.9	49.5	29.7
10/28/2022	18:00:00	0.2	82.5	46.5	29.7
10/28/2022	19:00:00	0.6	67.0	43.9	29.7
10/28/2022	20:00:00	0.7	70.0	42.2	29.7
10/28/2022	21:00:00	0.5	78.9	40.8	29.7
10/28/2022	22:00:00	0.6	107.7	40.3	29.7
10/28/2022	23:00:00	1.1	126.7	44.3	29.7
10/29/2022	0:00:00	1.9	130.9	45.8	
10/29/2022	1:00:00	2.1	140.7	46.1	
10/29/2022	2:00:00	2.3	143.8	45.6	
10/29/2022	3:00:00	1.6	138.9	44.8	
10/29/2022	4:00:00	2.0	137.3	43.9	
10/29/2022	5:00:00	1.7	139.1	43.3	
10/29/2022	6:00:00	0.5	114.3	41.9	
10/29/2022	7:00:00	0.6	91.7	45.6	
10/29/2022	8:00:00	1.0	147.0	53.3	
10/29/2022	9:00:00	1.2	164.8	59.5	
10/29/2022	10:00:00	0.8	119.7	64.9	
10/29/2022	11:00:00	1.0	38.2	67.0	
10/29/2022	12:00:00	1.9	35.6	66.5	
10/29/2022	13:00:00	2.9	22.0	64.5	
10/29/2022	14:00:00	2.9	37.0	61.7	
10/29/2022	15:00:00	2.3	43.9	59.1	
10/29/2022	16:00:00	1.7	52.7	55.0	
10/29/2022	17:00:00	0.9	72.5	51.6	
10/29/2022	18:00:00	0.8	65.0	48.0	
10/29/2022	19:00:00	0.6	70.9	44.8	
10/29/2022	20:00:00	0.7	111.5	44.9	
10/29/2022	21:00:00	1.1	116.1	48.7	
10/29/2022	22:00:00	1.3	117.6	49.6	
10/29/2022	23:00:00	1.2	99.4	50.6	
10/30/2022	0:00:00	1.5	115.4	50.8	
10/30/2022	1:00:00	2.1	129.8	50.7	
10/30/2022	2:00:00	2.3	128.4	49.3	
10/30/2022	3:00:00	1.6	123.5	47.8	
10/30/2022	4:00:00	2.5	129.1	48.0	
10/30/2022	5:00:00	2.4	133.3	47.9	
10/30/2022	6:00:00	2.4	136.3	47.6	
10/30/2022	7:00:00	2.5	134.4	48.5	
10/30/2022	8:00:00	2.6	139.3	51.3	
10/30/2022	9:00:00	2.2	135.3	56.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
10/30/2022	10:00:00	1.9	138.1	58.9	
10/30/2022	11:00:00	1.2	109.6	64.1	
10/30/2022	12:00:00	1.4	31.8	67.5	
10/30/2022	13:00:00	1.6	30.7	62.8	
10/30/2022	14:00:00	0.8	60.2	59.5	
10/30/2022	15:00:00	1.0	91.3	56.8	
10/30/2022	16:00:00	0.1	46.4	55.7	
10/30/2022	17:00:00	0.2	92.7	55.4	
10/30/2022	18:00:00	0.8	137.2	55.9	
10/30/2022	19:00:00	0.9	187.1	55.4	
10/30/2022	20:00:00	1.0	122.1	55.5	
10/30/2022	21:00:00	1.2	129.2	55.7	
10/30/2022	22:00:00	1.0	117.5	55.5	
10/30/2022	23:00:00	1.0	107.7	55.3	
10/31/2022	0:00:00	0.9	109.8	55.3	
10/31/2022	1:00:00	0.8	159.8	55.5	
10/31/2022	2:00:00	0.3	158.3	55.7	
10/31/2022	3:00:00	0.6	111.1	55.7	
10/31/2022	4:00:00	0.3	106.9	55.6	
10/31/2022	5:00:00	0.4	67.1	55.4	
10/31/2022	6:00:00	0.7	121.4	55.3	
10/31/2022	7:00:00	0.5	91.2	55.8	
10/31/2022	8:00:00	0.2	89.3	56.6	
10/31/2022	9:00:00	0.1	87.4	57.1	
10/31/2022	10:00:00	0.0	234.5	57.9	
10/31/2022	11:00:00	1.5	323.7	56.8	
10/31/2022	12:00:00	2.1	344.5	55.3	
10/31/2022	13:00:00	1.9	351.7	54.8	
10/31/2022	14:00:00	2.0	353.8	54.1	
10/31/2022	15:00:00	1.8	315.6	54.1	
10/31/2022	16:00:00	1.6	317.7	53.8	
10/31/2022	17:00:00	0.6	322.5	53.8	
10/31/2022	18:00:00	1.0	303.5	53.7	
10/31/2022	19:00:00	0.7	197.8	53.9	
10/31/2022	20:00:00	1.4	221.3	53.9	
10/31/2022	21:00:00	1.5	232.6	53.5	
10/31/2022	22:00:00	2.1	225.7	53.1	
10/31/2022	23:00:00	2.3	218.6	52.6	
11/1/2022	0:00:00	1.9	213.0	51.6	
11/1/2022	1:00:00	1.9	212.6	50.6	
11/1/2022	2:00:00	1.8	216.3	49.6	
11/1/2022	3:00:00	1.1	205.0	48.1	
11/1/2022	4:00:00	1.4	207.1	47.4	
11/1/2022	5:00:00	1.2	209.3	46.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/1/2022	6:00:00	1.1	208.1	45.3	
11/1/2022	7:00:00	1.0	211.2	47.8	
11/1/2022	8:00:00	1.2	203.6	53.3	
11/1/2022	9:00:00	1.6	200.2	58.4	
11/1/2022	10:00:00	2.0	225.7	63.2	
11/1/2022	11:00:00	2.4	239.3	65.6	
11/1/2022	12:00:00	1.9	269.9	67.6	
11/1/2022	13:00:00	1.8	304.7	68.9	
11/1/2022	14:00:00	1.4	307.2	69.8	
11/1/2022	15:00:00	0.7	5.2	68.3	
11/1/2022	16:00:00	1.4	187.0	64.5	
11/1/2022	17:00:00	1.1	162.0	59.3	
11/1/2022	18:00:00	1.3	157.4	55.2	
11/1/2022	19:00:00	1.6	164.5	56.7	
11/1/2022	20:00:00	2.0	174.5	55.1	
11/1/2022	21:00:00	2.0	171.9	54.1	
11/1/2022	22:00:00	1.6	166.2	53.1	
11/1/2022	23:00:00	1.1	146.2	50.6	
11/2/2022	0:00:00	0.4	94.7	45.5	
11/2/2022	1:00:00	1.3	150.0	48.1	
11/2/2022	2:00:00	1.7	151.7	49.0	
11/2/2022	3:00:00	2.2	152.6	50.1	
11/2/2022	4:00:00	2.5	152.5	49.9	
11/2/2022	5:00:00	2.4	147.3	48.9	
11/2/2022	6:00:00	2.4	143.6	48.1	
11/2/2022	7:00:00	1.9	142.8	50.2	
11/2/2022	8:00:00	2.0	152.2	56.4	
11/2/2022	9:00:00	2.3	172.8	63.0	
11/2/2022	10:00:00	3.0	193.1	66.7	
11/2/2022	11:00:00	3.3	184.3	68.8	
11/2/2022	12:00:00	3.3	186.6	70.5	
11/2/2022	13:00:00	2.5	165.8	71.9	
11/2/2022	14:00:00	2.4	176.7	72.4	
11/2/2022	15:00:00	2.1	161.9	71.6	
11/2/2022	16:00:00	1.2	146.8	68.2	
11/2/2022	17:00:00	1.1	136.0	64.3	
11/2/2022	18:00:00	0.9	138.9	62.1	
11/2/2022	19:00:00	1.5	135.7	61.0	
11/2/2022	20:00:00	1.5	147.1	59.8	
11/2/2022	21:00:00	1.9	157.7	58.7	
11/2/2022	22:00:00	1.9	162.9	57.4	
11/2/2022	23:00:00	2.3	168.6	56.2	
11/3/2022	0:00:00	2.1	167.2	55.0	
11/3/2022	1:00:00	2.1	167.7	54.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/3/2022	2:00:00	2.5	165.9	54.2	
11/3/2022	3:00:00	2.8	171.3	54.2	
11/3/2022	4:00:00	2.4	173.0	53.7	
11/3/2022	5:00:00	2.4	177.3	52.8	
11/3/2022	6:00:00	2.2	174.8	52.4	
11/3/2022	7:00:00	2.1	175.5	54.9	
11/3/2022	8:00:00	3.0	182.9	59.7	
11/3/2022	9:00:00	2.8	185.7	64.4	
11/3/2022	10:00:00	3.4	194.9	68.8	
11/3/2022	11:00:00	4.6	211.2	71.5	
11/3/2022	12:00:00	4.8	199.9	73.0	
11/3/2022	13:00:00	4.7	193.7	74.0	
11/3/2022	14:00:00	4.4	190.1	73.6	
11/3/2022	15:00:00	3.4	186.6	72.2	
11/3/2022	16:00:00	2.7	173.4	68.8	
11/3/2022	17:00:00	2.3	170.4	66.2	
11/3/2022	18:00:00	2.5	164.7	64.9	
11/3/2022	19:00:00	2.0	176.6	63.0	
11/3/2022	20:00:00	2.5	172.3	61.5	
11/3/2022	21:00:00	2.7	178.2	61.1	
11/3/2022	22:00:00	3.2	182.0	61.5	
11/3/2022	23:00:00	3.3	183.4	61.4	
11/4/2022	0:00:00	3.0	182.4	60.4	
11/4/2022	1:00:00	2.8	180.2	59.3	
11/4/2022	2:00:00	2.9	175.5	59.0	
11/4/2022	3:00:00	2.9	179.2	59.3	
11/4/2022	4:00:00	3.2	183.3	60.1	
11/4/2022	5:00:00	2.8	179.0	59.9	
11/4/2022	6:00:00	2.9	180.8	59.5	
11/4/2022	7:00:00	3.0	177.9	60.2	
11/4/2022	8:00:00	3.3	186.9	61.5	
11/4/2022	9:00:00	2.8	179.8	59.7	
11/4/2022	10:00:00	2.2	172.8	59.0	
11/4/2022	11:00:00	1.5	162.4	60.4	
11/4/2022	12:00:00	2.7	187.6	66.0	
11/4/2022	13:00:00	3.5	186.2	68.7	
11/4/2022	14:00:00	4.6	189.4	72.1	
11/4/2022	15:00:00	3.8	187.8	73.7	
11/4/2022	16:00:00	3.3	181.6	71.9	
11/4/2022	17:00:00	3.8	175.7	70.7	
11/4/2022	18:00:00	4.4	176.7	69.8	
11/4/2022	19:00:00	4.7	178.7	69.0	
11/4/2022	20:00:00	3.5	176.5	68.3	
11/4/2022	21:00:00	3.2	172.6	67.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/4/2022	22:00:00	4.0	162.9	67.3	
11/4/2022	23:00:00	4.2	168.5	67.3	
11/5/2022	0:00:00	3.7	176.7	67.4	
11/5/2022	1:00:00	3.5	181.2	64.8	
11/5/2022	2:00:00	3.1	183.2	65.7	
11/5/2022	3:00:00	4.1	191.0	65.7	
11/5/2022	4:00:00	4.1	169.9	59.0	
11/5/2022	5:00:00	5.0	174.6	58.0	
11/5/2022	6:00:00	6.3	175.4	59.2	
11/5/2022	7:00:00	5.9	172.7	59.6	
11/5/2022	8:00:00	6.0	175.1	60.7	
11/5/2022	9:00:00	6.0	178.5	62.4	
11/5/2022	10:00:00	6.1	185.7	62.6	
11/5/2022	11:00:00	7.3	188.3	62.7	
11/5/2022	12:00:00	6.7	210.0	61.9	
11/5/2022	13:00:00	7.5	231.5	56.0	
11/5/2022	14:00:00	7.2	227.3	52.1	
11/5/2022	15:00:00	7.3	215.9	52.6	
11/5/2022	16:00:00	8.1	221.1	51.6	
11/5/2022	17:00:00	6.4	225.7	50.4	
11/5/2022	18:00:00	5.6	221.4	48.6	
11/5/2022	19:00:00	4.8	218.3	47.0	
11/5/2022	20:00:00	4.1	216.7	46.3	
11/5/2022	21:00:00	3.2	213.3	45.7	
11/5/2022	22:00:00	2.5	206.4	44.6	
11/5/2022	23:00:00	1.8	196.5	44.1	
11/6/2022	0:00:00	1.9	191.1	43.6	
11/6/2022	1:00:00	1.7	193.0	43.2	
11/6/2022	2:00:00	2.3	189.9	44.0	
11/6/2022	3:00:00	2.4	179.1	43.9	
11/6/2022	4:00:00	2.5	184.9	44.1	
11/6/2022	5:00:00	2.6	186.9	44.8	
11/6/2022	6:00:00	3.0	177.4	45.6	
11/6/2022	7:00:00	3.1	170.6	46.2	
11/6/2022	8:00:00	3.3	174.1	48.3	
11/6/2022	9:00:00	3.5	186.0	51.1	
11/6/2022	10:00:00	4.5	189.3	55.1	
11/6/2022	11:00:00	4.8	190.3	60.2	
11/6/2022	12:00:00	4.4	201.6	64.4	
11/6/2022	13:00:00	4.5	225.5	66.1	
11/6/2022	14:00:00	4.8	230.3	65.8	
11/6/2022	15:00:00	3.6	212.2	64.6	
11/6/2022	16:00:00	3.8	240.2	61.7	
11/6/2022	17:00:00	4.1	261.3	59.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/6/2022	18:00:00	2.6	248.4	57.2	
11/6/2022	19:00:00	2.8	252.9	55.7	
11/6/2022	20:00:00	4.2	275.1	55.8	
11/6/2022	21:00:00	3.3	268.6	54.7	
11/6/2022	22:00:00	2.9	249.4	52.7	
11/6/2022	23:00:00	3.4	271.8	52.1	
11/7/2022	0:00:00	4.3	290.6	52.3	
11/7/2022	1:00:00	4.6	295.1	51.8	
11/7/2022	2:00:00	4.3	303.1	50.6	
11/7/2022	3:00:00	4.0	317.8	49.1	
11/7/2022	4:00:00	3.7	321.0	47.8	
11/7/2022	5:00:00	4.7	323.3	47.0	
11/7/2022	6:00:00	4.3	324.1	46.3	
11/7/2022	7:00:00	4.5	331.6	47.1	
11/7/2022	8:00:00	4.1	330.1	48.7	
11/7/2022	9:00:00	4.7	334.7	49.1	
11/7/2022	10:00:00	3.7	345.3	50.2	
11/7/2022	11:00:00	3.9	349.5	50.4	
11/7/2022	12:00:00	3.7	1.7	50.8	
11/7/2022	13:00:00	3.5	15.9	51.1	
11/7/2022	14:00:00	4.0	23.2	49.7	
11/7/2022	15:00:00	3.2	35.0	47.4	
11/7/2022	16:00:00	2.8	36.5	45.2	
11/7/2022	17:00:00	2.7	36.5	44.0	
11/7/2022	18:00:00	3.0	40.4	44.3	
11/7/2022	19:00:00	3.2	41.4	44.4	
11/7/2022	20:00:00	3.1	45.2	44.8	
11/7/2022	21:00:00	2.3	53.0	44.9	
11/7/2022	22:00:00	1.5	75.6	44.2	
11/7/2022	23:00:00	2.0	68.5	42.3	
11/8/2022	0:00:00	2.0	75.1	41.4	29.9
11/8/2022	1:00:00	1.6	86.8	40.3	29.9
11/8/2022	2:00:00	2.4	94.6	40.3	29.9
11/8/2022	3:00:00	2.5	92.7	40.4	29.9
11/8/2022	4:00:00	2.6	95.0	40.1	29.9
11/8/2022	5:00:00	2.5	100.1	40.3	30.0
11/8/2022	6:00:00	2.2	97.8	39.8	30.0
11/8/2022	7:00:00	2.7	104.1	41.7	30.0
11/8/2022	8:00:00	3.0	108.7	45.8	30.0
11/8/2022	9:00:00	3.4	117.9	48.6	30.0
11/8/2022	10:00:00	2.6	114.5	51.8	30.0
11/8/2022	11:00:00	3.4	125.3	53.6	29.9
11/8/2022	12:00:00	3.0	109.1	56.2	29.9
11/8/2022	13:00:00	2.7	126.4	57.9	29.9

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/8/2022	14:00:00	2.6	118.1	56.4	29.8
11/8/2022	15:00:00	2.3	106.5	55.4	29.8
11/8/2022	16:00:00	1.9	100.5	53.4	29.8
11/8/2022	17:00:00	1.4	99.6	50.9	29.8
11/8/2022	18:00:00	1.7	109.7	49.5	29.8
11/8/2022	19:00:00	1.9	115.8	48.9	29.8
11/8/2022	20:00:00	3.1	124.2	48.5	29.8
11/8/2022	21:00:00	3.3	130.5	47.8	29.8
11/8/2022	22:00:00	3.7	131.7	46.3	29.7
11/8/2022	23:00:00	3.5	137.2	45.6	29.7
11/9/2022	0:00:00	3.5	139.8	45.2	29.7
11/9/2022	1:00:00	3.3	141.3	45.5	29.7
11/9/2022	2:00:00	3.1	154.1	46.1	29.7
11/9/2022	3:00:00	3.2	159.6	46.5	29.7
11/9/2022	4:00:00	3.5	163.6	47.1	29.7
11/9/2022	5:00:00	3.2	162.0	46.8	29.7
11/9/2022	6:00:00	3.6	167.6	47.4	29.7
11/9/2022	7:00:00	3.4	174.3	48.9	29.7
11/9/2022	8:00:00	2.8	184.0	51.1	29.7
11/9/2022	9:00:00	2.6	183.1	52.5	29.6
11/9/2022	10:00:00	2.7	176.4	55.7	29.6
11/9/2022	11:00:00	3.2	177.2	61.8	29.6
11/9/2022	12:00:00	3.2	176.9	64.4	29.6
11/9/2022	13:00:00	2.8	171.0	64.8	29.5
11/9/2022	14:00:00	2.4	160.5	65.0	29.5
11/9/2022	15:00:00	2.1	149.1	68.0	29.5
11/9/2022	16:00:00	1.6	149.2	66.7	29.5
11/9/2022	17:00:00	1.7	148.8	65.3	29.5
11/9/2022	18:00:00	2.1	150.2	65.4	29.5
11/9/2022	19:00:00	2.2	155.4	65.3	29.5
11/9/2022	20:00:00	2.4	166.6	64.3	29.5
11/9/2022	21:00:00	2.3	164.0	63.1	29.5
11/9/2022	22:00:00	2.3	172.0	62.9	29.5
11/9/2022	23:00:00	3.0	186.9	63.2	29.4
11/10/2022	0:00:00	3.0	185.7	62.6	
11/10/2022	1:00:00	3.0	184.8	62.1	
11/10/2022	2:00:00	2.7	186.4	61.1	
11/10/2022	3:00:00	3.0	188.5	61.1	
11/10/2022	4:00:00	2.6	179.3	60.2	
11/10/2022	5:00:00	2.7	181.1	59.7	
11/10/2022	6:00:00	3.0	184.4	59.5	
11/10/2022	7:00:00	3.6	189.9	61.6	
11/10/2022	8:00:00	3.7	195.0	65.4	
11/10/2022	9:00:00	4.8	206.0	69.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/10/2022	10:00:00	4.7	200.0	71.4	
11/10/2022	11:00:00	4.9	201.7	74.4	
11/10/2022	12:00:00	4.6	192.7	75.9	
11/10/2022	13:00:00	4.6	193.6	76.0	
11/10/2022	14:00:00	3.9	189.1	75.6	
11/10/2022	15:00:00	4.0	196.1	73.6	
11/10/2022	16:00:00	3.0	192.9	70.1	
11/10/2022	17:00:00	2.4	176.7	66.8	
11/10/2022	18:00:00	2.8	180.5	64.6	
11/10/2022	19:00:00	2.6	175.1	62.8	
11/10/2022	20:00:00	3.0	181.6	62.8	
11/10/2022	21:00:00	3.2	193.3	61.6	
11/10/2022	22:00:00	2.5	194.2	59.3	
11/10/2022	23:00:00	1.4	189.7	56.6	
11/11/2022	0:00:00	2.0	192.2	54.8	
11/11/2022	1:00:00	1.8	198.5	53.9	
11/11/2022	2:00:00	2.0	184.9	52.7	
11/11/2022	3:00:00	1.7	229.6	51.8	
11/11/2022	4:00:00	2.0	230.0	50.8	
11/11/2022	5:00:00	2.9	315.8	51.9	
11/11/2022	6:00:00	3.8	330.0	51.4	
11/11/2022	7:00:00	3.0	331.5	50.5	
11/11/2022	8:00:00	3.3	333.2	50.5	
11/11/2022	9:00:00	3.9	321.2	50.5	
11/11/2022	10:00:00	4.0	316.7	49.1	
11/11/2022	11:00:00	5.1	305.3	46.7	
11/11/2022	12:00:00	4.3	315.9	46.2	
11/11/2022	13:00:00	4.6	329.0	47.4	
11/11/2022	14:00:00	5.0	341.5	48.0	
11/11/2022	15:00:00	4.9	340.9	45.6	
11/11/2022	16:00:00	4.4	336.5	43.2	
11/11/2022	17:00:00	4.4	321.1	42.3	
11/11/2022	18:00:00	5.4	312.6	40.7	
11/11/2022	19:00:00	5.0	321.4	38.3	
11/11/2022	20:00:00	5.1	320.8	36.3	
11/11/2022	21:00:00	4.6	312.0	35.6	
11/11/2022	22:00:00	4.4	321.5	34.9	
11/11/2022	23:00:00	4.2	313.6	34.4	
11/12/2022	0:00:00	3.8	317.8	34.2	
11/12/2022	1:00:00	4.0	305.8	33.9	
11/12/2022	2:00:00	3.4	306.7	33.7	
11/12/2022	3:00:00	3.5	309.2	34.4	
11/12/2022	4:00:00	3.6	315.0	35.1	
11/12/2022	5:00:00	3.8	308.8	35.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/12/2022	6:00:00	3.9	299.4	35.5	
11/12/2022	7:00:00	4.6	300.5	35.8	
11/12/2022	8:00:00	5.0	297.0	36.1	
11/12/2022	9:00:00	5.3	299.3	35.5	
11/12/2022	10:00:00	5.4	305.7	35.6	
11/12/2022	11:00:00	5.2	301.7	36.4	
11/12/2022	12:00:00	4.9	300.7	36.9	
11/12/2022	13:00:00	4.9	304.2	37.2	
11/12/2022	14:00:00	5.0	300.3	36.6	
11/12/2022	15:00:00	4.6	312.0	36.1	
11/12/2022	16:00:00	3.8	297.3	35.8	
11/12/2022	17:00:00	3.9	296.7	35.9	
11/12/2022	18:00:00	3.9	297.5	36.0	
11/12/2022	19:00:00	4.1	281.3	35.7	
11/12/2022	20:00:00	4.1	267.6	34.9	
11/12/2022	21:00:00	5.8	286.0	35.8	
11/12/2022	22:00:00	5.4	298.1	35.9	
11/12/2022	23:00:00	5.6	300.7	35.7	
11/13/2022	0:00:00	5.2	301.9	35.6	
11/13/2022	1:00:00	5.1	300.9	35.6	
11/13/2022	2:00:00	5.2	306.3	35.6	
11/13/2022	3:00:00	5.1	311.0	35.5	
11/13/2022	4:00:00	5.2	314.1	35.2	
11/13/2022	5:00:00	5.1	315.4	34.8	
11/13/2022	6:00:00	4.6	312.0	34.0	
11/13/2022	7:00:00	4.8	324.4	34.3	
11/13/2022	8:00:00	5.0	322.9	34.0	
11/13/2022	9:00:00	4.5	322.7	34.3	
11/13/2022	10:00:00	4.3	309.9	34.6	
11/13/2022	11:00:00	4.4	308.8	35.0	
11/13/2022	12:00:00	4.1	306.7	35.1	
11/13/2022	13:00:00	3.4	306.3	35.4	
11/13/2022	14:00:00	2.8	306.3	36.0	
11/13/2022	15:00:00	2.0	321.5	35.2	
11/13/2022	16:00:00	1.2	339.3	34.7	
11/13/2022	17:00:00	0.6	289.3	34.1	
11/13/2022	18:00:00	1.6	201.6	33.4	
11/13/2022	19:00:00	1.4	197.4	33.2	
11/13/2022	20:00:00	1.3	192.6	32.4	
11/13/2022	21:00:00	1.3	209.1	31.9	
11/13/2022	22:00:00	1.1	202.8	31.9	
11/13/2022	23:00:00	1.1	205.6	30.8	
11/14/2022	0:00:00	1.1	214.8	29.2	
11/14/2022	1:00:00	0.7	190.3	27.8	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/14/2022	2:00:00	0.6	176.3	26.9	
11/14/2022	3:00:00	0.9	181.9	27.6	
11/14/2022	4:00:00	1.5	167.7	26.9	
11/14/2022	5:00:00	1.4	169.5	26.7	
11/14/2022	6:00:00	1.8	175.4	27.6	
11/14/2022	7:00:00	1.7	172.5	29.5	
11/14/2022	8:00:00	1.3	187.4	33.7	
11/14/2022	9:00:00	2.2	198.5	38.2	
11/14/2022	10:00:00	2.9	194.9	39.1	
11/14/2022	11:00:00	2.4	164.3	41.8	
11/14/2022	12:00:00	2.8	151.7	42.4	
11/14/2022	13:00:00	2.5	146.8	43.1	
11/14/2022	14:00:00	2.5	152.5	41.6	
11/14/2022	15:00:00	2.1	111.4	41.4	
11/14/2022	16:00:00	1.8	102.3	37.9	
11/14/2022	17:00:00	1.4	95.7	36.1	
11/14/2022	18:00:00	1.4	98.0	34.1	
11/14/2022	19:00:00	1.6	98.8	33.1	
11/14/2022	20:00:00	1.6	101.4	32.2	
11/14/2022	21:00:00	1.4	98.1	32.0	
11/14/2022	22:00:00	1.3	91.4	32.2	
11/14/2022	23:00:00	1.3	76.9	32.4	
11/15/2022	0:00:00	1.4	88.3	33.0	
11/15/2022	1:00:00	1.6	90.7	33.2	
11/15/2022	2:00:00	2.0	101.3	33.8	
11/15/2022	3:00:00	2.0	104.4	34.2	
11/15/2022	4:00:00	1.6	84.5	34.3	
11/15/2022	5:00:00	1.7	77.0	34.1	
11/15/2022	6:00:00	2.3	94.0	34.3	
11/15/2022	7:00:00	3.0	107.2	33.8	
11/15/2022	8:00:00	2.3	102.8	32.1	
11/15/2022	9:00:00	1.9	97.4	33.3	
11/15/2022	10:00:00	1.7	94.1	35.1	
11/15/2022	11:00:00	1.7	97.4	36.5	
11/15/2022	12:00:00	1.2	82.2	37.4	
11/15/2022	13:00:00	1.1	76.4	37.7	
11/15/2022	14:00:00	1.0	49.8	37.5	
11/15/2022	15:00:00	0.6	73.5	37.2	
11/15/2022	16:00:00	0.6	188.2	36.0	
11/15/2022	17:00:00	0.7	206.3	34.3	
11/15/2022	18:00:00	1.2	194.8	33.3	
11/15/2022	19:00:00	1.8	196.7	32.7	
11/15/2022	20:00:00	2.7	217.9	32.5	
11/15/2022	21:00:00	3.9	236.9	33.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/15/2022	22:00:00	3.8	238.4	33.5	
11/15/2022	23:00:00	3.6	240.1	33.7	
11/16/2022	0:00:00	3.7	251.8	34.1	
11/16/2022	1:00:00	4.3	241.6	33.7	
11/16/2022	2:00:00	4.8	243.3	33.2	
11/16/2022	3:00:00	4.1	240.2	32.8	
11/16/2022	4:00:00	3.7	236.0	32.8	
11/16/2022	5:00:00	3.9	238.9	32.9	
11/16/2022	6:00:00	3.8	235.0	32.8	
11/16/2022	7:00:00	4.0	233.4	33.0	
11/16/2022	8:00:00	3.9	231.2	33.4	
11/16/2022	9:00:00	4.4	241.4	34.5	
11/16/2022	10:00:00	4.9	246.7	35.1	
11/16/2022	11:00:00	5.0	246.2	35.4	
11/16/2022	12:00:00	5.1	247.8	34.3	
11/16/2022	13:00:00	4.8	244.9	33.1	
11/16/2022	14:00:00	4.5	243.9	32.8	
11/16/2022	15:00:00	4.4	243.5	32.3	
11/16/2022	16:00:00	3.4	264.6	31.9	
11/16/2022	17:00:00	4.6	312.9	33.5	
11/16/2022	18:00:00	5.5	302.6	34.5	
11/16/2022	19:00:00	5.9	302.0	34.5	
11/16/2022	20:00:00	5.6	301.4	33.9	
11/16/2022	21:00:00	5.6	306.1	33.9	
11/16/2022	22:00:00	5.4	302.0	33.7	
11/16/2022	23:00:00	6.0	289.4	33.9	
11/17/2022	0:00:00	5.5	282.4	34.0	
11/17/2022	1:00:00	4.8	248.3	32.1	
11/17/2022	2:00:00	4.6	241.4	31.4	
11/17/2022	3:00:00	4.0	229.9	31.0	
11/17/2022	4:00:00	3.8	227.9	30.6	
11/17/2022	5:00:00	3.8	235.1	30.4	
11/17/2022	6:00:00	4.0	229.0	29.8	
11/17/2022	7:00:00	4.3	228.7	29.3	
11/17/2022	8:00:00	4.0	230.5	28.9	
11/17/2022	9:00:00	4.5	227.1	29.3	
11/17/2022	10:00:00	4.9	232.2	29.7	
11/17/2022	11:00:00	5.3	232.6	31.6	
11/17/2022	12:00:00	5.0	232.0	30.6	
11/17/2022	13:00:00	4.7	226.9	32.1	
11/17/2022	14:00:00	4.7	224.2	33.0	
11/17/2022	15:00:00	4.7	235.2	32.6	
11/17/2022	16:00:00	4.7	242.0	32.2	
11/17/2022	17:00:00	4.9	243.6	31.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/17/2022	18:00:00	4.8	238.3	31.5	
11/17/2022	19:00:00	5.3	246.5	31.8	
11/17/2022	20:00:00	5.2	244.3	31.5	
11/17/2022	21:00:00	6.2	262.5	31.4	
11/17/2022	22:00:00	5.5	261.2	31.5	
11/17/2022	23:00:00	4.9	268.5	30.6	
11/18/2022	0:00:00	3.9	240.1	29.6	
11/18/2022	1:00:00	5.0	247.0	29.4	
11/18/2022	2:00:00	5.0	248.4	28.5	
11/18/2022	3:00:00	5.6	244.7	27.4	
11/18/2022	4:00:00	5.8	247.4	27.1	
11/18/2022	5:00:00	6.1	246.1	26.6	
11/18/2022	6:00:00	5.5	244.6	25.8	
11/18/2022	7:00:00	6.2	245.0	25.9	
11/18/2022	8:00:00	6.2	245.4	26.0	
11/18/2022	9:00:00	6.6	246.6	26.3	
11/18/2022	10:00:00	6.5	250.3	26.9	
11/18/2022	11:00:00	5.9	245.0	25.7	
11/18/2022	12:00:00	5.9	246.8	25.5	
11/18/2022	13:00:00	6.0	244.8	25.4	
11/18/2022	14:00:00	6.7	249.3	25.1	
11/18/2022	15:00:00	5.9	246.8	24.1	
11/18/2022	16:00:00	5.3	243.1	23.4	
11/18/2022	17:00:00	6.7	256.4	22.9	
11/18/2022	18:00:00	5.4	249.2	21.9	
11/18/2022	19:00:00	4.7	238.3	20.9	
11/18/2022	20:00:00	4.9	237.8	21.1	
11/18/2022	21:00:00	4.7	235.7	20.3	
11/18/2022	22:00:00	4.2	229.2	20.4	
11/18/2022	23:00:00	4.1	228.2	20.5	
11/19/2022	0:00:00	4.2	233.3	21.1	
11/19/2022	1:00:00	4.0	226.3	21.3	
11/19/2022	2:00:00	4.5	234.0	21.5	
11/19/2022	3:00:00	4.0	237.7	20.6	
11/19/2022	4:00:00	4.5	222.2	19.2	
11/19/2022	5:00:00	4.7	213.7	18.7	
11/19/2022	6:00:00	4.5	206.3	18.4	
11/19/2022	7:00:00	4.6	200.8	18.8	
11/19/2022	8:00:00	5.0	207.3	20.6	
11/19/2022	9:00:00	5.3	220.7	23.2	
11/19/2022	10:00:00	5.4	233.8	24.9	
11/19/2022	11:00:00	6.3	244.2	25.6	
11/19/2022	12:00:00	5.6	247.2	26.1	
11/19/2022	13:00:00	5.8	247.5	26.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/19/2022	14:00:00	6.5	252.3	25.2	
11/19/2022	15:00:00	6.5	256.6	25.3	
11/19/2022	16:00:00	6.8	265.7	25.7	
11/19/2022	17:00:00	7.4	272.0	25.4	
11/19/2022	18:00:00	8.3	281.7	24.7	
11/19/2022	19:00:00	8.4	285.2	24.0	
11/19/2022	20:00:00	7.2	283.9	23.2	
11/19/2022	21:00:00	6.9	280.8	22.2	
11/19/2022	22:00:00	6.5	281.7	21.2	
11/19/2022	23:00:00	6.6	288.4	20.0	
11/20/2022	0:00:00	6.1	289.9	19.3	
11/20/2022	1:00:00	5.5	287.2	18.9	
11/20/2022	2:00:00	4.6	280.0	18.0	
11/20/2022	3:00:00	3.3	252.2	15.5	
11/20/2022	4:00:00	3.3	234.8	13.8	
11/20/2022	5:00:00	3.6	224.7	12.6	
11/20/2022	6:00:00	3.1	223.7	11.8	
11/20/2022	7:00:00	4.1	228.6	12.9	
11/20/2022	8:00:00	4.1	240.2	16.9	
11/20/2022	9:00:00	4.1	244.8	20.9	
11/20/2022	10:00:00	3.4	244.1	25.5	
11/20/2022	11:00:00	3.6	238.9	26.6	
11/20/2022	12:00:00	3.9	237.6	30.7	
11/20/2022	13:00:00	3.5	219.0	31.9	
11/20/2022	14:00:00	3.7	203.7	32.1	
11/20/2022	15:00:00	3.1	197.8	32.0	
11/20/2022	16:00:00	2.5	194.2	30.2	
11/20/2022	17:00:00	2.2	183.6	28.8	
11/20/2022	18:00:00	3.3	193.1	28.6	
11/20/2022	19:00:00	4.3	193.6	28.6	
11/20/2022	20:00:00	4.4	199.5	28.5	
11/20/2022	21:00:00	4.5	204.3	28.1	
11/20/2022	22:00:00	4.7	200.5	27.7	
11/20/2022	23:00:00	4.3	203.6	27.6	
11/21/2022	0:00:00	4.3	201.8	27.9	
11/21/2022	1:00:00	4.2	203.3	28.4	
11/21/2022	2:00:00	4.7	200.2	29.0	
11/21/2022	3:00:00	4.3	197.4	28.7	
11/21/2022	4:00:00	4.5	204.2	29.2	
11/21/2022	5:00:00	4.8	210.4	30.1	
11/21/2022	6:00:00	5.1	211.7	30.7	
11/21/2022	7:00:00	5.0	214.8	31.4	
11/21/2022	8:00:00	5.1	216.8	33.6	
11/21/2022	9:00:00	5.5	225.7	36.9	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/21/2022	10:00:00	5.2	222.2	39.3	
11/21/2022	11:00:00	5.2	223.7	43.2	
11/21/2022	12:00:00	5.0	229.9	46.5	
11/21/2022	13:00:00	4.4	237.2	48.2	
11/21/2022	14:00:00	4.2	247.6	49.0	
11/21/2022	15:00:00	4.1	246.8	47.5	
11/21/2022	16:00:00	2.5	241.6	43.8	
11/21/2022	17:00:00	2.3	233.6	41.7	
11/21/2022	18:00:00	1.0	240.5	39.5	
11/21/2022	19:00:00	1.0	232.6	38.2	
11/21/2022	20:00:00	0.5	160.7	35.0	
11/21/2022	21:00:00	0.5	144.6	31.9	
11/21/2022	22:00:00	0.2	177.7	28.6	
11/21/2022	23:00:00	0.4	174.9	27.9	
11/22/2022	0:00:00	0.3	196.4	26.9	29.6
11/22/2022	1:00:00	0.3	98.6	26.9	29.6
11/22/2022	2:00:00	0.4	80.7	26.7	29.6
11/22/2022	3:00:00	0.8	164.2	27.9	29.6
11/22/2022	4:00:00	1.6	182.2	28.3	29.6
11/22/2022	5:00:00	2.1	193.5	28.7	29.6
11/22/2022	6:00:00	2.0	199.5	29.0	29.6
11/22/2022	7:00:00	2.0	205.9	30.9	29.6
11/22/2022	8:00:00	2.7	207.7	35.7	29.6
11/22/2022	9:00:00	2.5	206.9	41.6	29.6
11/22/2022	10:00:00	2.9	232.4	47.4	29.6
11/22/2022	11:00:00	3.5	245.4	50.4	29.5
11/22/2022	12:00:00	3.4	238.2	52.3	29.5
11/22/2022	13:00:00	3.8	240.6	53.3	29.5
11/22/2022	14:00:00	3.6	234.2	53.4	29.5
11/22/2022	15:00:00	3.3	240.7	52.0	29.5
11/22/2022	16:00:00	1.4	215.7	48.0	29.5
11/22/2022	17:00:00	0.9	196.4	45.2	29.5
11/22/2022	18:00:00	1.0	197.4	42.8	29.5
11/22/2022	19:00:00	0.6	209.2	37.7	29.5
11/22/2022	20:00:00	0.4	181.4	35.2	29.5
11/22/2022	21:00:00	1.0	191.9	37.0	29.5
11/22/2022	22:00:00	1.5	189.1	36.2	29.5
11/22/2022	23:00:00	1.6	193.6	36.6	29.5
11/23/2022	0:00:00	1.7	204.3	36.6	29.5
11/23/2022	1:00:00	1.8	208.4	36.2	29.5
11/23/2022	2:00:00	2.0	203.0	36.1	29.5
11/23/2022	3:00:00	1.9	198.5	34.8	29.5
11/23/2022	4:00:00	1.7	199.0	33.9	29.5
11/23/2022	5:00:00	1.4	201.5	33.4	29.5

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/23/2022	6:00:00	0.7	197.8	32.4	29.5
11/23/2022	7:00:00	1.2	204.8	33.8	29.5
11/23/2022	8:00:00	2.2	201.6	39.9	29.5
11/23/2022	9:00:00	2.5	193.8	46.0	29.5
11/23/2022	10:00:00	3.6	195.5	50.8	29.5
11/23/2022	11:00:00	3.7	205.7	55.6	29.5
11/23/2022	12:00:00	3.2	194.1	59.4	29.5
11/23/2022	13:00:00	3.8	206.4	60.7	29.5
11/23/2022	14:00:00	3.1	202.6	60.6	29.5
11/23/2022	15:00:00	2.6	204.2	57.7	29.5
11/23/2022	16:00:00	1.3	178.8	53.5	29.5
11/23/2022	17:00:00	1.2	168.3	51.0	29.5
11/23/2022	18:00:00	1.2	159.0	49.1	29.5
11/23/2022	19:00:00	1.5	176.0	48.1	29.5
11/23/2022	20:00:00	1.3	172.1	47.2	29.5
11/23/2022	21:00:00	1.5	180.5	46.9	29.5
11/23/2022	22:00:00	1.5	172.7	46.6	29.5
11/23/2022	23:00:00	1.8	173.3	46.6	29.5
11/24/2022	0:00:00	1.5	162.8	45.4	
11/24/2022	1:00:00	1.7	144.9	43.1	
11/24/2022	2:00:00	1.9	150.0	41.9	
11/24/2022	3:00:00	2.1	145.8	41.3	
11/24/2022	4:00:00	2.4	147.3	39.7	
11/24/2022	5:00:00	2.4	155.1	39.5	
11/24/2022	6:00:00	2.3	140.1	39.2	
11/24/2022	7:00:00	2.4	149.7	39.3	
11/24/2022	8:00:00	2.4	153.6	42.7	
11/24/2022	9:00:00	2.3	166.0	45.4	
11/24/2022	10:00:00	2.7	180.5	49.6	
11/24/2022	11:00:00	2.6	193.4	53.9	
11/24/2022	12:00:00	3.3	203.2	54.3	
11/24/2022	13:00:00	1.9	204.4	51.8	
11/24/2022	14:00:00	2.3	210.8	51.7	
11/24/2022	15:00:00	2.6	219.5	50.2	
11/24/2022	16:00:00	2.8	205.4	45.5	
11/24/2022	17:00:00	2.4	219.4	44.9	
11/24/2022	18:00:00	2.2	211.4	44.8	
11/24/2022	19:00:00	2.9	223.4	45.2	
11/24/2022	20:00:00	3.1	222.9	46.1	
11/24/2022	21:00:00	3.6	237.5	46.8	
11/24/2022	22:00:00	3.3	242.6	47.0	
11/24/2022	23:00:00	3.9	269.3	47.3	
11/25/2022	0:00:00	4.0	297.9	47.0	
11/25/2022	1:00:00	4.5	336.9	45.4	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/25/2022	2:00:00	4.2	347.6	43.9	
11/25/2022	3:00:00	3.8	334.8	43.2	
11/25/2022	4:00:00	3.6	324.1	42.0	
11/25/2022	5:00:00	3.7	329.1	41.0	
11/25/2022	6:00:00	3.4	317.2	39.4	
11/25/2022	7:00:00	2.7	309.3	39.3	
11/25/2022	8:00:00	3.0	305.3	41.1	
11/25/2022	9:00:00	2.8	263.9	43.7	
11/25/2022	10:00:00	2.7	275.4	46.6	
11/25/2022	11:00:00	2.6	264.0	50.2	
11/25/2022	12:00:00	3.2	271.7	52.8	
11/25/2022	13:00:00	3.8	271.5	53.5	
11/25/2022	14:00:00	3.1	287.6	53.6	
11/25/2022	15:00:00	1.8	297.8	52.5	
11/25/2022	16:00:00	1.6	290.0	48.2	
11/25/2022	17:00:00	1.3	251.5	45.0	
11/25/2022	18:00:00	1.8	245.1	43.9	
11/25/2022	19:00:00	2.1	244.2	42.9	
11/25/2022	20:00:00	2.2	230.9	42.3	
11/25/2022	21:00:00	1.5	219.7	40.0	
11/25/2022	22:00:00	1.9	218.0	38.1	
11/25/2022	23:00:00	1.9	215.0	37.6	
11/26/2022	0:00:00	1.6	209.1	36.4	
11/26/2022	1:00:00	1.7	206.5	35.7	
11/26/2022	2:00:00	0.9	207.0	33.8	
11/26/2022	3:00:00	1.5	213.3	34.2	
11/26/2022	4:00:00	2.2	213.9	34.2	
11/26/2022	5:00:00	2.5	215.3	34.4	
11/26/2022	6:00:00	2.7	209.5	34.3	
11/26/2022	7:00:00	2.5	207.1	35.5	
11/26/2022	8:00:00	3.0	202.4	40.7	
11/26/2022	9:00:00	3.3	205.0	45.2	
11/26/2022	10:00:00	3.7	206.7	49.5	
11/26/2022	11:00:00	4.0	208.1	52.6	
11/26/2022	12:00:00	4.4	204.9	54.9	
11/26/2022	13:00:00	4.6	209.5	55.8	
11/26/2022	14:00:00	3.4	198.5	56.3	
11/26/2022	15:00:00	2.7	195.5	54.5	
11/26/2022	16:00:00	1.5	177.5	49.7	
11/26/2022	17:00:00	1.9	186.4	48.0	
11/26/2022	18:00:00	1.8	184.1	46.7	
11/26/2022	19:00:00	1.8	185.9	45.7	
11/26/2022	20:00:00	2.0	172.8	44.9	
11/26/2022	21:00:00	1.8	174.0	44.7	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/26/2022	22:00:00	1.2	149.0	44.7	
11/26/2022	23:00:00	0.7	64.9	43.0	
11/27/2022	0:00:00	1.0	101.5	42.3	
11/27/2022	1:00:00	1.5	112.6	43.3	
11/27/2022	2:00:00	1.4	102.9	44.4	
11/27/2022	3:00:00	0.5	99.1	43.9	
11/27/2022	4:00:00	0.7	78.6	40.3	
11/27/2022	5:00:00	0.8	61.0	39.7	
11/27/2022	6:00:00	2.5	39.3	40.5	
11/27/2022	7:00:00	4.8	40.2	42.8	
11/27/2022	8:00:00	5.2	40.2	43.1	
11/27/2022	9:00:00	5.5	39.3	41.2	
11/27/2022	10:00:00	4.1	45.7	40.6	
11/27/2022	11:00:00	3.8	20.0	41.3	
11/27/2022	12:00:00	4.8	1.5	41.6	
11/27/2022	13:00:00	5.8	352.6	43.6	
11/27/2022	14:00:00	5.8	357.4	44.2	
11/27/2022	15:00:00	5.8	355.8	43.5	
11/27/2022	16:00:00	5.7	357.3	43.3	
11/27/2022	17:00:00	6.0	357.7	42.8	
11/27/2022	18:00:00	5.8	359.9	42.7	
11/27/2022	19:00:00	5.3	2.3	42.6	
11/27/2022	20:00:00	4.9	2.8	42.7	
11/27/2022	21:00:00	4.2	2.5	42.4	
11/27/2022	22:00:00	3.6	0.1	41.8	
11/27/2022	23:00:00	3.1	1.7	41.4	
11/28/2022	0:00:00	2.9	10.7	41.1	
11/28/2022	1:00:00	2.6	17.7	40.4	
11/28/2022	2:00:00	1.8	25.8	39.0	
11/28/2022	3:00:00	0.3	160.5	36.9	
11/28/2022	4:00:00	0.3	190.6	35.9	
11/28/2022	5:00:00	1.0	209.0	34.0	
11/28/2022	6:00:00	0.4	183.9	31.8	
11/28/2022	7:00:00	0.6	196.3	31.7	
11/28/2022	8:00:00	0.6	165.1	36.3	
11/28/2022	9:00:00	1.3	191.4	43.9	
11/28/2022	10:00:00	1.4	206.0	46.0	
11/28/2022	11:00:00	2.3	205.0	47.2	
11/28/2022	12:00:00	2.1	208.6	46.8	
11/28/2022	13:00:00	2.8	207.8	47.4	
11/28/2022	14:00:00	3.2	215.0	45.5	
11/28/2022	15:00:00	2.4	207.5	42.7	
11/28/2022	16:00:00	1.8	161.9	42.2	
11/28/2022	17:00:00	1.8	171.5	42.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/28/2022	18:00:00	1.6	165.7	42.0	
11/28/2022	19:00:00	2.1	164.7	42.2	
11/28/2022	20:00:00	2.4	181.3	42.4	
11/28/2022	21:00:00	1.9	174.9	41.8	
11/28/2022	22:00:00	1.7	169.9	41.3	
11/28/2022	23:00:00	2.2	173.0	41.2	
11/29/2022	0:00:00	2.1	173.0	41.4	
11/29/2022	1:00:00	2.2	175.1	41.6	
11/29/2022	2:00:00	2.3	173.8	42.4	
11/29/2022	3:00:00	2.1	155.2	42.2	
11/29/2022	4:00:00	1.8	147.8	42.2	
11/29/2022	5:00:00	2.4	141.6	40.8	
11/29/2022	6:00:00	2.9	141.7	41.0	
11/29/2022	7:00:00	2.9	143.9	42.8	
11/29/2022	8:00:00	3.6	142.7	45.1	
11/29/2022	9:00:00	3.9	146.6	48.2	
11/29/2022	10:00:00	4.4	153.9	53.2	
11/29/2022	11:00:00	4.8	154.1	55.5	
11/29/2022	12:00:00	4.9	149.9	59.0	
11/29/2022	13:00:00	4.6	156.3	59.1	
11/29/2022	14:00:00	4.1	171.3	58.1	
11/29/2022	15:00:00	4.0	176.8	57.7	
11/29/2022	16:00:00	3.5	178.4	57.1	
11/29/2022	17:00:00	4.0	195.4	58.1	
11/29/2022	18:00:00	4.3	191.6	58.3	
11/29/2022	19:00:00	4.7	198.1	58.8	
11/29/2022	20:00:00	4.7	204.5	57.6	
11/29/2022	21:00:00	5.2	241.5	54.3	
11/29/2022	22:00:00	6.5	260.6	46.8	
11/29/2022	23:00:00	6.9	260.1	38.7	
11/30/2022	0:00:00	7.3	266.3	36.0	
11/30/2022	1:00:00	8.1	280.4	33.9	
11/30/2022	2:00:00	6.4	267.8	32.6	
11/30/2022	3:00:00	6.9	258.3	30.2	
11/30/2022	4:00:00	6.9	258.9	27.1	
11/30/2022	5:00:00	6.2	256.5	26.2	
11/30/2022	6:00:00	6.8	266.6	25.8	
11/30/2022	7:00:00	7.1	262.0	25.3	
11/30/2022	8:00:00	6.5	255.2	26.1	
11/30/2022	9:00:00	7.0	252.0	27.1	
11/30/2022	10:00:00	7.2	252.6	27.8	
11/30/2022	11:00:00	7.2	250.7	29.7	
11/30/2022	12:00:00	7.2	252.4	28.8	
11/30/2022	13:00:00	7.3	258.6	29.1	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
11/30/2022	14:00:00	6.9	254.5	29.4	
11/30/2022	15:00:00	7.1	253.4	28.8	
11/30/2022	16:00:00	6.3	253.2	27.3	
11/30/2022	17:00:00	6.9	256.5	26.8	
11/30/2022	18:00:00	7.6	261.7	26.1	
11/30/2022	19:00:00	7.4	265.7	25.5	
11/30/2022	20:00:00	6.3	266.1	24.9	
11/30/2022	21:00:00	5.7	266.4	24.2	
11/30/2022	22:00:00	6.0	277.0	23.9	
11/30/2022	23:00:00	5.5	277.1	23.2	
12/1/2022	0:00:00	5.1	258.9	22.0	
12/1/2022	1:00:00	4.4	264.2	21.3	
12/1/2022	2:00:00	5.0	281.9	21.9	
12/1/2022	3:00:00	3.5	241.0	19.2	
12/1/2022	4:00:00	3.9	271.9	20.4	
12/1/2022	5:00:00	2.6	230.4	18.1	
12/1/2022	6:00:00	2.3	226.8	16.9	
12/1/2022	7:00:00	2.3	213.8	17.7	
12/1/2022	8:00:00	1.9	207.2	21.5	
12/1/2022	9:00:00	2.5	191.0	25.3	
12/1/2022	10:00:00	2.1	191.0	29.3	
12/1/2022	11:00:00	2.6	169.0	32.8	
12/1/2022	12:00:00	3.1	177.7	34.9	
12/1/2022	13:00:00	3.6	176.7	35.5	
12/1/2022	14:00:00	3.2	175.3	35.9	
12/1/2022	15:00:00	2.8	170.3	35.0	
12/1/2022	16:00:00	2.5	170.2	31.7	
12/1/2022	17:00:00	2.9	158.2	30.2	
12/1/2022	18:00:00	2.8	155.8	30.9	
12/1/2022	19:00:00	3.2	156.3	31.8	
12/1/2022	20:00:00	3.1	166.3	32.4	
12/1/2022	21:00:00	3.5	168.7	33.2	
12/1/2022	22:00:00	3.7	178.4	34.3	
12/1/2022	23:00:00	3.5	178.0	34.6	
12/2/2022	0:00:00	3.6	172.4	34.8	
12/2/2022	1:00:00	3.8	175.0	34.9	
12/2/2022	2:00:00	3.3	175.5	35.7	
12/2/2022	3:00:00	3.3	179.4	36.2	
12/2/2022	4:00:00	3.1	174.2	35.8	
12/2/2022	5:00:00	3.6	174.2	36.6	
12/2/2022	6:00:00	3.7	175.0	37.2	
12/2/2022	7:00:00	3.3	175.1	37.9	
12/2/2022	8:00:00	4.0	185.1	39.8	
12/2/2022	9:00:00	4.1	189.8	41.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/2/2022	10:00:00	4.3	188.5	41.9	
12/2/2022	11:00:00	4.6	185.8	43.1	
12/2/2022	12:00:00	4.0	176.2	44.0	
12/2/2022	13:00:00	3.7	173.6	45.1	
12/2/2022	14:00:00	4.2	187.3	48.1	
12/2/2022	15:00:00	4.7	188.2	50.6	
12/2/2022	16:00:00	5.5	194.9	52.3	
12/2/2022	17:00:00	5.5	194.4	52.8	
12/2/2022	18:00:00	4.9	202.1	52.7	
12/2/2022	19:00:00	5.7	201.2	51.6	
12/2/2022	20:00:00	4.9	199.2	50.5	
12/2/2022	21:00:00	4.9	200.5	50.3	
12/2/2022	22:00:00	4.9	216.5	49.9	
12/2/2022	23:00:00	4.7	215.4	49.5	
12/3/2022	0:00:00	5.0	222.3	50.7	
12/3/2022	1:00:00	5.2	234.4	51.4	
12/3/2022	2:00:00	7.1	258.0	50.0	
12/3/2022	3:00:00	8.4	265.3	42.0	
12/3/2022	4:00:00	8.3	270.3	35.3	
12/3/2022	5:00:00	7.3	265.7	31.9	
12/3/2022	6:00:00	7.6	278.4	28.9	
12/3/2022	7:00:00	6.3	284.3	27.0	
12/3/2022	8:00:00	6.6	282.7	28.0	
12/3/2022	9:00:00	6.1	289.0	28.7	
12/3/2022	10:00:00	5.1	282.1	30.1	
12/3/2022	11:00:00	5.6	287.6	32.1	
12/3/2022	12:00:00	5.3	285.6	34.0	
12/3/2022	13:00:00	5.2	290.3	35.0	
12/3/2022	14:00:00	4.8	296.8	34.7	
12/3/2022	15:00:00	4.4	273.0	33.7	
12/3/2022	16:00:00	3.2	239.5	30.4	
12/3/2022	17:00:00	5.3	255.7	28.8	
12/3/2022	18:00:00	4.7	250.8	27.5	
12/3/2022	19:00:00	4.0	264.3	26.8	
12/3/2022	20:00:00	4.0	268.7	26.1	
12/3/2022	21:00:00	3.0	231.8	23.6	
12/3/2022	22:00:00	2.5	238.1	22.2	
12/3/2022	23:00:00	2.6	247.9	21.7	
12/4/2022	0:00:00	2.5	241.5	21.8	
12/4/2022	1:00:00	2.3	235.5	19.9	
12/4/2022	2:00:00	1.9	219.3	18.9	
12/4/2022	3:00:00	2.2	196.9	17.2	
12/4/2022	4:00:00	2.2	192.5	16.9	
12/4/2022	5:00:00	2.6	191.2	16.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/4/2022	6:00:00	2.3	196.3	15.6	
12/4/2022	7:00:00	3.0	211.3	17.2	
12/4/2022	8:00:00	3.4	217.9	23.7	
12/4/2022	9:00:00	3.7	205.6	29.1	
12/4/2022	10:00:00	3.6	214.6	33.9	
12/4/2022	11:00:00	4.3	227.3	37.0	
12/4/2022	12:00:00	5.0	220.4	38.6	
12/4/2022	13:00:00	4.5	227.4	40.8	
12/4/2022	14:00:00	4.3	227.6	41.3	
12/4/2022	15:00:00	3.9	222.0	40.2	
12/4/2022	16:00:00	2.8	210.4	36.6	
12/4/2022	17:00:00	2.6	206.4	34.2	
12/4/2022	18:00:00	2.6	205.7	32.9	
12/4/2022	19:00:00	2.4	209.4	31.4	
12/4/2022	20:00:00	2.6	213.0	30.2	
12/4/2022	21:00:00	3.0	208.6	29.7	
12/4/2022	22:00:00	3.2	208.6	28.9	
12/4/2022	23:00:00	3.2	200.2	28.4	
12/5/2022	0:00:00	3.4	204.3	28.3	
12/5/2022	1:00:00	3.0	205.0	28.1	
12/5/2022	2:00:00	3.0	201.3	28.2	
12/5/2022	3:00:00	3.1	202.2	28.7	
12/5/2022	4:00:00	3.1	195.3	28.6	
12/5/2022	5:00:00	3.2	192.9	29.1	
12/5/2022	6:00:00	2.9	193.9	29.5	
12/5/2022	7:00:00	2.5	183.8	28.9	
12/5/2022	8:00:00	2.9	176.5	30.8	
12/5/2022	9:00:00	3.1	174.8	33.9	
12/5/2022	10:00:00	3.4	184.0	38.0	
12/5/2022	11:00:00	2.8	179.3	40.1	
12/5/2022	12:00:00	2.6	171.5	40.3	
12/5/2022	13:00:00	2.6	165.3	40.7	
12/5/2022	14:00:00	1.9	175.7	42.5	
12/5/2022	15:00:00	2.0	165.0	42.2	
12/5/2022	16:00:00	2.6	188.9	41.4	
12/5/2022	17:00:00	2.1	187.9	40.9	
12/5/2022	18:00:00	1.2	182.4	40.3	
12/5/2022	19:00:00	1.0	208.0	39.9	
12/5/2022	20:00:00	2.0	199.7	40.1	
12/5/2022	21:00:00	2.0	194.7	39.9	
12/5/2022	22:00:00	1.0	228.5	39.7	
12/5/2022	23:00:00	0.7	200.0	39.6	
12/6/2022	0:00:00	1.4	229.4	39.5	29.3
12/6/2022	1:00:00	1.8	262.8	38.9	29.3

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/6/2022	2:00:00	0.5	183.4	38.5	29.3
12/6/2022	3:00:00	0.6	155.4	37.6	29.3
12/6/2022	4:00:00	1.1	141.7	37.6	29.3
12/6/2022	5:00:00	0.9	132.9	37.8	29.3
12/6/2022	6:00:00	0.5	84.9	37.9	29.3
12/6/2022	7:00:00	0.6	41.1	37.7	29.3
12/6/2022	8:00:00	0.8	146.1	38.3	29.4
12/6/2022	9:00:00	0.6	131.5	38.9	29.4
12/6/2022	10:00:00	0.5	54.6	39.9	29.4
12/6/2022	11:00:00	1.1	117.9	42.3	29.3
12/6/2022	12:00:00	0.8	168.3	43.8	29.3
12/6/2022	13:00:00	1.2	9.5	43.2	29.3
12/6/2022	14:00:00	2.0	22.7	42.2	29.3
12/6/2022	15:00:00	2.0	27.5	42.0	29.3
12/6/2022	16:00:00	1.9	35.2	42.0	29.4
12/6/2022	17:00:00	1.1	77.8	42.0	29.4
12/6/2022	18:00:00	0.8	52.1	41.0	29.4
12/6/2022	19:00:00	0.2	132.1	40.2	29.4
12/6/2022	20:00:00	0.5	343.8	40.2	29.4
12/6/2022	21:00:00	0.1	133.2	40.0	29.4
12/6/2022	22:00:00	0.2	102.3	40.2	29.4
12/6/2022	23:00:00	0.7	35.3	40.1	29.4
12/7/2022	0:00:00	0.9	18.6	40.4	29.4
12/7/2022	1:00:00	1.1	21.6	41.6	29.4
12/7/2022	2:00:00	0.3	29.4	41.7	29.5
12/7/2022	3:00:00	1.8	20.2	42.6	29.5
12/7/2022	4:00:00	1.5	27.1	42.6	29.5
12/7/2022	5:00:00	0.4	21.4	42.7	29.5
12/7/2022	6:00:00	0.5	152.8	42.2	29.5
12/7/2022	7:00:00	1.2	232.1	41.9	29.5
12/7/2022	8:00:00	1.8	250.7	41.3	29.6
12/7/2022	9:00:00	1.8	302.5	41.0	29.6
12/7/2022	10:00:00	1.4	318.7	41.4	29.6
12/7/2022	11:00:00	0.3	37.9	43.1	29.6
12/7/2022	12:00:00	0.3	236.5	46.8	29.6
12/7/2022	13:00:00	2.1	341.4	42.8	29.6
12/7/2022	14:00:00	1.5	13.7	43.2	29.6
12/7/2022	15:00:00	2.2	354.3	42.5	29.6
12/7/2022	16:00:00	2.3	351.3	42.1	29.6
12/7/2022	17:00:00	2.4	1.2	41.6	29.7
12/7/2022	18:00:00	2.0	22.0	41.1	29.7
12/7/2022	19:00:00	2.3	12.2	41.1	29.7
12/7/2022	20:00:00	2.0	3.9	41.0	29.7
12/7/2022	21:00:00	1.6	355.7	41.0	29.7

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/7/2022	22:00:00	2.4	30.7	40.4	29.7
12/7/2022	23:00:00	3.1	34.8	39.5	29.7
12/8/2022	0:00:00	1.9	43.7	39.2	
12/8/2022	1:00:00	2.4	34.1	39.2	
12/8/2022	2:00:00	2.5	33.1	38.9	
12/8/2022	3:00:00	2.5	31.8	38.5	
12/8/2022	4:00:00	1.7	41.5	38.1	
12/8/2022	5:00:00	0.9	54.8	37.8	
12/8/2022	6:00:00	0.8	106.5	37.7	
12/8/2022	7:00:00	0.8	95.4	37.7	
12/8/2022	8:00:00	1.4	80.6	38.0	
12/8/2022	9:00:00	1.7	81.0	38.9	
12/8/2022	10:00:00	1.7	61.8	40.3	
12/8/2022	11:00:00	3.5	26.5	41.2	
12/8/2022	12:00:00	3.8	32.5	42.8	
12/8/2022	13:00:00	3.3	37.9	42.0	
12/8/2022	14:00:00	3.2	37.4	39.9	
12/8/2022	15:00:00	2.9	39.7	38.5	
12/8/2022	16:00:00	2.2	43.8	37.4	
12/8/2022	17:00:00	1.4	55.1	36.4	
12/8/2022	18:00:00	1.0	71.9	35.1	
12/8/2022	19:00:00	1.3	74.2	34.1	
12/8/2022	20:00:00	1.1	72.1	32.7	
12/8/2022	21:00:00	1.4	69.6	31.8	
12/8/2022	22:00:00	1.5	77.5	31.9	
12/8/2022	23:00:00	1.0	79.0	30.8	
12/9/2022	0:00:00	0.9	64.1	29.3	
12/9/2022	1:00:00	1.4	79.6	29.6	
12/9/2022	2:00:00	2.4	99.0	32.4	
12/9/2022	3:00:00	2.8	103.0	32.9	
12/9/2022	4:00:00	2.9	106.7	32.8	
12/9/2022	5:00:00	3.4	113.9	33.3	
12/9/2022	6:00:00	3.7	111.6	33.4	
12/9/2022	7:00:00	3.5	111.8	33.5	
12/9/2022	8:00:00	2.7	107.2	33.7	
12/9/2022	9:00:00	2.7	95.9	33.7	
12/9/2022	10:00:00	3.2	93.8	34.0	
12/9/2022	11:00:00	3.2	100.1	34.3	
12/9/2022	12:00:00	2.5	108.0	34.5	
12/9/2022	13:00:00	2.9	93.6	34.6	
12/9/2022	14:00:00	2.8	95.9	34.8	
12/9/2022	15:00:00	2.6	96.3	34.8	
12/9/2022	16:00:00	2.7	98.4	34.8	
12/9/2022	17:00:00	2.3	96.9	35.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/9/2022	18:00:00	2.4	94.3	34.6	
12/9/2022	19:00:00	2.7	100.1	35.0	
12/9/2022	20:00:00	2.8	108.1	35.0	
12/9/2022	21:00:00	2.0	93.6	35.0	
12/9/2022	22:00:00	1.7	92.9	35.0	
12/9/2022	00:00:00	1.7	88.9	35.1	
12/9/2022	00:00:00	1.7	102.2	35.0	
12/10/2022	1:00:00	1.8	96.9	35.1	
12/10/2022	2:00:00	1.8	89.9	35.1	
12/10/2022	3:00:00	1.4	108.3	35.0	
12/10/2022	4:00:00	1.1	108.5	35.0	
12/10/2022	5:00:00	1.7	110.2	34.9	
12/10/2022	6:00:00	1.5	117.2	35.0	
12/10/2022	7:00:00	1.8	114.2	35.0	
12/10/2022	8:00:00	2.0	128.4	35.4	
12/10/2022	9:00:00	2.4	135.1	36.0	
12/10/2022	10:00:00	2.2	130.8	36.5	
12/10/2022	11:00:00	1.4	130.1	37.2	
12/10/2022	12:00:00	1.7	114.7	37.8	
12/10/2022	13:00:00	1.6	124.3	38.1	
12/10/2022	14:00:00	1.5	118.8	38.2	
12/10/2022	15:00:00	1.4	127.0	38.0	
12/10/2022	16:00:00	1.1	133.9	37.7	
12/10/2022	17:00:00	0.8	152.2	37.6	
12/10/2022	18:00:00	0.8	143.3	37.0	
12/10/2022	19:00:00	0.8	142.8	36.8	
12/10/2022	20:00:00	0.9	149.4	36.5	
12/10/2022	21:00:00	0.8	181.3	36.5	
12/10/2022	22:00:00	1.2	199.5	36.8	
12/10/2022	23:00:00	1.1	213.2	37.2	
12/11/2022	0:00:00	1.3	242.9	37.8	
12/11/2022	1:00:00	2.7	305.7	38.4	
12/11/2022	2:00:00	3.2	305.9	38.7	
12/11/2022	3:00:00	3.6	306.0	38.7	
12/11/2022	4:00:00	2.7	307.1	38.8	
12/11/2022	5:00:00	2.5	315.0	39.3	
12/11/2022	6:00:00	2.4	305.4	39.2	
12/11/2022	7:00:00	2.6	301.2	38.9	
12/11/2022	8:00:00	3.3	301.0	38.9	
12/11/2022	9:00:00	3.0	310.0	39.4	
12/11/2022	10:00:00	2.9	322.2	39.5	
12/11/2022	11:00:00	2.7	304.9	39.2	
12/11/2022	12:00:00	2.9	314.2	38.6	
12/11/2022	13:00:00	3.0	319.2	38.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/11/2022	14:00:00	2.7	320.9	38.9	
12/11/2022	15:00:00	1.6	335.6	38.8	
12/11/2022	16:00:00	0.8	335.8	38.4	
12/11/2022	17:00:00	0.5	0.6	38.3	
12/11/2022	18:00:00	0.2	168.1	37.8	
12/11/2022	19:00:00	0.7	244.3	37.7	
12/11/2022	20:00:00	0.9	185.4	37.7	
12/11/2022	21:00:00	1.4	194.2	37.3	
12/11/2022	22:00:00	1.2	219.8	37.3	
12/11/2022	23:00:00	1.2	209.1	37.3	
12/12/2022	0:00:00	1.2	288.0	37.3	
12/12/2022	1:00:00	0.6	273.2	36.9	
12/12/2022	2:00:00	0.4	190.6	36.6	
12/12/2022	3:00:00	0.6	246.6	36.3	
12/12/2022	4:00:00	0.7	190.0	36.4	
12/12/2022	5:00:00	0.4	110.9	35.5	
12/12/2022	6:00:00	0.9	125.3	35.4	
12/12/2022	7:00:00	1.7	127.7	35.8	
12/12/2022	8:00:00	1.6	119.7	36.8	
12/12/2022	9:00:00	1.6	110.1	38.6	
12/12/2022	10:00:00	1.5	98.4	40.1	
12/12/2022	11:00:00	1.5	105.1	40.7	
12/12/2022	12:00:00	1.6	102.4	40.6	
12/12/2022	13:00:00	1.5	93.5	40.2	
12/12/2022	14:00:00	1.7	89.4	39.6	
12/12/2022	15:00:00	2.0	94.6	38.9	
12/12/2022	16:00:00	2.0	103.9	38.0	
12/12/2022	17:00:00	2.1	97.7	37.4	
12/12/2022	18:00:00	1.9	106.3	37.0	
12/12/2022	19:00:00	1.8	106.4	36.9	
12/12/2022	20:00:00	1.6	104.9	36.6	
12/12/2022	21:00:00	1.8	109.7	36.2	
12/12/2022	22:00:00	2.4	111.5	35.8	
12/12/2022	23:00:00	2.3	109.3	35.0	
12/13/2022	0:00:00	2.6	120.8	34.4	
12/13/2022	1:00:00	2.4	112.7	34.0	
12/13/2022	2:00:00	2.5	117.6	34.2	
12/13/2022	3:00:00	2.6	119.4	34.4	
12/13/2022	4:00:00	2.7	120.0	34.5	
12/13/2022	5:00:00	2.7	117.2	34.5	
12/13/2022	6:00:00	2.5	118.1	34.5	
12/13/2022	7:00:00	2.9	113.0	34.6	
12/13/2022	8:00:00	2.9	119.9	34.8	
12/13/2022	9:00:00	2.9	117.0	35.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/13/2022	10:00:00	2.9	122.2	35.3	
12/13/2022	11:00:00	3.1	118.2	35.6	
12/13/2022	12:00:00	3.1	114.8	36.0	
12/13/2022	13:00:00	3.4	115.7	36.2	
12/13/2022	14:00:00	3.6	115.6	36.2	
12/13/2022	15:00:00	3.1	116.5	35.8	
12/13/2022	16:00:00	3.0	113.1	34.9	
12/13/2022	17:00:00	3.6	111.9	34.3	
12/13/2022	18:00:00	3.6	121.8	34.6	
12/13/2022	19:00:00	4.3	114.8	35.0	
12/13/2022	20:00:00	4.4	116.8	35.6	
12/13/2022	21:00:00	4.8	125.0	36.1	
12/13/2022	22:00:00	4.6	119.5	36.4	
12/13/2022	23:00:00	5.3	114.1	36.1	
12/14/2022	0:00:00	4.8	114.4	36.1	
12/14/2022	1:00:00	5.0	114.2	36.4	
12/14/2022	2:00:00	4.4	113.6	37.2	
12/14/2022	3:00:00	4.2	117.1	37.4	
12/14/2022	4:00:00	4.5	117.0	37.4	
12/14/2022	5:00:00	4.5	120.0	36.1	
12/14/2022	6:00:00	4.6	114.0	35.6	
12/14/2022	7:00:00	4.6	117.6	35.9	
12/14/2022	8:00:00	4.5	122.4	36.3	
12/14/2022	9:00:00	4.3	124.7	37.5	
12/14/2022	10:00:00	4.0	121.0	39.2	
12/14/2022	11:00:00	4.4	118.0	40.6	
12/14/2022	12:00:00	3.6	119.8	41.5	
12/14/2022	13:00:00	3.6	123.4	41.4	
12/14/2022	14:00:00	4.2	117.3	41.1	
12/14/2022	15:00:00	4.5	119.1	40.8	
12/14/2022	16:00:00	4.6	116.3	39.7	
12/14/2022	17:00:00	4.4	114.6	38.1	
12/14/2022	18:00:00	4.6	111.3	36.9	
12/14/2022	19:00:00	4.9	112.8	37.6	
12/14/2022	20:00:00	4.2	111.5	36.8	
12/14/2022	21:00:00	4.6	106.4	36.4	
12/14/2022	22:00:00	4.6	106.6	36.5	
12/14/2022	23:00:00	4.6	111.2	37.3	
12/15/2022	0:00:00	2.7	135.1	38.3	
12/15/2022	1:00:00	3.3	244.2	38.8	
12/15/2022	2:00:00	3.5	240.8	37.8	
12/15/2022	3:00:00	2.0	193.1	36.4	
12/15/2022	4:00:00	3.5	210.3	36.3	
12/15/2022	5:00:00	4.0	220.1	35.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/15/2022	6:00:00	3.6	218.1	34.6	
12/15/2022	7:00:00	3.1	212.8	33.9	
12/15/2022	8:00:00	2.5	203.5	34.6	
12/15/2022	9:00:00	3.2	209.1	35.3	
12/15/2022	10:00:00	3.1	208.1	35.5	
12/15/2022	11:00:00	3.6	203.7	35.9	
12/15/2022	12:00:00	3.7	210.1	35.8	
12/15/2022	13:00:00	3.7	210.9	35.7	
12/15/2022	14:00:00	2.9	202.7	35.7	
12/15/2022	15:00:00	2.6	192.4	35.7	
12/15/2022	16:00:00	2.3	199.1	34.6	
12/15/2022	17:00:00	2.0	197.4	32.2	
12/15/2022	18:00:00	3.1	212.8	32.0	
12/15/2022	19:00:00			31.2	
12/15/2022	20:00:00			30.7	
12/15/2022	21:00:00			30.9	
12/15/2022	22:00:00			31.0	
12/15/2022	23:00:00			30.2	
12/16/2022	0:00:00			30.0	
12/16/2022	1:00:00			30.1	
12/16/2022	2:00:00			30.3	
12/16/2022	3:00:00	3.0	218.6	30.1	
12/16/2022	4:00:00	2.3	200.0	30.3	
12/16/2022	5:00:00	2.9	204.5	30.5	
12/16/2022	6:00:00	3.0	210.0	30.7	
12/16/2022	7:00:00	3.2	211.0	30.9	
12/16/2022	8:00:00	3.6	220.6	30.9	
12/16/2022	9:00:00	2.9	208.0	31.2	
12/16/2022	10:00:00	3.3	198.5	31.2	
12/16/2022	11:00:00	4.1	220.3	31.1	
12/16/2022	12:00:00	4.4	235.1	31.1	
12/16/2022	13:00:00	3.5	230.9	30.0	
12/16/2022	14:00:00	3.9	231.0	29.0	
12/16/2022	15:00:00	4.9	235.9	28.5	
12/16/2022	16:00:00	3.9	231.7	27.4	
12/16/2022	17:00:00	4.5	230.7	27.2	
12/16/2022	18:00:00	4.4	229.4	27.1	
12/16/2022	19:00:00	4.0	228.2	26.7	
12/16/2022	20:00:00	4.0	226.3	26.7	
12/16/2022	21:00:00	3.6	220.3	26.7	
12/16/2022	22:00:00	4.3	230.3	26.9	
12/16/2022	23:00:00	4.1	235.1	27.0	
12/17/2022	0:00:00	4.1	236.2	27.1	
12/17/2022	1:00:00	4.6	246.7	27.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/17/2022	2:00:00	4.2	239.3	26.5	
12/17/2022	3:00:00	4.9	239.4	26.0	
12/17/2022	4:00:00	4.5	234.8	25.5	
12/17/2022	5:00:00	4.9	235.0	24.9	
12/17/2022	6:00:00	3.8	232.4	24.3	
12/17/2022	7:00:00	4.2	236.5	24.3	
12/17/2022	8:00:00	4.8	236.3	24.8	
12/17/2022	9:00:00	4.9	235.9	24.8	
12/17/2022	10:00:00	5.8	236.1	24.6	
12/17/2022	11:00:00	5.7	240.6	23.8	
12/17/2022	12:00:00	5.0	237.5	23.7	
12/17/2022	13:00:00	4.2	239.7	24.2	
12/17/2022	14:00:00	4.0	232.9	24.1	
12/17/2022	15:00:00	4.3	232.0	24.1	
12/17/2022	16:00:00	4.8	246.0	24.1	
12/17/2022	17:00:00	5.1	250.3	24.0	
12/17/2022	18:00:00	5.5	251.1	23.9	
12/17/2022	19:00:00	5.0	246.8	23.0	
12/17/2022	20:00:00	5.3	246.1	22.5	
12/17/2022	21:00:00	5.0	248.0	22.4	
12/17/2022	22:00:00	5.2	248.3	22.0	
12/17/2022	23:00:00	5.0	246.1	21.2	
12/18/2022	0:00:00	4.7	244.1	20.4	
12/18/2022	1:00:00	4.5	243.4	19.9	
12/18/2022	2:00:00	4.2	243.0	19.6	
12/18/2022	3:00:00	4.5	244.1	18.7	
12/18/2022	4:00:00	4.3	245.7	18.2	
12/18/2022	5:00:00	5.0	246.5	17.7	
12/18/2022	6:00:00	4.5	244.4	17.0	
12/18/2022	7:00:00	4.4	242.5	16.3	
12/18/2022	8:00:00	4.3	248.8	16.4	
12/18/2022	9:00:00	4.0	233.2	18.6	
12/18/2022	10:00:00	4.8	237.6	21.4	
12/18/2022	11:00:00	4.2	244.4	23.6	
12/18/2022	12:00:00	3.9	239.4	24.8	
12/18/2022	13:00:00	4.1	230.9	25.3	
12/18/2022	14:00:00	4.2	236.0	24.5	
12/18/2022	15:00:00	4.3	240.2	22.9	
12/18/2022	16:00:00	3.9	241.6	19.7	
12/18/2022	17:00:00	3.6	241.9	18.4	
12/18/2022	18:00:00	3.3	240.1	17.6	
12/18/2022	19:00:00	3.2	227.0	17.2	
12/18/2022	20:00:00	3.4	241.0	16.6	
12/18/2022	21:00:00	3.0	239.8	16.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/18/2022	22:00:00	2.7	239.5	15.4	
12/18/2022	23:00:00	2.5	240.9	14.6	
12/19/2022	0:00:00	2.5	227.4	14.3	
12/19/2022	1:00:00	2.7	234.6	14.2	
12/19/2022	2:00:00	1.5	219.6	13.5	
12/19/2022	3:00:00	1.9	218.5	13.0	
12/19/2022	4:00:00	1.7	207.5	12.8	
12/19/2022	5:00:00	2.0	211.4	13.1	
12/19/2022	6:00:00	2.1	216.2	13.4	
12/19/2022	7:00:00	1.8	209.1	13.0	
12/19/2022	8:00:00	1.5	209.5	13.5	
12/19/2022	9:00:00	1.7	201.8	16.9	
12/19/2022	10:00:00	0.9	202.3	23.8	
12/19/2022	11:00:00	0.8	186.2	28.0	
12/19/2022	12:00:00	0.8	181.3	29.7	
12/19/2022	13:00:00	1.5	144.5	27.9	
12/19/2022	14:00:00	1.5	159.2	26.6	
12/19/2022	15:00:00	1.2	131.0	25.8	
12/19/2022	16:00:00	1.2	117.5	24.6	
12/19/2022	17:00:00	1.2	140.2	23.8	
12/19/2022	18:00:00	0.9	122.2	23.3	
12/19/2022	19:00:00	1.3	151.0	22.9	
12/19/2022	20:00:00	1.6	144.8	22.8	
12/19/2022	21:00:00	2.2	128.6	22.9	
12/19/2022	22:00:00	2.1	128.2	23.2	
12/19/2022	23:00:00	2.9	142.0	23.6	
12/20/2022	0:00:00	2.6	154.9	24.0	29.7
12/20/2022	1:00:00	1.9	169.5	24.2	29.8
12/20/2022	2:00:00	1.1	213.8	22.9	29.8
12/20/2022	3:00:00	0.5	156.8	22.9	29.8
12/20/2022	4:00:00	1.1	141.3	23.2	29.8
12/20/2022	5:00:00	1.5	144.8	22.8	29.8
12/20/2022	6:00:00	1.3	163.3	21.8	29.8
12/20/2022	7:00:00	1.9	155.1	22.5	29.8
12/20/2022	8:00:00				29.8
12/20/2022	9:00:00				29.8
12/20/2022	10:00:00	2.1	193.9	30.1	29.8
12/20/2022	11:00:00	2.5	274.2	34.4	29.8
12/20/2022	12:00:00	2.9	313.9	32.3	29.8
12/20/2022	13:00:00	1.8	325.8	33.7	29.8
12/20/2022	14:00:00	1.6	341.8	33.7	29.8
12/20/2022	15:00:00	1.4	335.0	32.8	29.8
12/20/2022	16:00:00	0.4	324.9	32.5	29.8
12/20/2022	17:00:00	0.5	299.8	32.3	29.8

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/20/2022	18:00:00	2.0	328.5	32.7	29.8
12/20/2022	19:00:00	1.8	321.9	32.4	29.8
12/20/2022	20:00:00	2.2	321.6	31.8	29.8
12/20/2022	21:00:00	2.7	333.6	31.1	29.8
12/20/2022	22:00:00	2.9	342.8	30.3	29.8
12/20/2022	23:00:00	2.6	350.1	29.1	29.8
12/21/2022	0:00:00	2.8	352.6	28.9	29.8
12/21/2022	1:00:00	3.1	348.2	28.6	29.8
12/21/2022	2:00:00	3.2	6.3	27.4	29.8
12/21/2022	3:00:00	2.9	8.6	25.7	29.8
12/21/2022	4:00:00	2.1	15.4	26.1	29.8
12/21/2022	5:00:00	1.5	20.2	26.6	29.8
12/21/2022	6:00:00	1.3	38.4	26.7	29.8
12/21/2022	7:00:00	1.2	68.6	26.9	29.8
12/21/2022	8:00:00	1.6	83.3	27.4	29.8
12/21/2022	9:00:00	1.8	93.1	28.9	29.8
12/21/2022	10:00:00	1.6	127.8	30.0	29.8
12/21/2022	11:00:00	1.6	155.2	29.7	29.7
12/21/2022	12:00:00	1.7	141.3	30.4	29.7
12/21/2022	13:00:00	1.6	125.9	30.9	29.7
12/21/2022	14:00:00	1.5	131.0	31.2	29.6
12/21/2022	15:00:00	1.5	133.8	31.4	29.6
12/21/2022	16:00:00	1.9	135.1	31.6	29.6
12/21/2022	17:00:00	1.8	135.2	31.1	29.6
12/21/2022	18:00:00	1.6	134.5	30.6	29.5
12/21/2022	19:00:00	3.0	140.6	31.0	29.5
12/21/2022	20:00:00	3.2	141.2	31.2	29.5
12/21/2022	21:00:00	2.8	139.4	31.4	29.5
12/21/2022	22:00:00	2.5	139.8	31.3	29.5
12/21/2022	23:00:00	2.2	131.5	31.0	29.4
12/22/2022	0:00:00	2.4	133.6	30.7	
12/22/2022	1:00:00	2.7	141.8	30.9	
12/22/2022	2:00:00	2.5	150.0	31.5	
12/22/2022	3:00:00	2.5	152.9	31.7	
12/22/2022	4:00:00	2.2	151.9	31.8	
12/22/2022	5:00:00	2.4	161.2	32.4	
12/22/2022	6:00:00	2.1	164.8	32.5	
12/22/2022	7:00:00	1.3	174.7	32.2	
12/22/2022	8:00:00	1.8	169.4	32.4	
12/22/2022	9:00:00	1.6	193.0	33.4	
12/22/2022	10:00:00	1.8	231.8	34.2	
12/22/2022	11:00:00	1.0	254.1	34.3	
12/22/2022	12:00:00	0.7	296.8	32.8	
12/22/2022	13:00:00	1.3	312.0	32.1	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/22/2022	14:00:00	4.6	308.2	30.1	
12/22/2022	15:00:00	7.0	302.2	22.5	
12/22/2022	16:00:00	7.0	303.5	17.8	
12/22/2022	17:00:00	7.5	303.8	14.3	
12/22/2022	18:00:00	7.1	304.0	10.8	
12/22/2022	19:00:00	7.0	299.3	7.6	
12/22/2022	20:00:00	7.3	301.3	5.7	
12/22/2022	21:00:00	7.3	295.8	3.8	
12/22/2022	22:00:00	7.7	293.1	1.3	
12/22/2022	23:00:00	7.8	296.5	0.0	
12/23/2022	0:00:00	8.1	292.0	-1.8	
12/23/2022	1:00:00	6.9	275.9	-4.1	
12/23/2022	2:00:00	7.5	275.2	-5.5	
12/23/2022	3:00:00	7.0	268.5	-7.1	
12/23/2022	4:00:00	7.6	272.0	-6.9	
12/23/2022	5:00:00	7.3	267.6	-7.8	
12/23/2022	6:00:00	8.9	276.2	-6.8	
12/23/2022	7:00:00	8.7	276.5	-6.3	
12/23/2022	8:00:00	8.5	269.9	-6.1	
12/23/2022	9:00:00	8.4	266.2	-6.0	
12/23/2022	10:00:00	8.6	265.2	-4.4	
12/23/2022	11:00:00	9.2	267.0	-3.0	
12/23/2022	12:00:00	8.8	263.9	-1.8	
12/23/2022	13:00:00	8.6	263.0	-2.1	
12/23/2022	14:00:00	8.4	264.6	-2.3	
12/23/2022	15:00:00	9.3	265.3	-2.6	
12/23/2022	16:00:00	8.4	267.4	-2.1	
12/23/2022	17:00:00	7.8	266.6	-2.0	
12/23/2022	18:00:00	8.3	266.2	-1.8	
12/23/2022	19:00:00	8.3	272.9	-1.2	
12/23/2022	20:00:00	7.5	270.8	-1.2	
12/23/2022	21:00:00	6.9	268.7	-1.2	
12/23/2022	22:00:00	7.1	266.0	-1.4	
12/23/2022	23:00:00	7.8	269.2	-1.7	
12/24/2022	0:00:00	7.1	265.6	-1.3	
12/24/2022	1:00:00	7.0	265.6	-1.0	
12/24/2022	2:00:00	7.0	268.1	-0.1	
12/24/2022	3:00:00	7.0	268.2	-0.3	
12/24/2022	4:00:00	6.4	265.3	0.2	
12/24/2022	5:00:00	6.5	265.6	0.4	
12/24/2022	6:00:00	7.0	267.7	0.9	
12/24/2022	7:00:00	5.9	261.6	0.9	
12/24/2022	8:00:00	6.2	265.0	2.2	
12/24/2022	9:00:00	6.0	264.6	4.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/24/2022	10:00:00	6.2	264.3	7.4	
12/24/2022	11:00:00	6.4	263.5	9.9	
12/24/2022	12:00:00	6.1	258.4	11.1	
12/24/2022	13:00:00	6.1	258.4	12.5	
12/24/2022	14:00:00	6.1	263.6	13.3	
12/24/2022	15:00:00	7.6	265.4	13.1	
12/24/2022	16:00:00	7.3	267.6	11.9	
12/24/2022	17:00:00	6.8	270.0	11.6	
12/24/2022	18:00:00	5.7	274.3	12.0	
12/24/2022	19:00:00	6.4	280.8	11.7	
12/24/2022	20:00:00	7.5	292.5	11.4	
12/24/2022	21:00:00	7.5	289.7	10.8	
12/24/2022	22:00:00	6.8	294.1	10.1	
12/24/2022	23:00:00	7.5	290.0	9.5	
12/25/2022	0:00:00	5.5	272.3	7.4	
12/25/2022	1:00:00	5.6	266.2	5.8	
12/25/2022	2:00:00	5.7	287.5	6.5	
12/25/2022	3:00:00	5.8	290.9	6.6	
12/25/2022	4:00:00	6.5	286.0	6.3	
12/25/2022	5:00:00	3.9	267.0	4.8	
12/25/2022	6:00:00	3.5	248.1	2.7	
12/25/2022	7:00:00	3.9	248.0	2.4	
12/25/2022	8:00:00	4.4	255.3	3.7	
12/25/2022	9:00:00	4.1	262.5	7.3	
12/25/2022	10:00:00	4.1	254.9	9.9	
12/25/2022	11:00:00	4.0	251.9	12.3	
12/25/2022	12:00:00	3.8	252.5	14.4	
12/25/2022	13:00:00	4.1	249.3	15.9	
12/25/2022	14:00:00	4.3	252.1	16.1	
12/25/2022	15:00:00	4.1	245.6	14.9	
12/25/2022	16:00:00	3.7	244.7	12.3	
12/25/2022	17:00:00	3.1	244.8	10.9	
12/25/2022	18:00:00	2.5	238.3	10.4	
12/25/2022	19:00:00	1.9	230.5	9.7	
12/25/2022	20:00:00	2.3	241.4	10.1	
12/25/2022	21:00:00	2.3	242.3	10.8	
12/25/2022	22:00:00	2.1	239.3	11.2	
12/25/2022	23:00:00	2.4	235.9	11.1	
12/26/2022	0:00:00	2.3	239.0	11.8	
12/26/2022	1:00:00	2.3	236.7	13.7	
12/26/2022	2:00:00	1.3	215.4	14.8	
12/26/2022	3:00:00	1.0	185.4	15.2	
12/26/2022	4:00:00	1.3	177.0	15.8	
12/26/2022	5:00:00	1.5	160.4	16.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/26/2022	6:00:00	1.7	183.7	16.3	
12/26/2022	7:00:00	1.1	191.0	16.0	
12/26/2022	8:00:00	1.1	152.2	16.5	
12/26/2022	9:00:00	1.4	170.7	18.0	
12/26/2022	10:00:00	1.6	172.4	19.5	
12/26/2022	11:00:00	1.5	183.4	20.9	
12/26/2022	12:00:00	0.7	323.6	21.3	
12/26/2022	13:00:00	1.0	345.8	20.9	
12/26/2022	14:00:00	0.8	341.6	21.2	
12/26/2022	15:00:00	0.9	227.5	21.4	
12/26/2022	16:00:00	1.2	219.4	20.7	
12/26/2022	17:00:00	1.5	209.2	20.8	
12/26/2022	18:00:00	1.9	220.0	20.8	
12/26/2022	19:00:00	2.3	244.1	20.8	
12/26/2022	20:00:00	2.0	250.6	21.0	
12/26/2022	21:00:00	1.7	246.8	21.2	
12/26/2022	22:00:00	2.1	244.2	21.1	
12/26/2022	23:00:00	2.1	266.2	21.1	
12/27/2022	0:00:00	2.7	278.6	20.6	
12/27/2022	1:00:00	2.2	248.5	17.7	
12/27/2022	2:00:00	2.0	225.5	14.5	
12/27/2022	3:00:00	1.9	226.0	12.4	
12/27/2022	4:00:00	2.0	227.8	11.0	
12/27/2022	5:00:00	1.9	220.1	9.8	
12/27/2022	6:00:00	1.8	218.0	8.6	
12/27/2022	7:00:00	1.9	211.7	8.1	
12/27/2022	8:00:00	2.8	211.6	11.3	
12/27/2022	9:00:00	3.6	213.1	16.1	
12/27/2022	10:00:00	3.8	220.5	19.1	
12/27/2022	11:00:00	3.7	208.9	22.0	
12/27/2022	12:00:00	3.1	199.6	24.9	
12/27/2022	13:00:00	3.4	202.6	24.8	
12/27/2022	14:00:00	3.8	196.5	24.6	
12/27/2022	15:00:00	3.5	191.9	24.9	
12/27/2022	16:00:00	3.2	190.9	23.3	
12/27/2022	17:00:00	3.4	194.5	22.5	
12/27/2022	18:00:00	4.1	190.4	23.0	
12/27/2022	19:00:00	4.5	193.3	24.5	
12/27/2022	20:00:00	4.5	190.7	24.9	
12/27/2022	21:00:00	5.1	188.3	25.2	
12/27/2022	22:00:00	5.2	192.2	25.4	
12/27/2022	23:00:00	4.9	197.8	25.6	
12/28/2022	0:00:00	4.8	194.7	25.6	
12/28/2022	1:00:00	4.4	192.3	25.7	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/28/2022	2:00:00	4.2	194.4	26.4	
12/28/2022	3:00:00	4.2	200.3	27.0	
12/28/2022	4:00:00	4.3	194.9	27.7	
12/28/2022	5:00:00	4.3	195.9	28.6	
12/28/2022	6:00:00	4.4	196.3	29.5	
12/28/2022	7:00:00	3.8	184.5	29.9	
12/28/2022	8:00:00	4.0	184.6	32.2	
12/28/2022	9:00:00	4.3	181.6	34.8	
12/28/2022	10:00:00	4.7	182.3	38.6	
12/28/2022	11:00:00	4.6	190.7	41.4	
12/28/2022	12:00:00	5.1	195.6	44.0	
12/28/2022	13:00:00	5.2	200.9	45.7	
12/28/2022	14:00:00	5.3	196.6	45.9	
12/28/2022	15:00:00	5.0	188.6	45.8	
12/28/2022	16:00:00	4.9	182.4	43.7	
12/28/2022	17:00:00	5.3	183.6	43.3	
12/28/2022	18:00:00	5.2	190.4	43.6	
12/28/2022	19:00:00	4.8	199.4	43.4	
12/28/2022	20:00:00	4.6	201.1	43.7	
12/28/2022	21:00:00	3.7	201.6	43.6	
12/28/2022	22:00:00	3.8	205.4	44.2	
12/28/2022	23:00:00	3.9	206.8	45.1	
12/29/2022	0:00:00	4.2	207.6	45.7	
12/29/2022	1:00:00	4.4	205.4	45.9	
12/29/2022	2:00:00	4.3	204.3	46.0	
12/29/2022	3:00:00	5.0	205.1	46.5	
12/29/2022	4:00:00	5.0	206.2	47.3	
12/29/2022	5:00:00	4.9	204.9	47.8	
12/29/2022	6:00:00	4.7	206.0	48.3	
12/29/2022	7:00:00	5.1	209.4	50.0	
12/29/2022	8:00:00	5.2	206.7	51.5	
12/29/2022	9:00:00	4.9	207.8	52.1	
12/29/2022	10:00:00	5.1	211.3	52.9	
12/29/2022	11:00:00	4.6	209.4	54.1	
12/29/2022	12:00:00	4.5	210.3	55.1	
12/29/2022	13:00:00	4.5	206.8	55.8	
12/29/2022	14:00:00	4.4	207.4	56.2	
12/29/2022	15:00:00	4.5	198.8	56.1	
12/29/2022	16:00:00	4.0	199.3	56.1	
12/29/2022	17:00:00	4.1	202.1	56.3	
12/29/2022	18:00:00	4.1	193.3	56.2	
12/29/2022	19:00:00	4.0	194.5	55.6	
12/29/2022	20:00:00	4.0	200.6	55.0	
12/29/2022	21:00:00	3.5	194.6	53.9	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/29/2022	22:00:00	4.0	201.9	54.6	
12/29/2022	23:00:00	4.4	207.5	54.8	
12/30/2022	0:00:00	4.0	211.9	54.8	
12/30/2022	1:00:00	4.3	216.3	55.1	
12/30/2022	2:00:00	3.9	213.4	55.6	
12/30/2022	3:00:00	3.8	212.8	55.9	
12/30/2022	4:00:00	3.8	230.7	55.4	
12/30/2022	5:00:00	3.5	242.1	54.8	
12/30/2022	6:00:00	3.0	247.7	53.0	
12/30/2022	7:00:00	3.1	256.7	49.8	
12/30/2022	8:00:00	3.2	250.4	47.2	
12/30/2022	9:00:00	2.9	246.5	46.3	
12/30/2022	10:00:00	2.4	281.7	46.1	
12/30/2022	11:00:00	2.3	292.8	45.3	
12/30/2022	12:00:00	2.1	326.0	44.7	
12/30/2022	13:00:00	1.8	334.2	42.0	
12/30/2022	14:00:00	1.6	343.3	40.7	
12/30/2022	15:00:00	0.6	13.4	39.7	
12/30/2022	16:00:00	0.7	23.9	39.2	
12/30/2022	17:00:00	0.8	8.4	38.6	
12/30/2022	18:00:00	1.8	332.1	38.0	
12/30/2022	19:00:00	1.1	344.5	37.5	
12/30/2022	20:00:00	1.8	330.0	36.9	
12/30/2022	21:00:00	1.6	325.5	36.4	
12/30/2022	22:00:00	1.2	309.1	35.5	
12/30/2022	23:00:00	1.1	342.8	34.8	
12/31/2022	0:00:00	1.6	345.6	35.3	
12/31/2022	1:00:00	1.5	2.3	35.1	
12/31/2022	2:00:00	1.6	356.4	35.4	
12/31/2022	3:00:00	2.1	348.0	35.4	
12/31/2022	4:00:00	1.2	7.2	35.4	
12/31/2022	5:00:00	1.3	340.0	35.3	
12/31/2022	6:00:00	1.6	333.5	34.8	
12/31/2022	7:00:00	1.3	317.3	34.4	
12/31/2022	8:00:00	1.6	331.0	35.1	
12/31/2022	9:00:00	1.7	334.2	35.6	
12/31/2022	10:00:00	1.9	326.9	36.0	
12/31/2022	11:00:00	2.7	319.6	35.2	
12/31/2022	12:00:00	2.3	337.2	34.9	
12/31/2022	13:00:00	1.2	41.5	36.0	
12/31/2022	14:00:00	1.0	30.3	36.1	
12/31/2022	15:00:00	1.0	45.2	36.7	
12/31/2022	16:00:00	1.0	71.0	34.9	
12/31/2022	17:00:00	0.9	142.3	34.4	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
12/31/2022	18:00:00	0.7	132.8	35.1	
12/31/2022	19:00:00	1.0	164.4	35.3	
12/31/2022	20:00:00	2.2	150.6	35.3	
12/31/2022	21:00:00	2.5	164.0	34.8	
12/31/2022	22:00:00	2.2	162.4	35.1	
12/31/2022	23:00:00	0.8	122.6	36.0	
1/1/2023	0:00:00	1.0	126.6	35.8	
1/1/2023	1:00:00	1.2	148.4	36.2	
1/1/2023	2:00:00	1.7	177.3	37.7	
1/1/2023	3:00:00	1.8	193.1	38.6	
1/1/2023	4:00:00	1.4	206.5	39.3	
1/1/2023	5:00:00	1.6	203.0	39.9	
1/1/2023	6:00:00	1.8	203.5	40.8	
1/1/2023	7:00:00	1.6	222.5	42.1	
1/1/2023	8:00:00	1.8	232.5	43.4	
1/1/2023	9:00:00	2.3	247.6	44.4	
1/1/2023	10:00:00	3.1	259.7	45.0	
1/1/2023	11:00:00	2.7	256.4	45.7	
1/1/2023	12:00:00	2.5	251.7	46.6	
1/1/2023	13:00:00	2.5	247.6	48.2	
1/1/2023	14:00:00	1.6	218.9	49.1	
1/1/2023	15:00:00	0.7	213.5	47.0	
1/1/2023	16:00:00	0.5	75.3	43.7	
1/1/2023	17:00:00	0.8	79.7	40.8	
1/1/2023	18:00:00	0.8	198.3	40.5	
1/1/2023	19:00:00	1.4	219.5	42.7	
1/1/2023	20:00:00	1.0	214.0	42.6	
1/1/2023	21:00:00	1.7	213.4	42.7	
1/1/2023	22:00:00	0.6	234.9	42.7	
1/1/2023	23:00:00	0.3	79.1	41.5	
1/2/2023	0:00:00	0.3	19.4	40.6	
1/2/2023	1:00:00	0.4	137.1	40.4	
1/2/2023	2:00:00	0.6	77.0	40.2	
1/2/2023	3:00:00	0.5	110.6	40.4	
1/2/2023	4:00:00	0.8	76.1	40.3	
1/2/2023	5:00:00	0.5	70.6	39.8	
1/2/2023	6:00:00	0.9	26.1	38.9	
1/2/2023	7:00:00	0.5	64.1	36.9	
1/2/2023	8:00:00	0.2	58.9	37.4	
1/2/2023	9:00:00	0.7	31.9	39.5	
1/2/2023	10:00:00	1.8	26.4	38.2	
1/2/2023	11:00:00	1.4	46.7	38.3	
1/2/2023	12:00:00	1.4	33.5	39.2	
1/2/2023	13:00:00	1.3	28.4	39.2	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/2/2023	14:00:00	2.4	42.9	37.2	
1/2/2023	15:00:00	1.8	63.4	37.3	
1/2/2023	16:00:00	1.2	68.0	38.1	
1/2/2023	17:00:00	0.8	56.5	38.9	
1/2/2023	18:00:00	0.4	10.2	38.8	
1/2/2023	19:00:00	0.6	55.6	39.1	
1/2/2023	20:00:00	0.7	53.2	39.5	
1/2/2023	21:00:00	0.8	81.8	40.1	
1/2/2023	22:00:00	1.2	73.2	40.6	
1/2/2023	23:00:00	0.9	78.5	42.5	
1/3/2023	0:00:00	1.5	91.4	45.1	
1/3/2023	1:00:00	1.1	80.7	46.0	
1/3/2023	2:00:00	1.3	65.5	45.9	
1/3/2023	3:00:00	1.6	51.4	44.7	
1/3/2023	4:00:00	1.5	63.0	43.0	
1/3/2023	5:00:00	1.3	69.8	43.2	
1/3/2023	6:00:00	0.5	106.6	45.8	
1/3/2023	7:00:00	1.3	136.8	47.8	
1/3/2023	8:00:00	1.7	144.3	48.9	
1/3/2023	9:00:00	0.6	140.5	49.9	
1/3/2023	10:00:00	0.9	154.4	51.8	
1/3/2023	11:00:00	1.3	157.2	54.6	
1/3/2023	12:00:00	1.4	186.0	57.3	
1/3/2023	13:00:00	1.6	210.1	58.6	
1/3/2023	14:00:00	1.8	208.4	59.3	
1/3/2023	15:00:00	2.7	211.3	59.7	
1/3/2023	16:00:00	2.6	211.7	59.8	
1/3/2023	17:00:00	2.6	205.0	59.3	
1/3/2023	18:00:00	1.7	198.4	59.3	
1/3/2023	19:00:00	2.1	198.9	59.6	
1/3/2023	20:00:00	2.3	247.8	57.1	
1/3/2023	21:00:00	1.5	168.3	55.7	
1/3/2023	22:00:00	2.5	217.1	55.8	
1/3/2023	23:00:00	4.1	262.7	54.0	
1/4/2023	0:00:00	5.3	280.1	47.7	29.0
1/4/2023	1:00:00	2.8	262.9	45.2	29.0
1/4/2023	2:00:00	2.3	239.3	43.2	29.0
1/4/2023	3:00:00	2.0	209.6	41.9	29.0
1/4/2023	4:00:00	2.3	226.6	39.5	29.0
1/4/2023	5:00:00	2.4	231.3	38.5	29.0
1/4/2023	6:00:00	1.8	219.0	37.2	29.0
1/4/2023	7:00:00	1.7	205.5	35.7	29.0
1/4/2023	8:00:00	1.8	198.9	37.7	29.1
1/4/2023	9:00:00	2.3	231.7	39.4	29.1

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/4/2023	10:00:00	2.3	237.2	40.6	29.1
1/4/2023	11:00:00	3.0	244.1	40.8	29.1
1/4/2023	12:00:00	3.4	270.3	39.0	29.1
1/4/2023	13:00:00	3.8	262.6	35.8	29.1
1/4/2023	14:00:00	3.4	244.2	35.2	29.1
1/4/2023	15:00:00	3.6	241.3	35.5	29.1
1/4/2023	16:00:00	3.3	234.6	35.5	29.1
1/4/2023	17:00:00	3.5	239.8	34.9	29.2
1/4/2023	18:00:00	2.8	231.8	34.7	29.2
1/4/2023	19:00:00	2.1	215.8	34.4	29.2
1/4/2023	20:00:00	2.4	223.3	34.1	29.2
1/4/2023	21:00:00	3.1	228.5	33.6	29.2
1/4/2023	22:00:00	2.8	234.0	33.8	29.2
1/4/2023	23:00:00	2.5	223.2	34.1	29.2
1/5/2023	0:00:00	2.1	228.2	33.9	29.2
1/5/2023	1:00:00	2.2	228.6	34.4	29.2
1/5/2023	2:00:00	2.3	233.1	34.6	29.2
1/5/2023	3:00:00	2.3	229.1	34.6	29.2
1/5/2023	4:00:00	1.6	216.5	34.5	29.2
1/5/2023	5:00:00	1.5	211.8	34.4	29.2
1/5/2023	6:00:00	1.4	209.2	34.2	29.2
1/5/2023	7:00:00	1.6	230.3	33.9	29.2
1/5/2023	8:00:00	3.6	258.5	33.4	29.2
1/5/2023	9:00:00	2.9	251.2	32.9	29.2
1/5/2023	10:00:00	2.9	248.0	33.1	29.2
1/5/2023	11:00:00	3.4	254.0	33.2	29.2
1/5/2023	12:00:00	3.3	257.5	33.4	29.2
1/5/2023	13:00:00	3.3	252.3	33.8	29.2
1/5/2023	14:00:00	4.3	258.7	33.3	29.2
1/5/2023	15:00:00	4.2	261.5	32.3	29.2
1/5/2023	16:00:00	4.2	256.1	31.7	29.3
1/5/2023	17:00:00	3.5	248.3	31.4	29.3
1/5/2023	18:00:00	3.4	251.7	31.6	29.3
1/5/2023	19:00:00	3.4	254.4	32.1	29.3
1/5/2023	20:00:00	3.4	243.8	31.8	29.3
1/5/2023	21:00:00	3.7	250.6	31.9	29.3
1/5/2023	22:00:00	3.9	251.9	32.1	29.3
1/5/2023	23:00:00	3.8	251.1	32.3	29.3
1/6/2023	0:00:00	4.4	258.9	32.5	
1/6/2023	1:00:00	4.4	265.5	32.7	
1/6/2023	2:00:00	3.3	245.2	32.3	
1/6/2023	3:00:00	3.7	247.2	31.8	
1/6/2023	4:00:00	3.6	251.2	31.5	
1/6/2023	5:00:00	3.7	254.6	31.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/6/2023	6:00:00	3.1	247.8	31.5	
1/6/2023	7:00:00	3.4	247.5	31.1	
1/6/2023	8:00:00	2.8	237.0	31.1	
1/6/2023	9:00:00	3.3	248.9	31.8	
1/6/2023	10:00:00	3.6	252.7	31.8	
1/6/2023	11:00:00	3.1	250.6	31.1	
1/6/2023	12:00:00	3.2	253.8	30.1	
1/6/2023	13:00:00	2.6	243.2	29.1	
1/6/2023	14:00:00	2.6	251.9	28.2	
1/6/2023	15:00:00	2.1	236.6	28.4	
1/6/2023	16:00:00	2.3	232.0	28.6	
1/6/2023	17:00:00	2.2	253.5	28.6	
1/6/2023	18:00:00	1.2	257.4	28.2	
1/6/2023	19:00:00	1.2	307.4	28.2	
1/6/2023	20:00:00	1.6	333.7	27.7	
1/6/2023	21:00:00	1.3	334.2	27.5	
1/6/2023	22:00:00	0.8	317.3	27.4	
1/6/2023	23:00:00	0.7	206.1	27.2	
1/7/2023	0:00:00	0.7	184.0	27.3	
1/7/2023	1:00:00	0.7	202.4	27.6	
1/7/2023	2:00:00	0.6	257.0	28.6	
1/7/2023	3:00:00	0.7	205.1	28.2	
1/7/2023	4:00:00	0.5	43.0	30.2	
1/7/2023	5:00:00	1.0	27.7	30.0	
1/7/2023	6:00:00	2.0	29.0	32.1	
1/7/2023	7:00:00	2.6	25.8	33.5	
1/7/2023	8:00:00	2.7	37.0	33.8	
1/7/2023	9:00:00	2.8	38.4	33.8	
1/7/2023	10:00:00	2.6	42.0	34.0	
1/7/2023	11:00:00	2.9	38.5	34.2	
1/7/2023	12:00:00	3.3	37.5	33.9	
1/7/2023	13:00:00	2.6	42.9	33.6	
1/7/2023	14:00:00	2.5	35.3	33.4	
1/7/2023	15:00:00	2.0	35.5	33.1	
1/7/2023	16:00:00	1.6	29.9	32.6	
1/7/2023	17:00:00	1.0	24.2	32.5	
1/7/2023	18:00:00	1.9	26.3	32.9	
1/7/2023	19:00:00	1.5	52.7	33.0	
1/7/2023	20:00:00	1.3	96.8	32.7	
1/7/2023	21:00:00	1.3	112.3	32.0	
1/7/2023	22:00:00	1.1	106.9	31.3	
1/7/2023	23:00:00	0.7	126.6	30.4	
1/8/2023	0:00:00	0.5	118.8	29.7	
1/8/2023	1:00:00	0.3	143.0	27.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/8/2023	2:00:00	1.0	149.7	28.6	
1/8/2023	3:00:00	1.0	116.6	29.8	
1/8/2023	4:00:00	1.0	135.6	29.8	
1/8/2023	5:00:00	1.0	118.6	29.6	
1/8/2023	6:00:00	0.5	101.0	29.0	
1/8/2023	7:00:00	0.7	51.9	28.8	
1/8/2023	8:00:00	0.3	67.6	28.7	
1/8/2023	9:00:00	0.8	103.6	29.5	
1/8/2023	10:00:00	0.8	87.3	31.2	
1/8/2023	11:00:00	0.9	46.6	34.9	
1/8/2023	12:00:00	2.0	11.3	34.8	
1/8/2023	13:00:00	2.6	355.9	35.2	
1/8/2023	14:00:00	2.3	351.6	32.6	
1/8/2023	15:00:00	2.1	351.9	32.2	
1/8/2023	16:00:00	0.4	334.8	30.9	
1/8/2023	17:00:00	0.2	15.1	28.5	
1/8/2023	18:00:00	2.1	317.7	30.5	
1/8/2023	19:00:00	3.5	284.9	30.1	
1/8/2023	20:00:00	3.1	253.7	28.5	
1/8/2023	21:00:00	3.1	249.6	28.0	
1/8/2023	22:00:00	2.6	248.7	27.5	
1/8/2023	23:00:00	2.4	251.7	27.8	
1/9/2023	0:00:00	2.8	240.1	27.2	
1/9/2023	1:00:00	3.3	252.1	26.5	
1/9/2023	2:00:00	3.0	254.3	26.2	
1/9/2023	3:00:00	3.0	255.6	26.4	
1/9/2023	4:00:00	2.5	237.3	25.6	
1/9/2023	5:00:00	1.9	224.9	25.1	
1/9/2023	6:00:00	1.7	206.6	25.0	
1/9/2023	7:00:00	2.2	211.3	25.1	
1/9/2023	8:00:00	2.5	207.1	27.9	
1/9/2023	9:00:00	3.3	213.9	32.3	
1/9/2023	10:00:00	2.9	209.2	36.1	
1/9/2023	11:00:00	3.4	213.9	39.0	
1/9/2023	12:00:00	3.5	212.0	41.7	
1/9/2023	13:00:00	3.4	214.9	43.4	
1/9/2023	14:00:00	3.2	218.3	44.6	
1/9/2023	15:00:00	2.9	209.5	42.8	
1/9/2023	16:00:00	2.4	215.4	40.1	
1/9/2023	17:00:00	2.0	198.1	38.0	
1/9/2023	18:00:00	1.9	193.0	37.0	
1/9/2023	19:00:00	2.1	188.6	36.4	
1/9/2023	20:00:00	2.6	191.1	36.9	
1/9/2023	21:00:00	2.3	198.5	36.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/9/2023	22:00:00	2.6	191.7	35.7	
1/9/2023	23:00:00	3.1	199.6	36.1	
1/10/2023	0:00:00	2.7	194.0	36.7	
1/10/2023	1:00:00	2.8	180.3	36.9	
1/10/2023	2:00:00	2.6	192.6	37.7	
1/10/2023	3:00:00	2.9	187.4	37.8	
1/10/2023	4:00:00	2.7	186.0	37.8	
1/10/2023	5:00:00	2.5	182.0	38.2	
1/10/2023	6:00:00	2.6	177.5	38.7	
1/10/2023	7:00:00	2.2	183.6	37.8	
1/10/2023	8:00:00	2.2	174.6	38.4	
1/10/2023	9:00:00	2.6	185.0	41.7	
1/10/2023	10:00:00	1.9	196.2	44.7	
1/10/2023	11:00:00	2.0	175.8	47.2	
1/10/2023	12:00:00	1.8	180.9	49.5	
1/10/2023	13:00:00	1.9	179.0	51.0	
1/10/2023	14:00:00	2.1	188.9	51.3	
1/10/2023	15:00:00	1.9	190.4	50.6	
1/10/2023	16:00:00	1.2	184.4	46.9	
1/10/2023	17:00:00	0.9	166.8	43.9	
1/10/2023	18:00:00	1.1	171.7	42.4	
1/10/2023	19:00:00	1.4	165.4	41.3	
1/10/2023	20:00:00	1.4	141.4	40.4	
1/10/2023	21:00:00	1.6	149.4	39.4	
1/10/2023	22:00:00	1.4	150.9	38.1	
1/10/2023	23:00:00	1.3	152.8	37.4	
1/11/2023	0:00:00	1.2	164.7	37.4	
1/11/2023	1:00:00	1.2	158.8	38.0	
1/11/2023	2:00:00	0.9	154.8	38.6	
1/11/2023	3:00:00	1.1	152.3	39.0	
1/11/2023	4:00:00	1.3	130.4	38.7	
1/11/2023	5:00:00	1.6	135.3	39.9	
1/11/2023	6:00:00	2.2	146.2	39.9	
1/11/2023	7:00:00	2.4	149.3	40.3	
1/11/2023	8:00:00	2.3	143.2	41.3	
1/11/2023	9:00:00	2.1	158.7	43.4	
1/11/2023	10:00:00	2.7	151.6	47.9	
1/11/2023	11:00:00	2.7	150.7	51.6	
1/11/2023	12:00:00	2.4	174.2	53.2	
1/11/2023	13:00:00	2.7	189.6	53.4	
1/11/2023	14:00:00	2.3	189.7	51.0	
1/11/2023	15:00:00	2.3	182.7	48.0	
1/11/2023	16:00:00	1.4	193.8	46.6	
1/11/2023	17:00:00	1.4	191.1	45.9	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/11/2023	18:00:00	1.5	215.6	45.8	
1/11/2023	19:00:00	1.2	218.1	45.7	
1/11/2023	20:00:00	1.3	212.3	45.5	
1/11/2023	21:00:00	0.8	207.3	45.3	
1/11/2023	22:00:00	0.8	215.3	44.8	
1/11/2023	23:00:00	1.5	223.0	44.2	
1/12/2023	0:00:00	1.3	356.3	42.7	
1/12/2023	1:00:00	2.5	35.5	40.3	
1/12/2023	2:00:00	3.8	33.3	38.8	
1/12/2023	3:00:00	3.5	40.7	38.0	
1/12/2023	4:00:00	3.7	38.7	38.4	
1/12/2023	5:00:00	3.6	36.8	38.8	
1/12/2023	6:00:00	4.3	32.7	38.5	
1/12/2023	7:00:00	5.0	34.3	38.4	
1/12/2023	8:00:00	6.0	32.2	38.9	
1/12/2023	9:00:00	6.0	38.3	38.6	
1/12/2023	10:00:00	6.2	32.7	38.0	
1/12/2023	11:00:00	6.3	34.3	37.8	
1/12/2023	12:00:00	5.2	32.9	38.0	
1/12/2023	13:00:00	5.0	20.8	38.0	
1/12/2023	14:00:00	5.8	15.4	36.2	
1/12/2023	15:00:00	5.6	10.7	35.8	
1/12/2023	16:00:00	5.4	13.1	35.2	
1/12/2023	17:00:00	5.4	19.5	35.4	
1/12/2023	18:00:00	5.8	13.3	35.8	
1/12/2023	19:00:00	5.7	23.9	35.4	
1/12/2023	20:00:00	4.9	24.5	35.2	
1/12/2023	21:00:00	4.7	11.9	35.6	
1/12/2023	22:00:00	5.3	14.5	35.5	
1/12/2023	23:00:00	5.4	14.8	35.5	
1/13/2023	0:00:00	5.3	15.0	34.9	
1/13/2023	1:00:00	5.4	15.0	34.3	
1/13/2023	2:00:00	5.6	12.5	34.1	
1/13/2023	3:00:00	6.5	8.8	33.7	
1/13/2023	4:00:00	5.9	14.5	33.0	
1/13/2023	5:00:00	6.6	17.4	32.4	
1/13/2023	6:00:00	6.7	18.9	31.9	
1/13/2023	7:00:00	6.5	15.5	32.0	
1/13/2023	8:00:00	6.3	12.5	32.2	
1/13/2023	9:00:00	6.5	3.1	32.5	
1/13/2023	10:00:00	5.9	7.4	32.0	
1/13/2023	11:00:00	5.4	18.4	32.6	
1/13/2023	12:00:00	5.1	29.5	32.1	
1/13/2023	13:00:00	4.7	10.7	31.7	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/13/2023	14:00:00	5.2	30.1	32.5	
1/13/2023	15:00:00	5.3	20.4	32.1	
1/13/2023	16:00:00	5.8	11.9	32.1	
1/13/2023	17:00:00	5.3	16.2	31.3	
1/13/2023	18:00:00	6.5	7.0	30.2	
1/13/2023	19:00:00	5.2	8.1	30.3	
1/13/2023	20:00:00	5.4	5.4	30.5	
1/13/2023	21:00:00	4.7	7.5	30.3	
1/13/2023	22:00:00	4.3	9.8	30.2	
1/13/2023	23:00:00	3.9	8.1	30.1	
1/14/2023	0:00:00	4.0	356.6	30.1	
1/14/2023	1:00:00	4.0	346.4	29.9	
1/14/2023	2:00:00	4.2	328.2	28.8	
1/14/2023	3:00:00	4.4	335.9	28.4	
1/14/2023	4:00:00	3.6	348.9	28.4	
1/14/2023	5:00:00	3.1	345.6	28.1	
1/14/2023	6:00:00	2.8	337.7	27.8	
1/14/2023	7:00:00	2.6	329.1	27.3	
1/14/2023	8:00:00	2.3	307.7	27.2	
1/14/2023	9:00:00	2.0	294.9	27.4	
1/14/2023	10:00:00	2.2	260.3	27.8	
1/14/2023	11:00:00	1.8	223.0	28.3	
1/14/2023	12:00:00	2.1	215.4	28.5	
1/14/2023	13:00:00	2.7	219.9	28.8	
1/14/2023	14:00:00	2.7	219.5	31.2	
1/14/2023	15:00:00	2.0	196.4	31.3	
1/14/2023	16:00:00	1.2	170.6	29.1	
1/14/2023	17:00:00	0.9	172.3	27.1	
1/14/2023	18:00:00	1.1	146.2	26.1	
1/14/2023	19:00:00	0.9	185.6	25.4	
1/14/2023	20:00:00	1.3	168.2	25.1	
1/14/2023	21:00:00	1.6	200.9	25.4	
1/14/2023	22:00:00	1.5	186.9	25.5	
1/14/2023	23:00:00	2.0	181.4	25.1	
1/15/2023	0:00:00	1.9	168.3	24.7	
1/15/2023	1:00:00	1.9	196.5	24.5	
1/15/2023	2:00:00	1.9	174.6	24.7	
1/15/2023	3:00:00	2.5	170.6	24.8	
1/15/2023	4:00:00	2.4	174.3	25.1	
1/15/2023	5:00:00	2.2	180.2	25.3	
1/15/2023	6:00:00	2.5	170.8	25.4	
1/15/2023	7:00:00	3.0	164.0	26.3	
1/15/2023	8:00:00	3.3	166.5	28.2	
1/15/2023	9:00:00	3.5	168.3	30.2	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/15/2023	10:00:00	3.2	179.8	33.5	
1/15/2023	11:00:00	3.7	169.7	36.7	
1/15/2023	12:00:00	3.9	173.7	40.2	
1/15/2023	13:00:00	3.7	164.1	41.3	
1/15/2023	14:00:00	3.6	155.1	41.4	
1/15/2023	15:00:00	3.5	158.8	40.8	
1/15/2023	16:00:00	3.3	154.0	38.9	
1/15/2023	17:00:00	3.6	147.2	37.3	
1/15/2023	18:00:00	3.3	146.9	36.4	
1/15/2023	19:00:00	3.7	149.2	36.1	
1/15/2023	20:00:00	3.7	155.4	36.8	
1/15/2023	21:00:00	3.5	158.6	37.4	
1/15/2023	22:00:00	3.0	159.7	37.7	
1/15/2023	23:00:00	3.2	164.4	38.5	
1/16/2023	0:00:00	3.2	158.8	38.6	
1/16/2023	1:00:00	3.4	153.2	38.2	
1/16/2023	2:00:00	3.4	151.8	38.5	
1/16/2023	3:00:00	3.1	154.6	39.0	
1/16/2023	4:00:00	3.6	152.5	39.9	
1/16/2023	5:00:00	3.5	155.2	40.4	
1/16/2023	6:00:00	3.6	157.1	40.2	
1/16/2023	7:00:00	3.7	159.4	40.2	
1/16/2023	8:00:00	3.5	156.7	40.2	
1/16/2023	9:00:00	3.3	149.8	37.5	
1/16/2023	10:00:00	3.6	153.3	36.1	
1/16/2023	11:00:00	3.8	164.5	37.6	
1/16/2023	12:00:00	4.0	162.4	38.8	
1/16/2023	13:00:00	4.2	168.9	39.9	
1/16/2023	14:00:00	3.6	160.0	40.4	
1/16/2023	15:00:00	3.8	166.6	40.8	
1/16/2023	16:00:00	3.8	162.2	41.2	
1/16/2023	17:00:00	3.2	167.3	42.0	
1/16/2023	18:00:00	2.7	160.8	42.8	
1/16/2023	19:00:00	2.7	162.6	44.4	
1/16/2023	20:00:00	2.9	178.1	46.3	
1/16/2023	21:00:00	2.6	186.0	47.6	
1/16/2023	22:00:00	2.6	207.4	49.4	
1/16/2023	23:00:00	4.1	234.8	51.1	
1/17/2023	0:00:00	5.1	242.4	50.0	
1/17/2023	1:00:00	4.7	240.7	47.7	
1/17/2023	2:00:00	4.5	242.9	47.3	
1/17/2023	3:00:00	5.0	243.9	46.5	
1/17/2023	4:00:00	4.8	257.6	44.9	
1/17/2023	5:00:00	4.5	252.7	43.5	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/17/2023	6:00:00	4.2	251.7	43.2	
1/17/2023	7:00:00	4.2	251.4	42.6	
1/17/2023	8:00:00	5.8	257.6	41.5	
1/17/2023	9:00:00	6.0	256.4	39.7	
1/17/2023	10:00:00	5.9	258.6	39.7	
1/17/2023	11:00:00	5.5	259.1	40.2	
1/17/2023	12:00:00	6.4	259.3	40.4	
1/17/2023	13:00:00	6.0	267.2	40.3	
1/17/2023	14:00:00	5.9	274.3	39.5	
1/17/2023	15:00:00	5.4	264.8	39.0	
1/17/2023	16:00:00	5.7	271.2	38.8	
1/17/2023	17:00:00	5.8	275.5	38.7	
1/17/2023	18:00:00	5.2	287.1	38.7	
1/17/2023	19:00:00	4.8	280.6	38.8	
1/17/2023	20:00:00	5.2	277.7	39.0	
1/17/2023	21:00:00	4.8	297.9	38.8	
1/17/2023	22:00:00	4.9	308.4	37.8	
1/17/2023	23:00:00	4.8	302.2	37.4	
1/18/2023	0:00:00	4.3	300.2	37.3	
1/18/2023	1:00:00	4.2	298.0	37.1	
1/18/2023	2:00:00	3.2	273.3	37.1	
1/18/2023	3:00:00	4.3	304.2	37.1	
1/18/2023	4:00:00	3.4	309.4	36.4	
1/18/2023	5:00:00	3.2	306.1	36.5	
1/18/2023	6:00:00	2.5	315.8	36.5	
1/18/2023	7:00:00	2.0	326.9	36.5	
1/18/2023	8:00:00	2.0	5.7	36.5	
1/18/2023	9:00:00	1.2	355.7	37.0	
1/18/2023	10:00:00	1.3	40.7	37.9	
1/18/2023	11:00:00	1.2	60.0	38.9	
1/18/2023	12:00:00	1.1	86.7	39.0	
1/18/2023	13:00:00	1.3	133.8	39.0	
1/18/2023	14:00:00	1.7	136.3	38.8	
1/18/2023	15:00:00	1.6	110.0	38.4	
1/18/2023	16:00:00	1.8	117.1	37.9	
1/18/2023	17:00:00	2.3	96.0	37.6	
1/18/2023	18:00:00	2.2	83.4	37.2	
1/18/2023	19:00:00	2.2	84.9	35.9	
1/18/2023	20:00:00	2.3	92.9	35.8	
1/18/2023	21:00:00	2.5	91.8	36.0	
1/18/2023	22:00:00	3.3	99.4	35.9	
1/18/2023	23:00:00	4.3	102.8	36.1	
1/19/2023	0:00:00	4.6	120.2	36.7	
1/19/2023	1:00:00	4.6	133.3	37.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/19/2023	2:00:00	3.9	137.2	37.7	
1/19/2023	3:00:00	3.1	139.6	38.3	
1/19/2023	4:00:00	2.1	150.4	38.8	
1/19/2023	5:00:00	1.8	168.8	39.3	
1/19/2023	6:00:00	1.9	192.0	39.9	
1/19/2023	7:00:00	2.8	224.7	40.4	
1/19/2023	8:00:00	3.7	244.2	39.4	
1/19/2023	9:00:00	3.0	238.8	38.8	
1/19/2023	10:00:00	2.0	217.7	39.4	
1/19/2023	11:00:00	2.2	222.9	40.2	
1/19/2023	12:00:00	1.9	213.8	41.4	
1/19/2023	13:00:00	2.3	204.4	41.9	
1/19/2023	14:00:00	3.3	223.7	41.9	
1/19/2023	15:00:00	5.2	238.4	37.2	
1/19/2023	16:00:00	4.3	240.7	36.8	
1/19/2023	17:00:00	4.6	256.2	37.4	
1/19/2023	18:00:00	7.1	275.0	37.2	
1/19/2023	19:00:00	6.4	272.8	36.4	
1/19/2023	20:00:00	5.1	265.9	35.2	
1/19/2023	21:00:00	5.5	270.4	34.8	
1/19/2023	22:00:00	5.0	265.0	33.6	
1/19/2023	23:00:00	6.1	271.7	33.7	
1/20/2023	0:00:00	6.3	276.3	34.0	
1/20/2023	1:00:00	5.8	273.7	34.2	
1/20/2023	2:00:00	5.8	282.0	34.1	
1/20/2023	3:00:00	5.4	276.9	33.9	
1/20/2023	4:00:00	5.4	271.5	33.6	
1/20/2023	5:00:00	5.1	281.1	33.3	
1/20/2023	6:00:00	6.2	290.1	33.5	
1/20/2023	7:00:00	6.6	287.2	33.6	
1/20/2023	8:00:00	5.0	307.8	32.9	
1/20/2023	9:00:00	5.4	304.6	33.4	
1/20/2023	10:00:00	5.6	304.7	33.6	
1/20/2023	11:00:00	5.0	302.1	33.5	
1/20/2023	12:00:00	5.1	302.6	32.8	
1/20/2023	13:00:00	4.9	311.8	32.5	
1/20/2023	14:00:00	5.1	309.2	32.3	
1/20/2023	15:00:00	4.6	308.7	32.0	
1/20/2023	16:00:00	3.8	311.5	32.0	
1/20/2023	17:00:00	3.6	316.1	31.8	
1/20/2023	18:00:00	3.7	318.5	31.8	
1/20/2023	19:00:00	3.9	311.1	31.7	
1/20/2023	20:00:00	2.8	319.7	31.5	
1/20/2023	21:00:00	2.7	336.7	31.4	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/20/2023	22:00:00	1.4	353.9	31.2	
1/20/2023	23:00:00	0.6	215.4	31.0	
1/21/2023	0:00:00	2.6	250.2	30.7	
1/21/2023	1:00:00	2.5	246.1	30.5	
1/21/2023	2:00:00	2.3	248.7	30.3	
1/21/2023	3:00:00	2.7	256.4	30.1	
1/21/2023	4:00:00	2.7	246.0	29.6	
1/21/2023	5:00:00	2.8	236.0	28.9	
1/21/2023	6:00:00	2.3	247.4	28.4	
1/21/2023	7:00:00	2.5	236.0	28.3	
1/21/2023	8:00:00	2.6	240.5	28.3	
1/21/2023	9:00:00	2.2	222.3	29.0	
1/21/2023	10:00:00	2.4	217.3	29.7	
1/21/2023	11:00:00	2.6	209.5	30.4	
1/21/2023	12:00:00	3.1	215.2	30.7	
1/21/2023	13:00:00	2.8	221.0	31.4	
1/21/2023	14:00:00	3.1	224.5	31.5	
1/21/2023	15:00:00	3.0	225.0	31.9	
1/21/2023	16:00:00	2.7	223.1	31.9	
1/21/2023	17:00:00	2.6	227.3	31.4	
1/21/2023	18:00:00	1.6	217.3	31.2	
1/21/2023	19:00:00	1.0	198.9	31.2	
1/21/2023	20:00:00	0.7	205.5	31.2	
1/21/2023	21:00:00	1.0	157.2	31.3	
1/21/2023	22:00:00	1.3	197.5	31.5	
1/21/2023	23:00:00	1.2	187.0	31.2	
1/22/2023	0:00:00	1.0	204.2	31.2	
1/22/2023	1:00:00	1.0	190.2	31.0	
1/22/2023	2:00:00	0.9	132.0	30.6	
1/22/2023	3:00:00	1.5	126.0	30.2	
1/22/2023	4:00:00	0.9	130.9	30.0	
1/22/2023	5:00:00	1.0	119.4	30.1	
1/22/2023	6:00:00	1.1	124.1	30.0	
1/22/2023	7:00:00	0.5	137.2	30.0	
1/22/2023	8:00:00	0.5	90.8	30.5	
1/22/2023	9:00:00	0.7	74.2	31.5	
1/22/2023	10:00:00	1.0	44.6	31.6	
1/22/2023	11:00:00	0.5	18.6	32.8	
1/22/2023	12:00:00	1.9	351.5	32.7	
1/22/2023	13:00:00	2.4	353.4	31.8	
1/22/2023	14:00:00	1.9	0.7	32.2	
1/22/2023	15:00:00	2.2	354.6	32.1	
1/22/2023	16:00:00	3.7	349.5	32.1	
1/22/2023	17:00:00	3.6	353.8	32.4	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/22/2023	18:00:00	3.5	1.3	32.8	
1/22/2023	19:00:00	4.0	350.8	32.1	
1/22/2023	20:00:00	4.5	344.7	31.8	
1/22/2023	21:00:00	3.9	358.3	32.3	
1/22/2023	22:00:00	4.0	353.0	32.1	
1/22/2023	23:00:00	4.2	351.8	31.1	
1/23/2023	0:00:00	4.2	345.1	30.2	29.3
1/23/2023	1:00:00	3.9	340.2	29.9	29.3
1/23/2023	2:00:00	4.5	347.8	28.9	29.3
1/23/2023	3:00:00	3.4	337.7	28.1	29.3
1/23/2023	4:00:00	2.9	328.9	27.7	29.4
1/23/2023	5:00:00	3.1	328.4	26.9	29.4
1/23/2023	6:00:00	3.7	319.2	25.7	29.4
1/23/2023	7:00:00	3.0	285.5	24.6	29.4
1/23/2023	8:00:00	3.0	247.0	23.8	29.4
1/23/2023	9:00:00	3.5	247.9	24.3	29.5
1/23/2023	10:00:00	3.6	253.3	25.3	29.5
1/23/2023	11:00:00	3.4	252.7	28.1	29.4
1/23/2023	12:00:00	4.0	237.8	32.5	29.4
1/23/2023	13:00:00	4.6	244.6	34.2	29.4
1/23/2023	14:00:00	4.7	239.5	33.7	29.4
1/23/2023	15:00:00	4.0	240.0	33.8	29.4
1/23/2023	16:00:00	3.6	232.4	32.1	29.4
1/23/2023	17:00:00	3.8	229.0	30.1	29.4
1/23/2023	18:00:00	3.6	230.3	29.8	29.4
1/23/2023	19:00:00	4.0	226.7	29.8	29.4
1/23/2023	20:00:00	4.1	234.3	29.8	29.4
1/23/2023	21:00:00	3.8	240.5	30.2	29.4
1/23/2023	22:00:00	4.7	256.8	30.4	29.4
1/23/2023	23:00:00	5.1	267.4	31.0	29.4
1/24/2023	0:00:00	4.2	271.0	30.9	29.5
1/24/2023	1:00:00	3.8	261.9	30.5	29.5
1/24/2023	2:00:00	3.8	266.8	30.3	29.5
1/24/2023	3:00:00	3.1	248.3	29.4	29.5
1/24/2023	4:00:00	3.0	250.8	28.9	29.5
1/24/2023	5:00:00	3.0	256.3	28.5	29.5
1/24/2023	6:00:00	2.7	242.5	28.3	29.5
1/24/2023	7:00:00	1.8	212.6	28.2	29.5
1/24/2023	8:00:00	1.8	215.5	28.3	29.6
1/24/2023	9:00:00	1.4	187.2	28.5	29.6
1/24/2023	10:00:00	1.6	205.4	29.1	29.5
1/24/2023	11:00:00	1.9	232.7	29.9	29.6
1/24/2023	12:00:00	2.4	218.5	30.6	29.5
1/24/2023	13:00:00	2.2	199.8	31.7	29.5

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/24/2023	14:00:00	1.5	171.8	31.7	29.5
1/24/2023	15:00:00	1.6	199.1	31.6	29.5
1/24/2023	16:00:00	1.6	209.1	31.3	29.5
1/24/2023	17:00:00	1.6	208.8	31.2	29.5
1/24/2023	18:00:00	0.7	183.0	31.2	29.5
1/24/2023	19:00:00	0.9	135.0	30.9	29.5
1/24/2023	20:00:00	0.8	137.2	30.8	29.5
1/24/2023	21:00:00	0.4	93.0	30.8	29.4
1/24/2023	22:00:00	1.1	123.0	30.6	29.4
1/24/2023	23:00:00	1.3	139.8	30.9	29.4
1/25/2023	0:00:00	1.9	143.1	31.4	
1/25/2023	1:00:00	1.6	137.3	31.5	
1/25/2023	2:00:00	1.7	126.7	31.4	
1/25/2023	3:00:00	1.3	113.2	31.1	
1/25/2023	4:00:00	1.5	96.4	31.1	
1/25/2023	5:00:00	1.5	88.4	31.2	
1/25/2023	6:00:00	1.9	94.5	31.2	
1/25/2023	7:00:00	1.7	95.0	31.4	
1/25/2023	8:00:00	1.2	77.9	31.9	
1/25/2023	9:00:00	1.3	65.0	32.4	
1/25/2023	10:00:00	2.4	48.4	32.6	
1/25/2023	11:00:00	3.0	38.6	32.8	
1/25/2023	12:00:00	3.5	31.1	33.4	
1/25/2023	13:00:00	3.7	25.2	33.2	
1/25/2023	14:00:00	3.3	17.5	33.0	
1/25/2023	15:00:00	3.2	13.5	33.1	
1/25/2023	16:00:00	3.5	2.2	33.3	
1/25/2023	17:00:00	3.9	345.0	33.3	
1/25/2023	18:00:00	3.3	349.0	33.2	
1/25/2023	19:00:00	3.1	2.1	33.6	
1/25/2023	20:00:00	3.1	351.1	33.1	
1/25/2023	21:00:00	4.2	322.2	32.3	
1/25/2023	22:00:00	4.9	311.7	32.1	
1/25/2023	23:00:00	4.5	305.6	32.1	
1/26/2023	0:00:00	4.6	305.2	32.0	
1/26/2023	1:00:00	4.3	307.7	31.6	
1/26/2023	2:00:00	3.4	313.4	31.5	
1/26/2023	3:00:00	3.7	303.4	31.4	
1/26/2023	4:00:00	4.1	299.1	31.3	
1/26/2023	5:00:00	4.1	302.6	31.1	
1/26/2023	6:00:00	4.3	301.8	31.0	
1/26/2023	7:00:00	4.0	267.9	29.9	
1/26/2023	8:00:00	4.0	250.1	26.9	
1/26/2023	9:00:00	3.6	247.3	25.6	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/26/2023	10:00:00	3.8	247.4	26.0	
1/26/2023	11:00:00	4.4	249.6	25.4	
1/26/2023	12:00:00	4.3	246.9	24.7	
1/26/2023	13:00:00	4.3	251.4	23.9	
1/26/2023	14:00:00	4.8	252.4	22.8	
1/26/2023	15:00:00	4.1	247.1	21.5	
1/26/2023	16:00:00	4.4	256.0	21.2	
1/26/2023	17:00:00	4.5	256.6	20.6	
1/26/2023	18:00:00	4.4	247.2	20.0	
1/26/2023	19:00:00	4.2	249.6	19.5	
1/26/2023	20:00:00	4.9	251.3	19.2	
1/26/2023	21:00:00	4.4	250.4	19.1	
1/26/2023	22:00:00	3.5	241.1	18.6	
1/26/2023	23:00:00	4.1	235.8	18.5	
1/27/2023	0:00:00	3.7	237.0	18.0	
1/27/2023	1:00:00	3.3	235.2	15.5	
1/27/2023	2:00:00	2.2	209.2	13.8	
1/27/2023	3:00:00	2.0	203.5	12.8	
1/27/2023	4:00:00	2.5	180.5	12.5	
1/27/2023	5:00:00	2.9	182.9	12.7	
1/27/2023	6:00:00	2.8	186.1	14.6	
1/27/2023	7:00:00	3.3	183.6	16.9	
1/27/2023	8:00:00	4.2	186.4	19.0	
1/27/2023	9:00:00	4.2	177.8	22.9	
1/27/2023	10:00:00	5.0	182.1	26.4	
1/27/2023	11:00:00	4.9	195.8	28.2	
1/27/2023	12:00:00	4.5	201.6	29.2	
1/27/2023	13:00:00	3.9	212.1	29.9	
1/27/2023	14:00:00	4.6	219.5	31.3	
1/27/2023	15:00:00	4.9	229.1	32.8	
1/27/2023	16:00:00	4.6	230.5	33.4	
1/27/2023	17:00:00	5.1	243.5	35.4	
1/27/2023	18:00:00	8.0	268.7	35.6	
1/27/2023	19:00:00	6.1	261.0	32.7	
1/27/2023	20:00:00	6.1	261.1	30.9	
1/27/2023	21:00:00	5.0	265.2	28.4	
1/27/2023	22:00:00	6.0	268.3	26.8	
1/27/2023	23:00:00	6.1	273.2	25.8	
1/28/2023	0:00:00	3.7	258.9	24.4	
1/28/2023	1:00:00	2.6	250.3	23.2	
1/28/2023	2:00:00	2.1	262.8	22.9	
1/28/2023	3:00:00	1.7	244.6	22.2	
1/28/2023	4:00:00	0.8	277.4	22.5	
1/28/2023	5:00:00	1.0	211.9	21.3	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/28/2023	6:00:00	1.1	211.2	21.2	
1/28/2023	7:00:00	1.4	214.9	21.2	
1/28/2023	8:00:00	2.1	219.5	22.4	
1/28/2023	9:00:00	1.6	207.0	23.5	
1/28/2023	10:00:00	0.9	155.1	25.3	
1/28/2023	11:00:00	0.5	173.7	27.8	
1/28/2023	12:00:00	1.5	71.8	28.0	
1/28/2023	13:00:00	2.0	64.7	29.2	
1/28/2023	14:00:00	2.2	65.9	30.7	
1/28/2023	15:00:00	2.4	59.1	30.2	
1/28/2023	16:00:00	1.6	65.2	29.3	
1/28/2023	17:00:00	1.9	67.1	28.3	
1/28/2023	18:00:00	2.0	67.2	28.0	
1/28/2023	19:00:00	2.1	67.4	28.4	
1/28/2023	20:00:00	1.9	73.8	28.5	
1/28/2023	21:00:00	1.2	77.4	28.5	
1/28/2023	22:00:00	1.0	46.8	28.6	
1/28/2023	23:00:00	1.3	32.8	28.7	
1/29/2023	0:00:00	1.7	43.7	29.4	
1/29/2023	1:00:00	2.2	41.9	30.0	
1/29/2023	2:00:00	2.1	32.8	30.4	
1/29/2023	3:00:00	2.6	22.5	30.9	
1/29/2023	4:00:00	3.6	28.4	31.2	
1/29/2023	5:00:00	3.7	17.7	30.9	
1/29/2023	6:00:00	3.9	21.9	30.5	
1/29/2023	7:00:00	4.2	20.8	30.4	
1/29/2023	8:00:00	4.1	19.4	30.3	
1/29/2023	9:00:00	4.2	20.8	30.6	
1/29/2023	10:00:00	3.6	18.1	31.2	
1/29/2023	11:00:00	3.6	19.2	31.6	
1/29/2023	12:00:00	3.4	19.9	31.4	
1/29/2023	13:00:00	3.6	18.6	31.2	
1/29/2023	14:00:00	3.3	26.4	30.6	
1/29/2023	15:00:00	3.4	9.9	30.1	
1/29/2023	16:00:00	5.2	359.2	29.3	
1/29/2023	17:00:00	4.9	352.4	29.0	
1/29/2023	18:00:00	3.9	353.2	29.1	
1/29/2023	19:00:00	3.8	2.3	29.0	
1/29/2023	20:00:00	3.8	15.1	28.9	
1/29/2023	21:00:00	3.3	22.4	28.5	
1/29/2023	22:00:00	3.3	10.9	27.7	
1/29/2023	23:00:00	3.0	6.8	27.6	
1/30/2023	0:00:00	4.5	352.3	26.6	
1/30/2023	1:00:00	5.5	344.4	25.0	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/30/2023	2:00:00	5.4	343.5	24.0	
1/30/2023	3:00:00	5.4	343.9	23.0	
1/30/2023	4:00:00	5.1	347.4	21.5	
1/30/2023	5:00:00	5.0	344.7	20.0	
1/30/2023	6:00:00	4.7	347.8	18.9	
1/30/2023	7:00:00	4.4	350.8	18.2	
1/30/2023	8:00:00	4.9	351.3	17.8	
1/30/2023	9:00:00	4.8	349.7	17.8	
1/30/2023	10:00:00	5.5	346.3	17.4	
1/30/2023	11:00:00	4.7	343.0	16.5	
1/30/2023	12:00:00	4.6	343.8	16.4	
1/30/2023	13:00:00	4.7	347.2	16.5	
1/30/2023	14:00:00	4.6	343.2	16.0	
1/30/2023	15:00:00	4.5	343.8	15.4	
1/30/2023	16:00:00	3.9	342.7	14.6	
1/30/2023	17:00:00	3.5	337.2	13.2	
1/30/2023	18:00:00	3.5	334.0	13.2	
1/30/2023	19:00:00	3.5	339.5	12.6	
1/30/2023	20:00:00	3.7	335.2	12.0	
1/30/2023	21:00:00	3.8	333.4	11.6	
1/30/2023	22:00:00	3.6	347.1	12.2	
1/30/2023	23:00:00	3.3	341.4	12.7	
1/31/2023	0:00:00	3.6	319.3	12.3	
1/31/2023	1:00:00	3.4	314.8	11.5	
1/31/2023	2:00:00	2.5	315.0	10.8	
1/31/2023	3:00:00	2.1	327.6	11.2	
1/31/2023	4:00:00	1.1	260.1	10.7	
1/31/2023	5:00:00	1.3	217.4	8.8	
1/31/2023	6:00:00	1.7	214.8	6.9	
1/31/2023	7:00:00	1.7	218.2	6.6	
1/31/2023	8:00:00	1.3	221.1	10.5	
1/31/2023	9:00:00	1.8	245.5	16.6	
1/31/2023	10:00:00	2.7	252.2	18.9	
1/31/2023	11:00:00	3.1	240.1	20.0	
1/31/2023	12:00:00	3.0	241.4	21.4	
1/31/2023	13:00:00	2.7	282.6	21.9	
1/31/2023	14:00:00	2.9	299.7	20.6	
1/31/2023	15:00:00	2.2	293.4	20.5	
1/31/2023	16:00:00	2.8	287.1	18.2	
1/31/2023	17:00:00	2.8	252.4	14.6	
1/31/2023	18:00:00	2.9	241.9	12.5	
1/31/2023	19:00:00	2.3	243.0	10.6	
1/31/2023	20:00:00	2.6	246.9	8.9	
1/31/2023	21:00:00	3.1	254.6	8.1	

Date	Time	Wind Speed (m/s)	Wind Direction (degrees)	Temperature (°F)	Barometric Pressure (inches HG)
1/31/2023	22:00:00	2.8	240.6	7.2	
1/31/2023	23:00:00	2.7	222.8	7.1	
2/1/2023	0:00:00	2.9	233.5	6.8	
2/1/2023	1:00:00	2.5	227.0	5.9	
2/1/2023	2:00:00	1.7	215.2	4.5	
2/1/2023	3:00:00	1.4	214.3	4.1	
2/1/2023	4:00:00	1.5	222.4	3.9	
2/1/2023	5:00:00	2.0	225.0	4.6	
2/1/2023	6:00:00	2.0	220.1	5.4	
2/1/2023	7:00:00	2.3	209.9	7.0	
2/1/2023	8:00:00	2.9	217.7	11.7	
2/1/2023	9:00:00	3.5	219.0	17.4	
2/1/2023	10:00:00	3.7	218.7	20.9	
2/1/2023	11:00:00	4.0	215.0	23.6	
2/1/2023	12:00:00	3.4	209.6	27.3	