

Indoor Air Sampling and Forensic Analysis at Peter
Cooper Village and Stuyvesant Town Properties

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Prepared by:

Anchor QEA
90 Elwood Davis Rd, Suite 340
Liverpool, NY 13088

Prepared for:

Consolidated Edison Company of New York, Inc.
31-01 20th Avenue, Building No. 138
Long Island City, NY 11105

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1 Preliminary Hydrocarbon Forensic Review of Peter Cooper Village and Stuyvesant Town 2017 Indoor Air Monitoring Results

1.1 Introduction

In October 2017, indoor air sampling was conducted at the Former East 21st Street Works former manufactured gas plant (MGP) Site and Former East 14th, 17th, and 19th Street Holder Stations located in Manhattan, New York (hereinafter referred to as the Site). The investigation activities were conducted in general accordance with the *Interim Site Management Plan Work Plan Indoor Air Sampling Former East 21st Street Works* (AECOM 2009a) and the *Interim Site Management Plan Work Plan Indoor Air Sampling Former East 21st Street Works Former East 14th Street Station, Former 17th Street Station, Former 19th Street Station* (AECOM 2009b).

As part of this sampling program, ambient (outside) and indoor air volatile organic carbon (VOC) compound results from the residential apartment buildings located at Peter Cooper Village (PCV) and Stuyvesant Town (ST) were subjected to chemical environmental forensic evaluation. Chemical environmental forensic evaluation is the evaluation of patterns in chemical data to draw conclusions about contaminant sources at a site. The objective of this forensic evaluation was to determine if the presence of chemical constituents detected in indoor air samples, at concentrations above guidance values, could be attributed to MGP-related contamination (including coal tar) in subsurface soil and groundwater.

As detailed below, the results of the forensic evaluation concluded that the chemical constituents detected in the indoor air samples were attributed to the use and storage of chemical products at PCV and ST, including paints, paint thinners and cleaning agents, and not MGP-related contamination.

1.2 Methods

Anchor QEA, LLC, reviewed the laboratory results for all samples collected at PCV, which were analyzed by U.S. Environmental Protection Agency (EPA) Compendium Method TO-15, titled, "*Determination of VOCs In Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*" (EPA 1999). In addition to the TO-15 Target Analyte List, the samples were analyzed for n-alkanes, isopropyl benzene, and naphthalene.

Other than noting individual exceedances, Anchor QEA excluded the following two sets of chemical results from forensic analysis:

- Halogenated compounds (compounds containing chlorine or bromine) were excluded because they are not associated with residual materials generated from historical MGP operations (such as MGP tar).
- The tentatively identified compounds (TICs) butane and pentane were excluded. This is because the concentration of a TIC can't be confirmed until the compound can be detected by analyzing it with a known standard.
- The remaining hydrocarbon compounds, which were subject to forensic analysis, are listed in Table 1.

1.3 Rationale

Table 1 compounds are either aromatic (benzene, toluene, ethylbenzene and xylenes (BTEX) and related compounds; blue shading in Table 1) or aliphatic (saturated straight chain and branched chains; orange shading in Table 1). The VOC compounds in Table 1 are present in MGP residuals, crude petroleum, and petroleum distillates such as diesel and gasoline. The VOCs in Table 1 found in residential and commercial building indoor air can also arise from the myriad of petroleum-based products used and stored by homeowners and industry. Therefore, these VOCs are not MGP-specific but may result from multiple hydrocarbon sources (Uhler 2010; Murphy and Morrison 2015; Azzolina et al. 2014).

MGP residuals (including coal tar) are dominated by aromatic compounds. In contrast, petroleum and petroleum distillates are dominated by aliphatic compounds (EPRI 2000; Murphy and Morrison 2015). Consequently, vapor VOCs from an MGP-related source (such as coal tar) will contain proportionally more aromatic compounds, and vapor from a petroleum source will contain proportionally more aliphatic compounds (Uhler 2010; Azzolina et al. 2014), and the ratio of aliphatic/aromatic compounds may therefore be used to discriminate between MGP tar and petroleum distillates in vapor.

1.4 Results

The following types of results were evaluated:

- Chemical concentrations
- Diagnostic chemical ratios of aliphatic versus aromatic compounds designed to distinguish MGP tar from petroleum-related sources
- Hydrocarbon fingerprint profile plots

The fingerprint profile plots arrange the chemicals in Table 1 along the x-axis and the bar heights correspond to chemical concentrations denoted on the y-axis. The shape of the fingerprint profile plot is a visual representation of the hydrocarbon composition and provides insight into possible

sources contributing to the sample chemical composition. To aid fingerprint evaluation, fingerprint profile plots have color-coded aliphatic and aromatic compounds, and compounds are arranged in increasing molecular weight order (Table 1).

Samples were divided into three groups based on collection location and results (Table 2):

1. Outdoor ambient air samples
2. High-concentration indoor air samples
3. Low-concentration indoor air samples

Two indoor samples, categorized as high-concentration samples, were distinct from their associated outdoor ambient samples. The remaining indoor samples are categorized as low-concentration with respect to concentration of VOC compounds.

The “high concentration indoor air samples” (IA-3-02-20171014 and IA-441-01PR-2017101), contained concentrations of aliphatic, aromatic, and total hydrocarbons at approximately one order of magnitude greater than the maximum concentration observed in the “outdoor ambient air samples” and the other “low-concentration indoor air samples” (Table 2). Based on these results, the high-concentration indoor air samples were further evaluated to determine if a specific source was contributing to the elevated concentrations at their locations.

The location notes for the high-concentration indoor samples stated these samples were collected in an area where paint and paint-related products were being stored and used.

The hydrocarbon fingerprint profile plots for the high-concentration indoor samples were dominated by toluene—note the bar height for toluene in Figure 1 versus the bar height for the other chemicals. Toluene is an ingredient found in some paints, paint removers and or thinners. Additionally, sample IA-3-02-20171014 had relatively high concentrations of aliphatic compounds typically found in mineral-oil-based paint thinners.

Based on the forensic analysis, the presence of high-concentrations of VOCs at these locations likely resulted from paint storage and painting operations, both of which were documented during the indoor air survey. Dominance of toluene and aliphatic compounds is inconsistent with MGP tar composition (EPRI 2000; Uhler 2010; Murphy and Morrison 2015; Azzolina et al. 2014).

Excepting the two high-concentration indoor samples noted above, there was only one indoor air sample with a hydrocarbon exceedance of New York State Department of Health Fuel Oil Indoor Air Upper Fence or EPA BASE 90th Percentile screening levels. Sample IA-5-01-20171014 had a naphthalene concentration of 5.6 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which slightly exceeded the EPA BASE 90th Percentile screening level of 5.1 $\mu\text{g}/\text{m}^3$.

Attachment 1 provides the hydrocarbon fingerprint profile plots for all outdoor and indoor samples. Hydrocarbon fingerprints profiles for low-concentration indoor air samples were very variable, not indicating any consistent hydrocarbon vapor source at the Site. Most fingerprint profiles contained a generally equally weighted mixture of aromatic and aliphatic compounds (Figure 2), which is inconsistent with MGP tar composition. A few low-concentration samples were dominated by toluene, possibly indicating local inputs from painting operations.

Diagnostic aliphatic versus aromatic ratio results are presented in Table 3, with comparisons to typical MGP tar and petroleum product results from Uhler et al. (2010). Table 3 demonstrates that the ratios for MGP tar are well outside the range of ratio results for the ambient and indoor air samples at PCV and ST. The indoor air results from PCV and ST are inconsistent with MGP tar as the source of the air vapor hydrocarbons. Two of the ratios are plotted in a double-ratio plot (Figure 3). Figure 3 illustrates indoor air samples have a broader range of compound ratios than ambient air samples, which is consistent with localized indoor source(s) for hydrocarbon VOCs; however, the indoor air samples differentiate more from the MGP tar than the ambient outdoor samples, strongly indicating the indoor air hydrocarbon sources are unrelated to MGP tar.

2 References

- AECOM (AECOM Environmental), 2009a. *Interim Site Management Plan Work Plan Indoor Air Sampling Former East 21st Street Works*. Prepared for Consolidated Edison Company of New York. February 6, 2009.
- AECOM, 2009b. *Interim Site Management Plan Work Plan Indoor Air Sampling Former East 21st Street Works Former East 14th Street Station, Former 17th Street Station, Former 19th Street Station*. Prepared for Consolidated Edison Company of New York. February 6, 2009.
- Azzolina, N.A., E.F. Neuhauser, J.T. Finn, T.R. Crawford, K.A. Anders, M.A. Doroski, A.C. Perretta, M.A. Distler, and G.W. Heitzman, 2014. Volatile Organic Compounds from Coal Tar and Soil Vapor Samples at MGP Sites. *Environmental Forensics* 15:225–233.
- EPA (U.S. Environmental Protection Agency), 1999. *EPA Air Method, Toxic Organics - 15 (TO-15): Determination of VOCs In Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*. EPA 625/R-96/010b.
- EPRI (Electric Power Research Institute), 2000. *Chemical Source Attribution at Former MGP Sites. Final Report*. December 2000.
- Murphy, B.L. and R.D. Morrison, 2015. *Introduction to Environmental Forensics*, Third Edition. Academic Press, Burlington, MA, 719 pp.

Uhler, A.D., K.J. McCarthy, S.D. Emsbo-Mattingly, S.A. Stout, and G.S. Douglas, 2010. Predicting Chemical Fingerprints of Vadose Zone Soil Gas and Indoor Air from Non-Aqueous Phase Liquid Composition, *Environmental Forensics*, 11:4, 342-354.

Tables

Table 1
Hydrocarbon Fingerprinting List and Attributes

Chemical Name	Plot Code	Aliphatic or Aromatic	Molecular Weight
Isopentane	I-C5	Aliphatic	72.15
Benzene	B	Aromatic	78.11
Thiophene	TH	Aromatic	84.14
n-Hexane	C6	Aliphatic	86.18
2-methylpentane	2M-C5	Aliphatic	86.18
Toluene	T	Aromatic	92.14
n-Heptane	C7	Aliphatic	100.2
2,3-Dimethylpentane	23M-C5	Aliphatic	100.2
Styrene	S	Aromatic	104.15
Ethylbenzene	E	Aromatic	106.17
m-Xylene & p-Xylene	MPX	Aromatic	106.17
o-Xylene	OX	Aromatic	106.17
n-Octane	C8	Aliphatic	114.23
Isoctane	I-C8	Aliphatic	114.23
Indene	INDENE	Aromatic	116.2
Indane	INDANE	Aromatic	118.2
1,2,3-Trimethylbenzene	123MB	Aromatic	120.19
1,2,4-Trimethylbenzene	124MB	Aromatic	120.19
1,3,5-Trimethylbenzene	135MB	Aromatic	120.19
Isopropylbenzene	IPB	Aromatic	120.19
Naphthalene	N	Aromatic	128.2
n-Nonane	C9	Aliphatic	128.26
n-Decane	C10	Aliphatic	142.28
n-Undecane	C11	Aliphatic	156.31
n-Dodecane	C12	Aliphatic	170.34

Notes:

Orange shading indicates aliphatic compounds.

Blue shading indicates aromatic compounds.

Table 2
Hydrocarbon Concentration Summary

Chemical Group	Ambient Outdoor Air Samples (N = 6)			High Concentration Indoor Air Samples		Low Concentration Indoor Air Samples (N = 73)		
	Minimum	Maximum	Mean	IA-3-02-20171014	IA-441-01PR-20171013	Minimum	Maximum	Mean
Aliphatic Hydrocarbons (µg/m ³)	0.72	8.9	4.5	518	483	2.3	41	9.2
Aromatic Hydrocarbons (µg/m ³)	0.85	9.3	3.8	207	1345	2.8	50	10.2
Total Hydrocarbons (µg/m ³)	1.6	18.2	8.3	725	1828	5.1	91	19

Notes:

µg/m³: micograms per cubic meter

Table 3**Diganostic Ratios of Aliphatic versus Aromatic Compounds**

Ratio	Ratio Type	Crude Petroleum and Petroleum Products*	MGP Tar*	Ambient Outdoor Air Samples	Indoor Air Samples
C6/B	Aliphatic/Aromatic	1.6 - 5.5	0.02	0.61 - 3.8	0.62 - 16.0
BTEX/C6-C9	Aromatic/Aliphatic	0.34 - 1.8	102	3.6 - 11.3	1.4 - 60.5
124M/C9	Aromatic/Aliphatic	0.16 - 12.4	63	0.85 - 1.1	0.18 - 4.9

*Ratios are calculated using data from Uhler et al. 2010; petroleum products are North Slope Crude Oil, aviation gasoline, jet fuel A, light naphtha, gasoline, and diesel; MGP tar is unweathered coal tar.

BTEX = sum of benzene (B), toluene, ethylbenzene and xylenes; C6-C9 = Sum of n-hexane (C6), n-heptane (C7), n-octane (C8) and n-nonane (C9), 124M = 1,2,4, trimethylbenzene.

MGP: manufactured gas plant

Figures

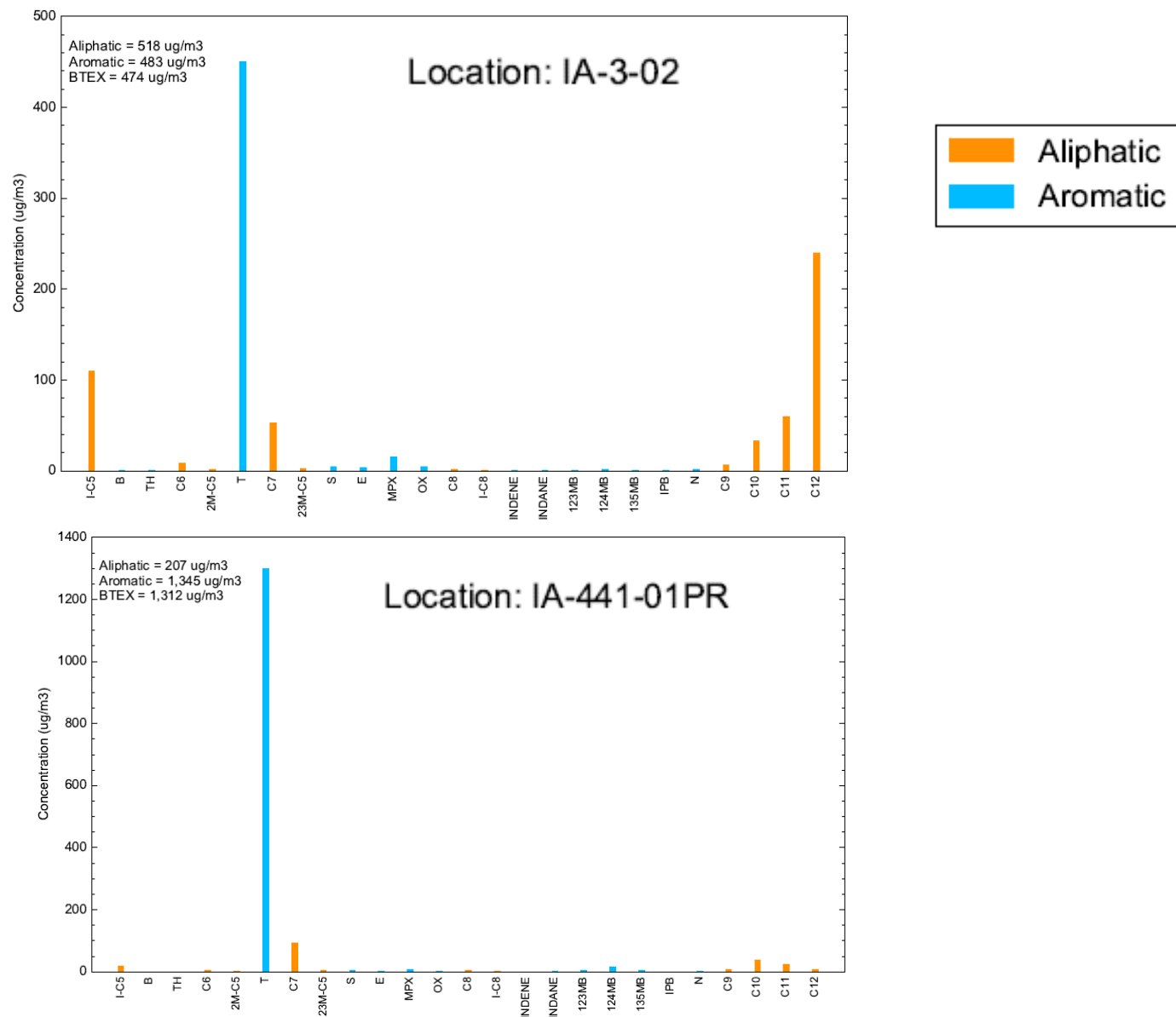


Figure 1

Air Vapor Hydrocarbon Fingerprints for the Two High Concentration Samples

Notes: See Table 1 for X-axis compound codes. Results below the detection limit are plotted as open bars at the detection limit.

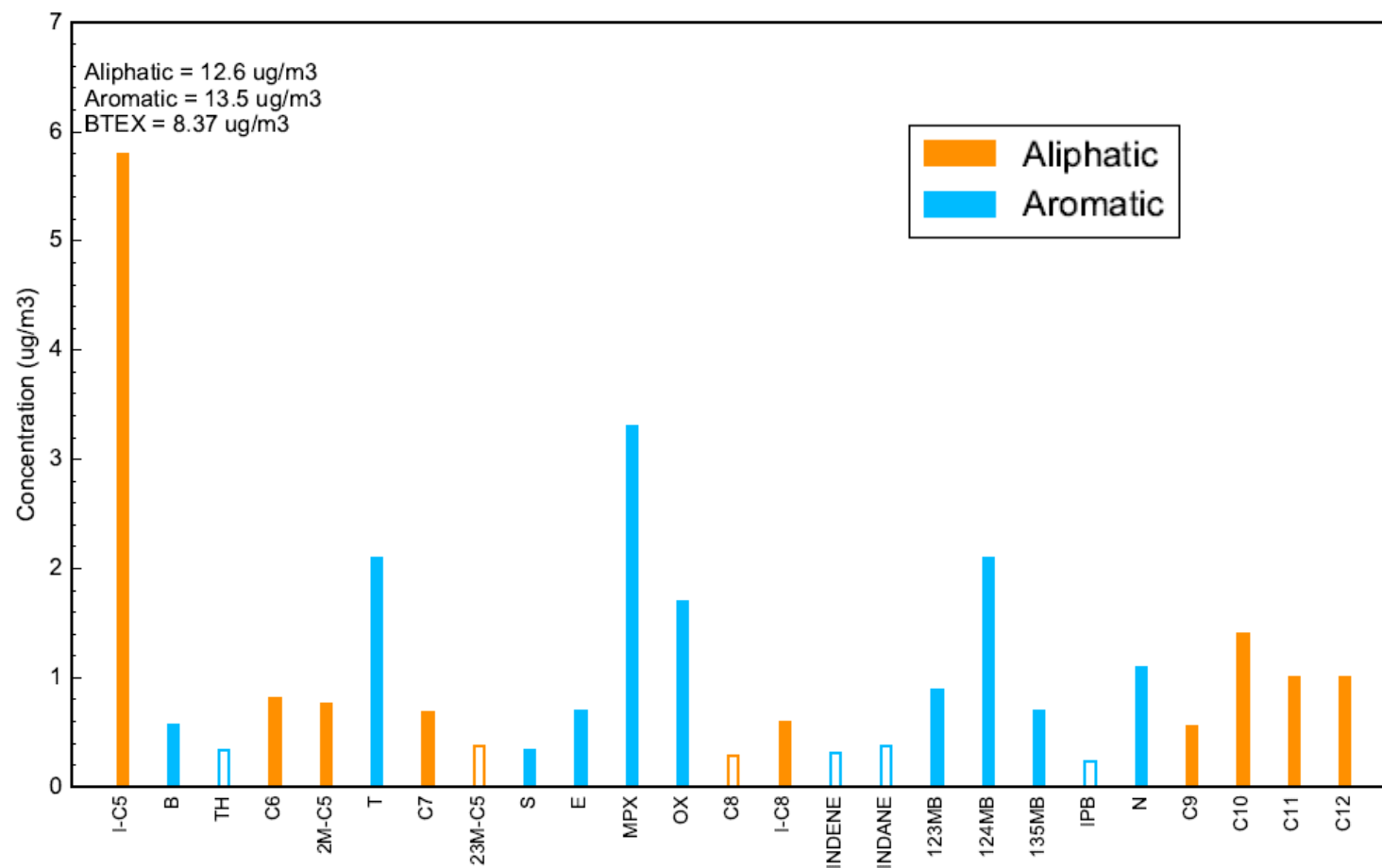


Figure 2
Typical Low Concentration Indoor Air Vapor Hydrocarbon Fingerprint:
Sample IA-2-02-20171015

Notes: See Table 1 for X-axis compound codes. Results below the detection limit are plotted as open bars at the detection limit.

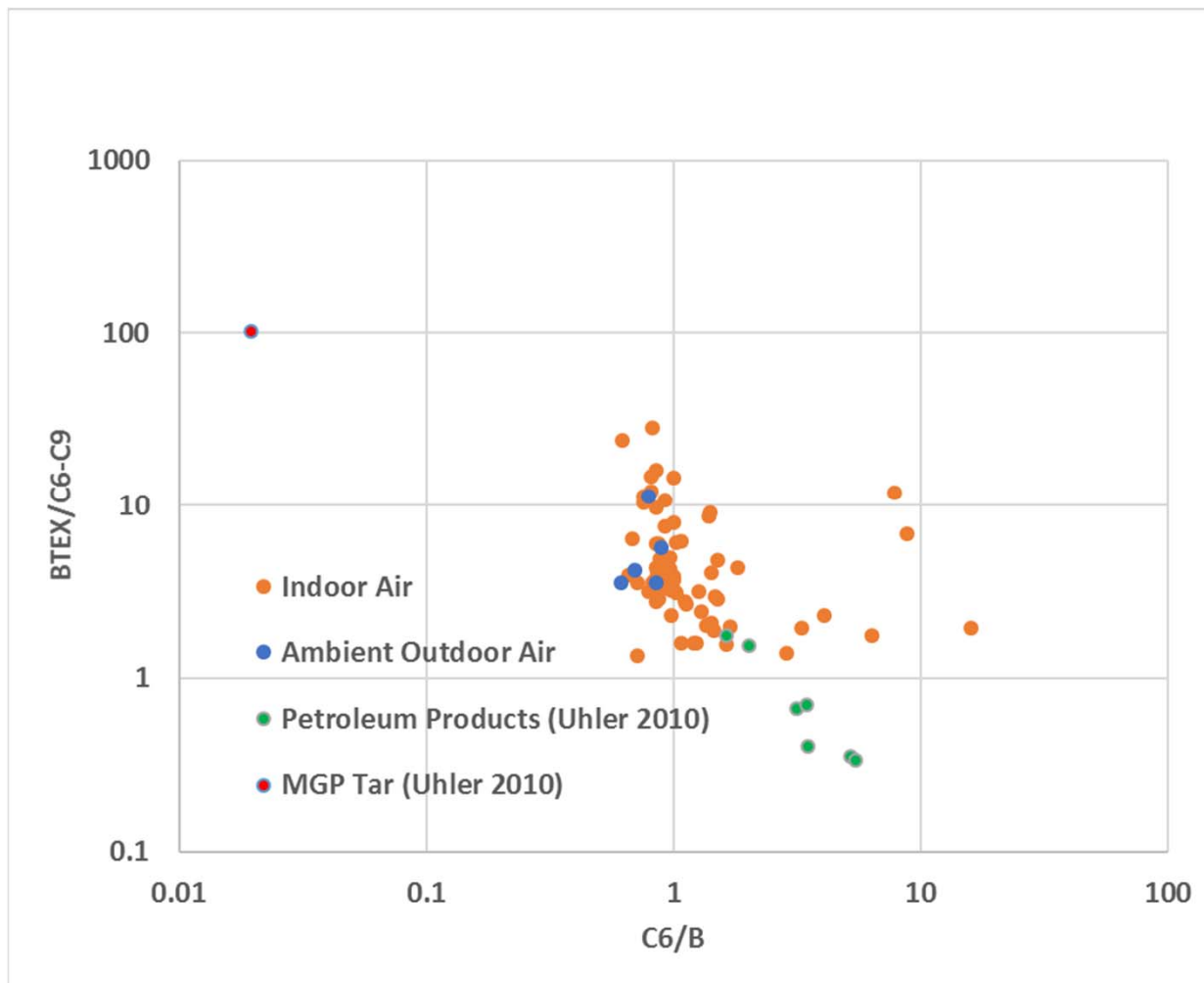


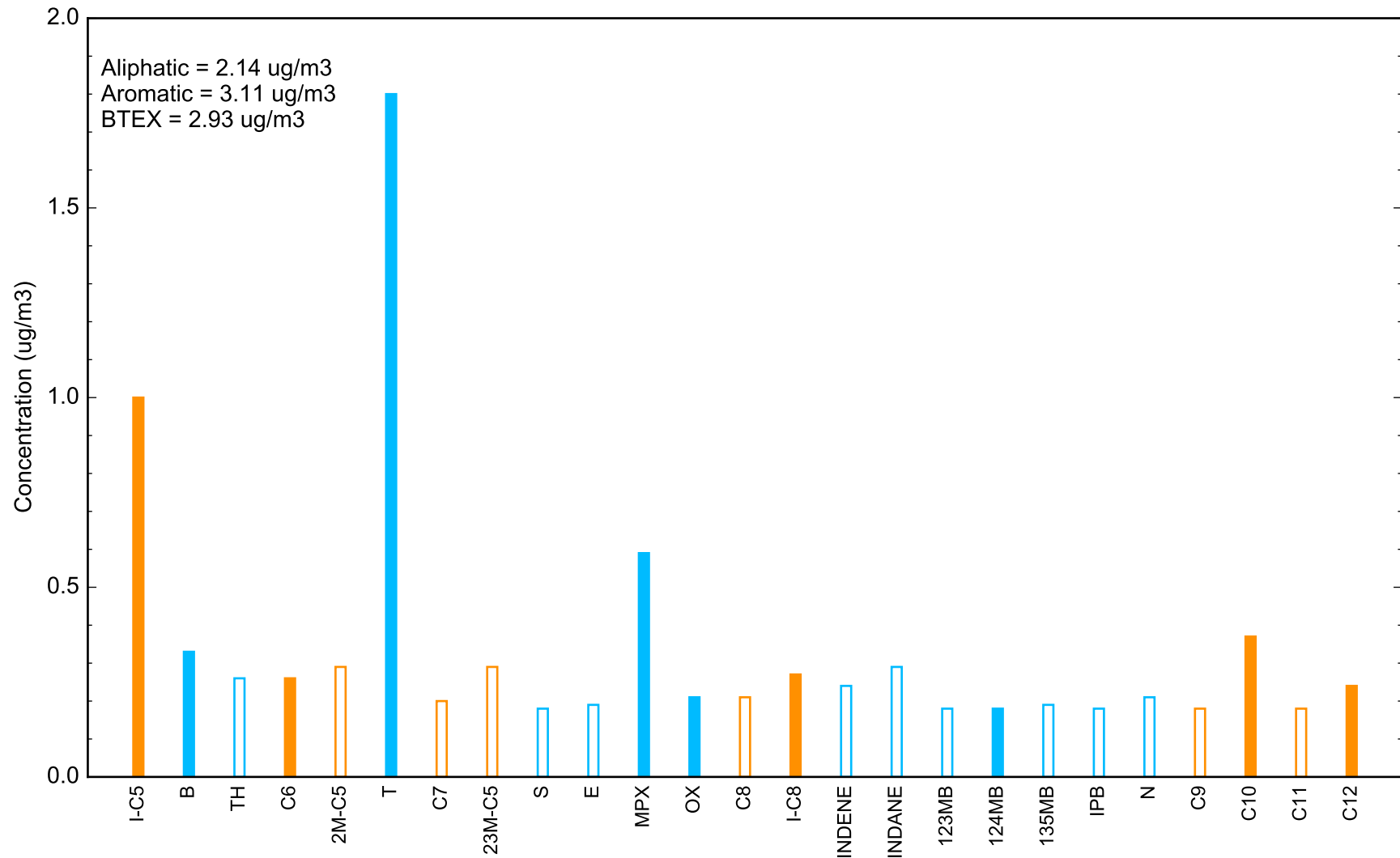
Figure 3
 Diagnostic Air Vapor Hydrocarbon Ratios for Peter Cooper Village 2017 Air Vapor Samples and Representative Air Vapor Ratios for Hydrocarbon Products

Notes: Tar and petroleum product ratios calculated using data from Uhler et al. 2010. BTEX = sum of benzene (B), toluene, ethylbenzene and xylenes; C6-C9 = Sum of n-hexane (C6), n-heptane (C7), n-octane (C8) and n-nonane (C9).

Attachment 1

Hydrocarbon Fingerprint Profile Plots

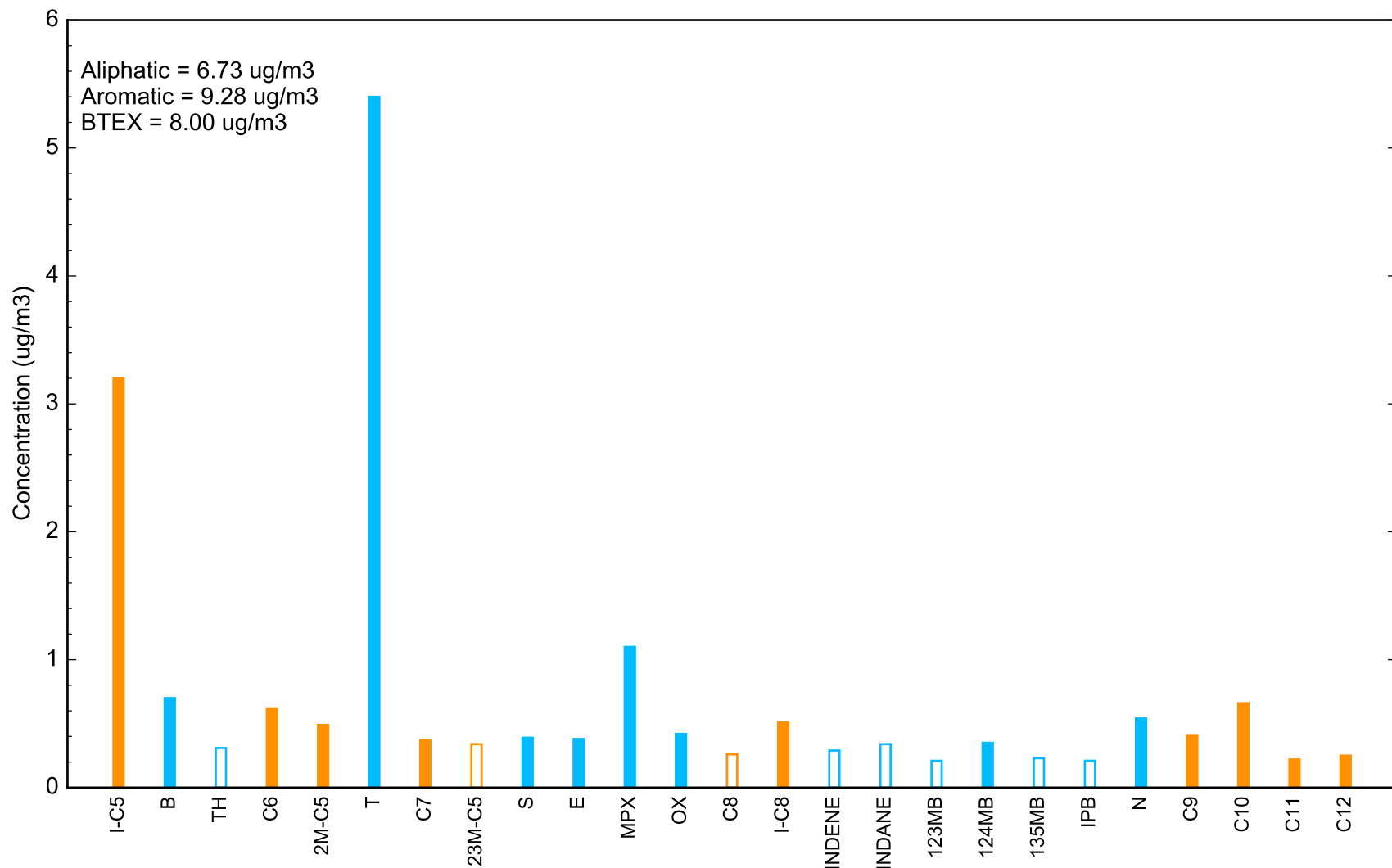
Location: AMB-01
Subfacility: AMBIENT AIR
Date: 2017-10-12 12:58:00



Peter Cooper Village, Figure 1
Concentration of Volatile Organic Compounds: AMB-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.

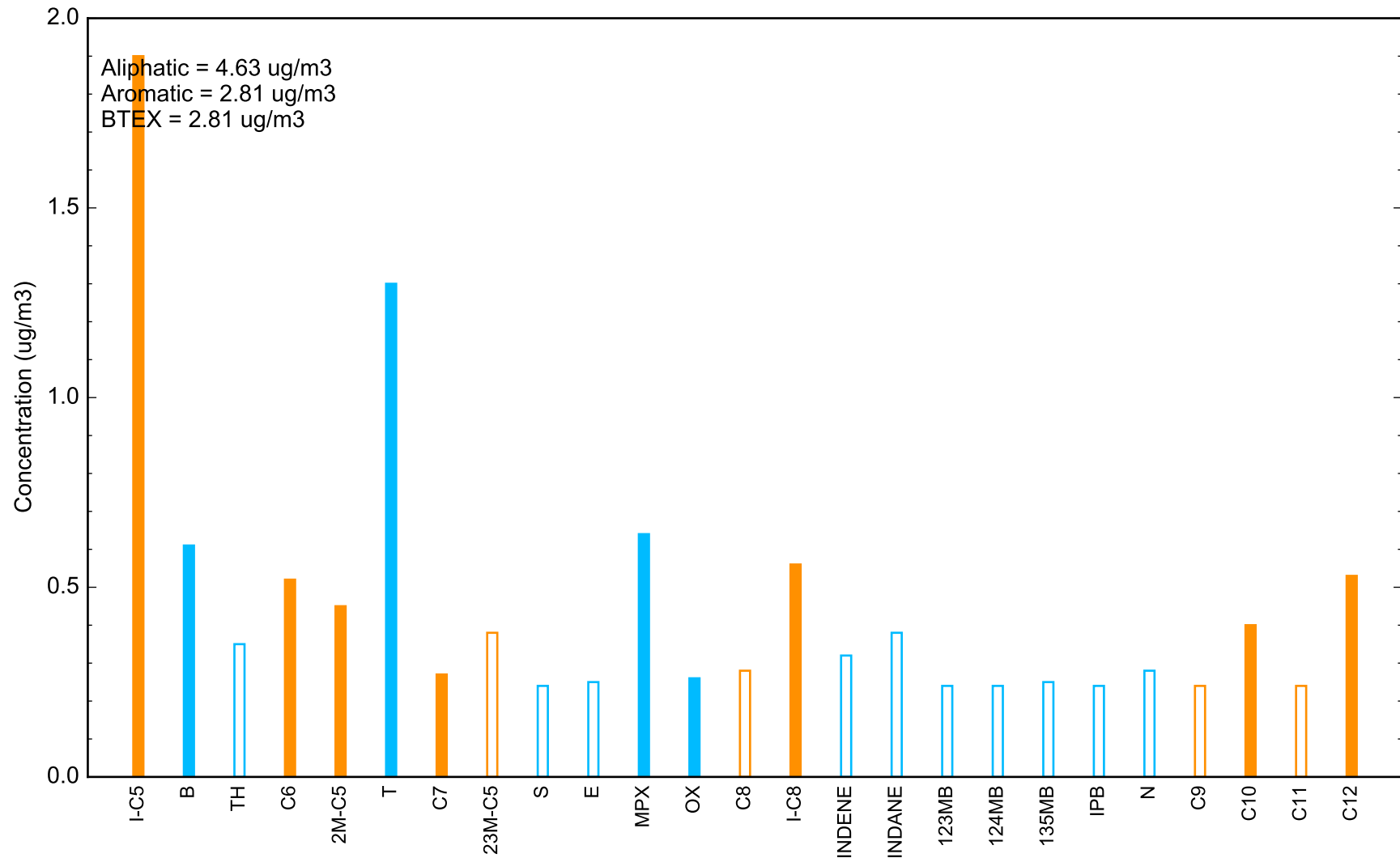
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Subfacility: AMBIENT AIR
Date: 2017-10-13 14:43:00



Peter Cooper Village, Figure 2
Concentration of Volatile Organic Compounds: AB-201710131443

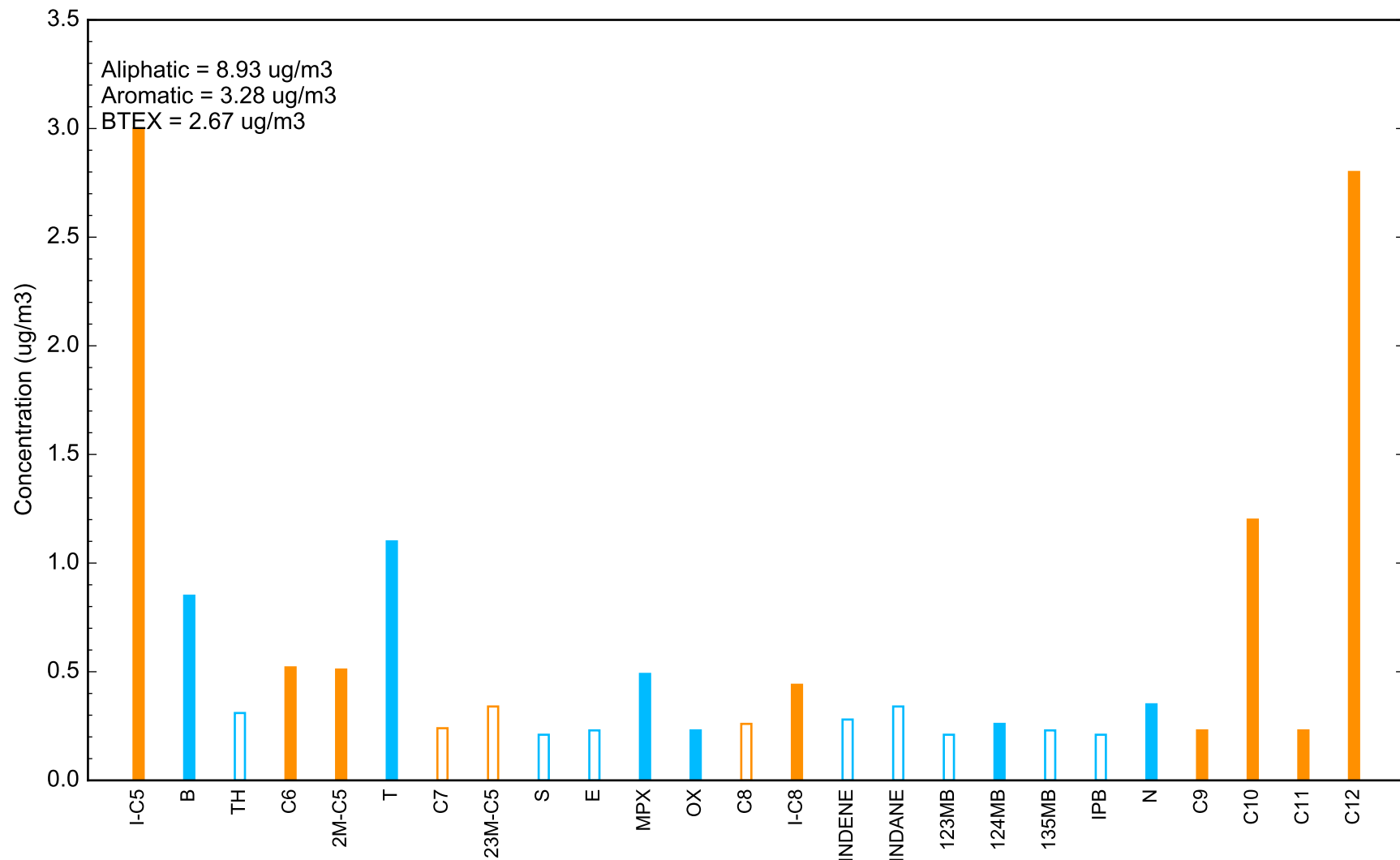
Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.

Location: AMB-03
Subfacility: AMBIENT AIR
Date: 2017-10-14 16:50:00



Peter Cooper Village, Figure 3
Concentration of Volatile Organic Compounds: AB-201710141650
*Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*

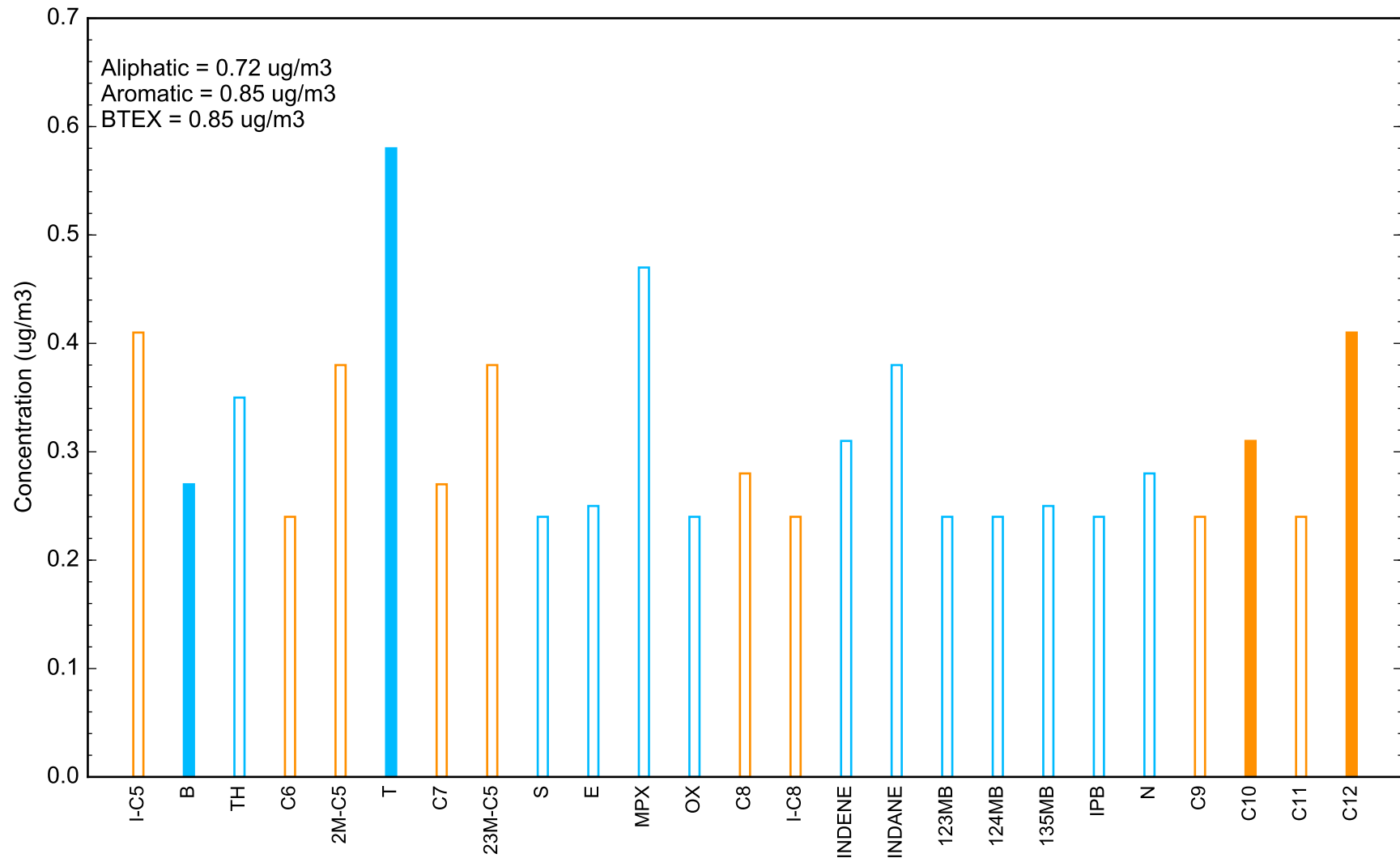
Location: AMB-04
Subfacility: AMBIENT AIR
Date: 2017-10-15 17:17:00



Peter Cooper Village, Figure 4
Concentration of Volatile Organic Compounds: AB-201710151717

*Results less than detection limit set to detection limit and plotted unfilled.
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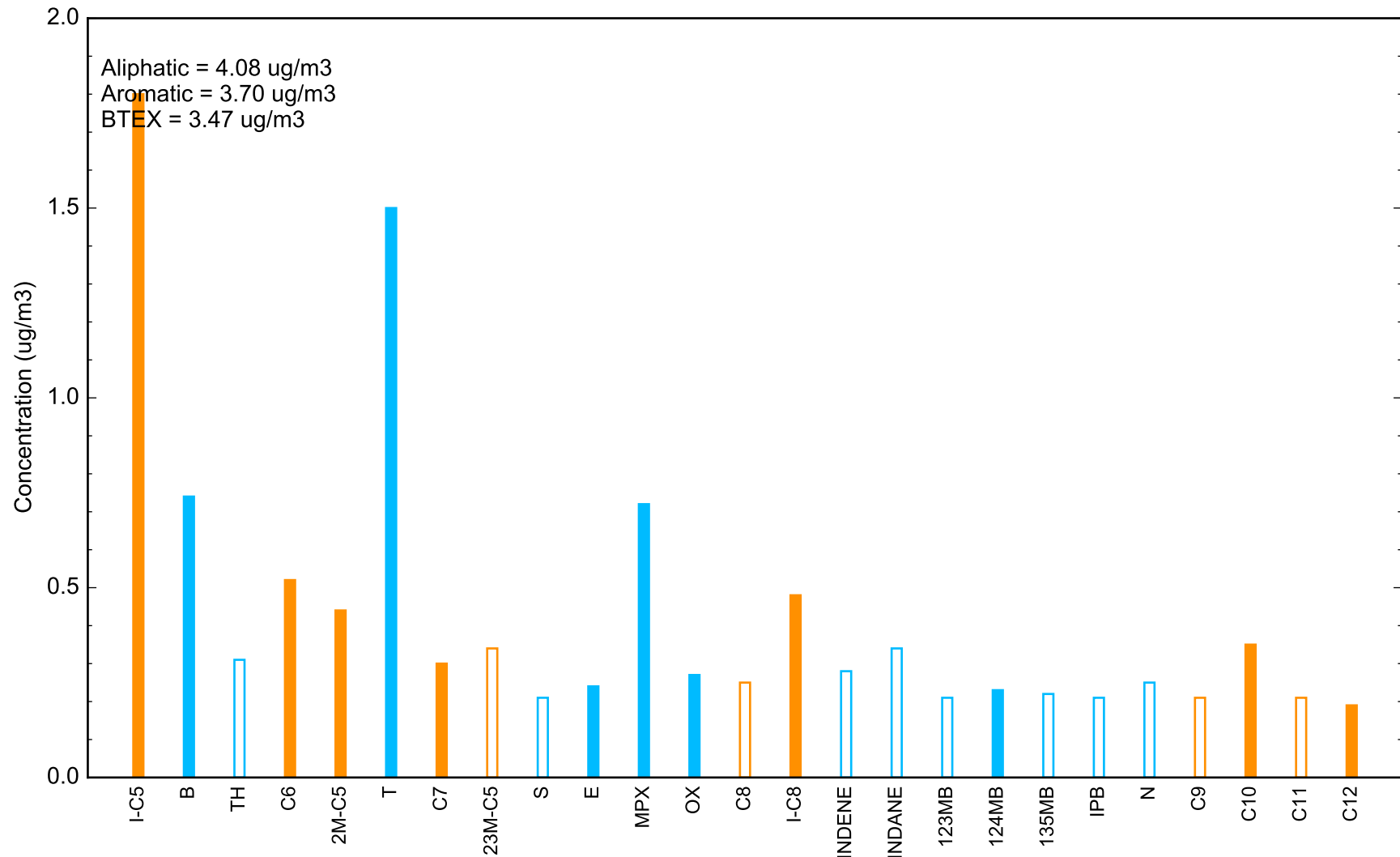
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Peter Cooper Village, Figure 5
Concentration of Volatile Organic Compounds: AB-201710161655

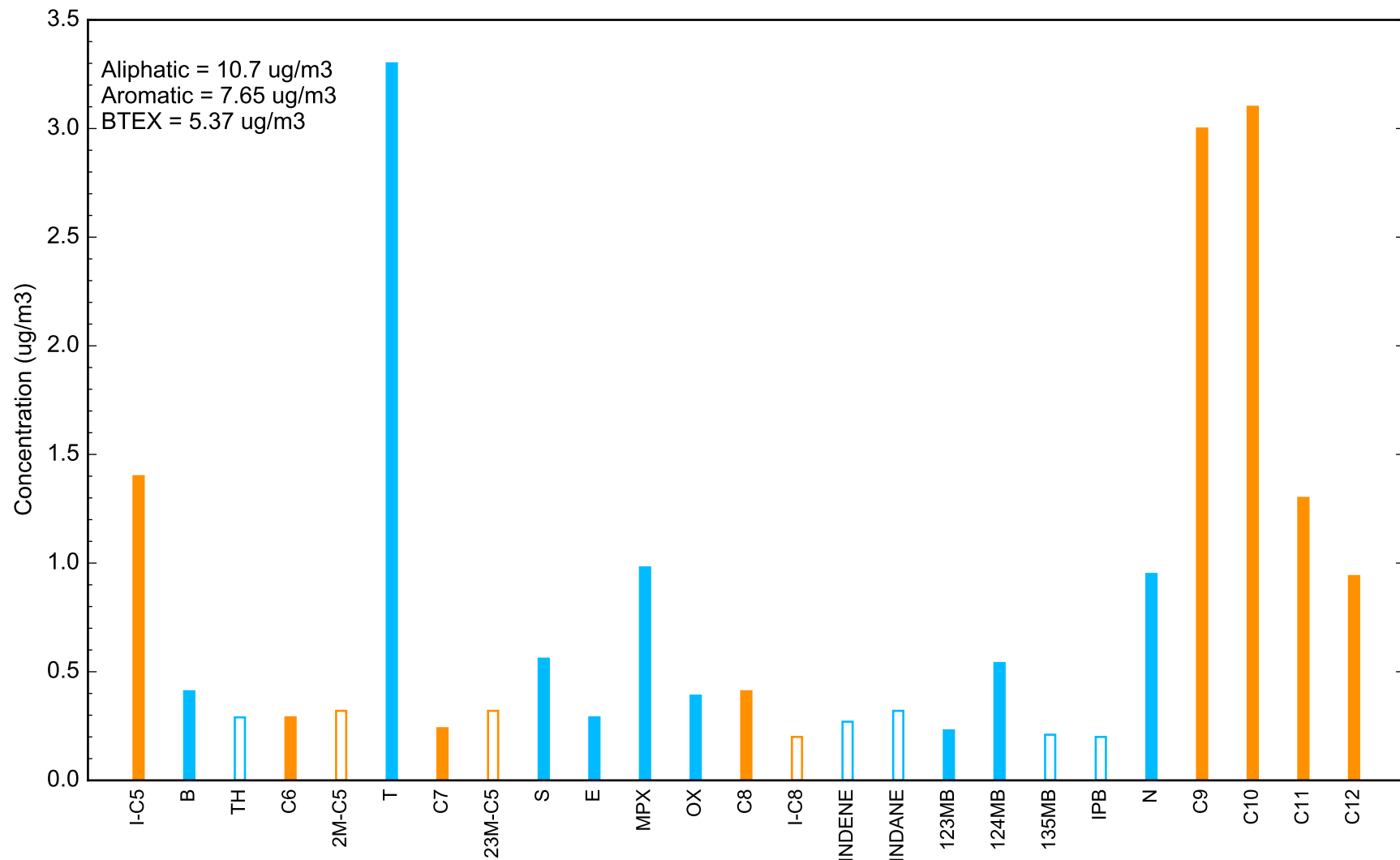
Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.

Location: AMB-06
Subfacility: AMBIENT AIR
Date: 2017-10-17 15:15:00



Peter Cooper Village, Figure 6
Concentration of Volatile Organic Compounds: AB-201710171515
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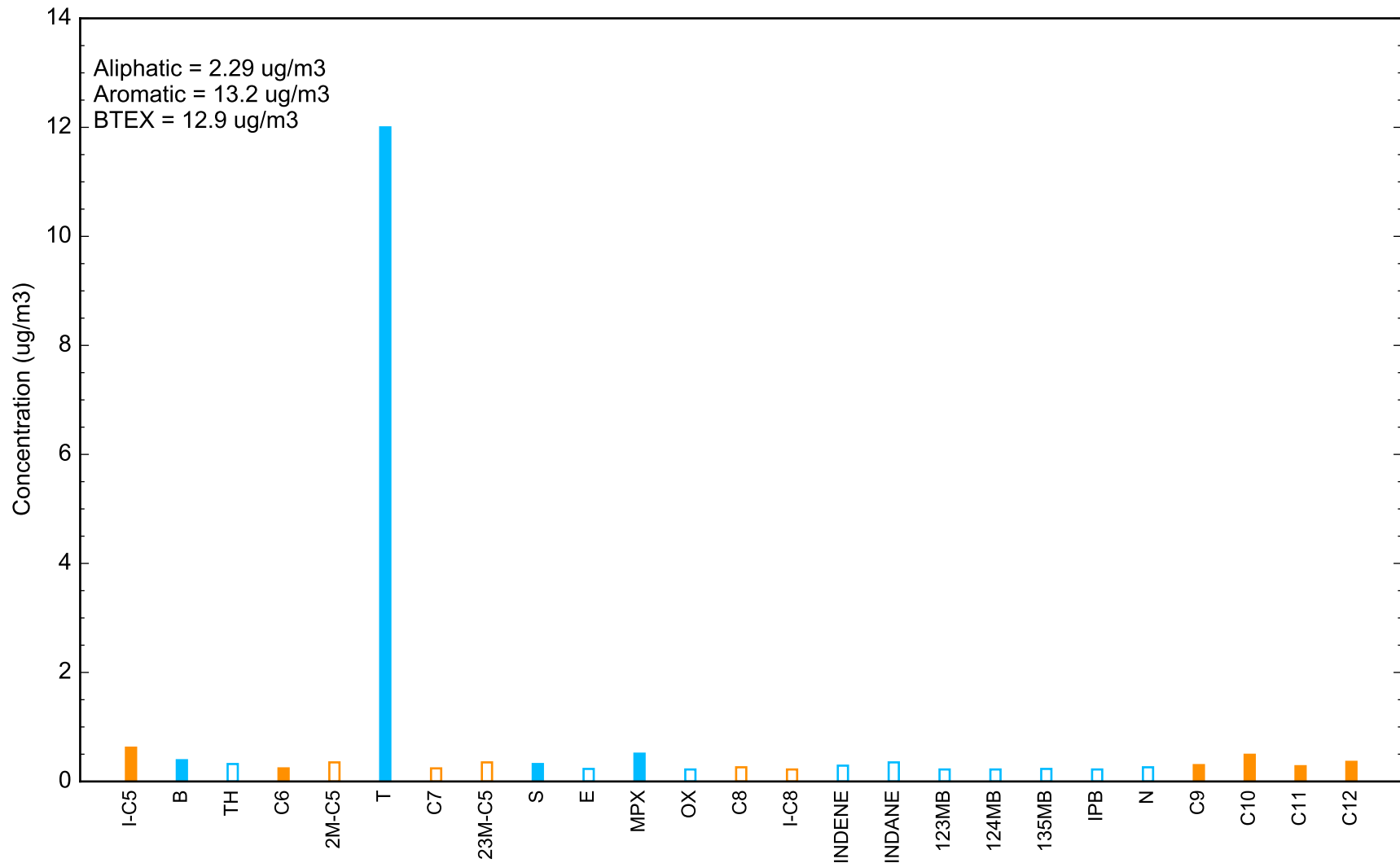
Location: IA-16ST-01
Subfacility: 16ST
Date: 2017-10-16 15:01:00



Peter Cooper Village, Figure 7
Concentration of Volatile Organic Compounds: IA-16ST-01-20171016

Results less than detection limit set to detection limit and plotted unfilled.
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Subfacility: 16ST
Date: 2017-10-16 17:37:00



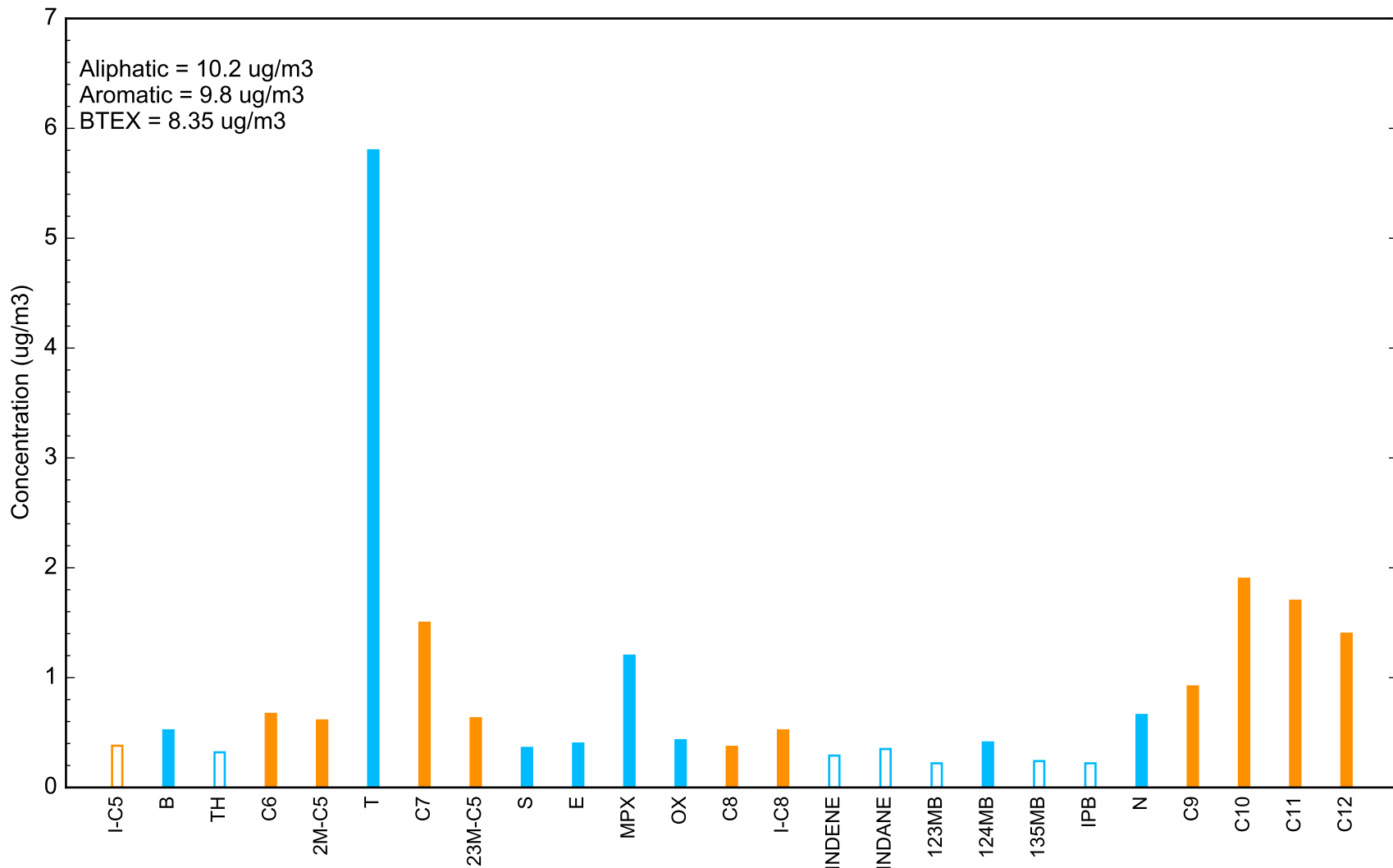
Peter Cooper Village, Figure 8

Concentration of Volatile Organic Compounds: IA-16ST-02-20171016

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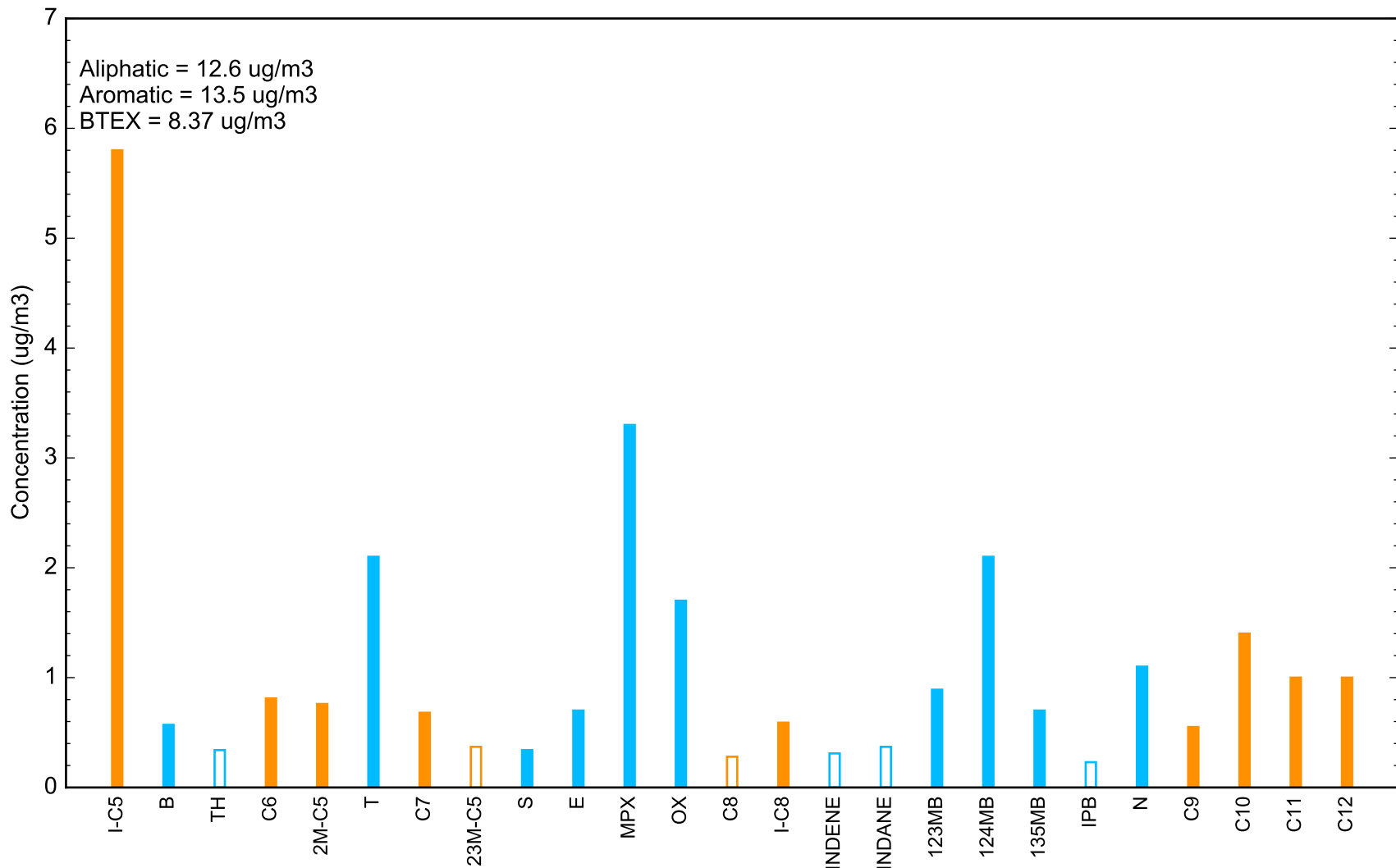


Location: IA-2-01
Subfacility: 2
Date: 2017-10-15 16:28:00



Peter Cooper Village, Figure 9
Concentration of Volatile Organic Compounds: IA-2-01-20171015
*Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*

Location: IA-2-02
Subfacility: 2
Date: 2017-10-15 16:20:00



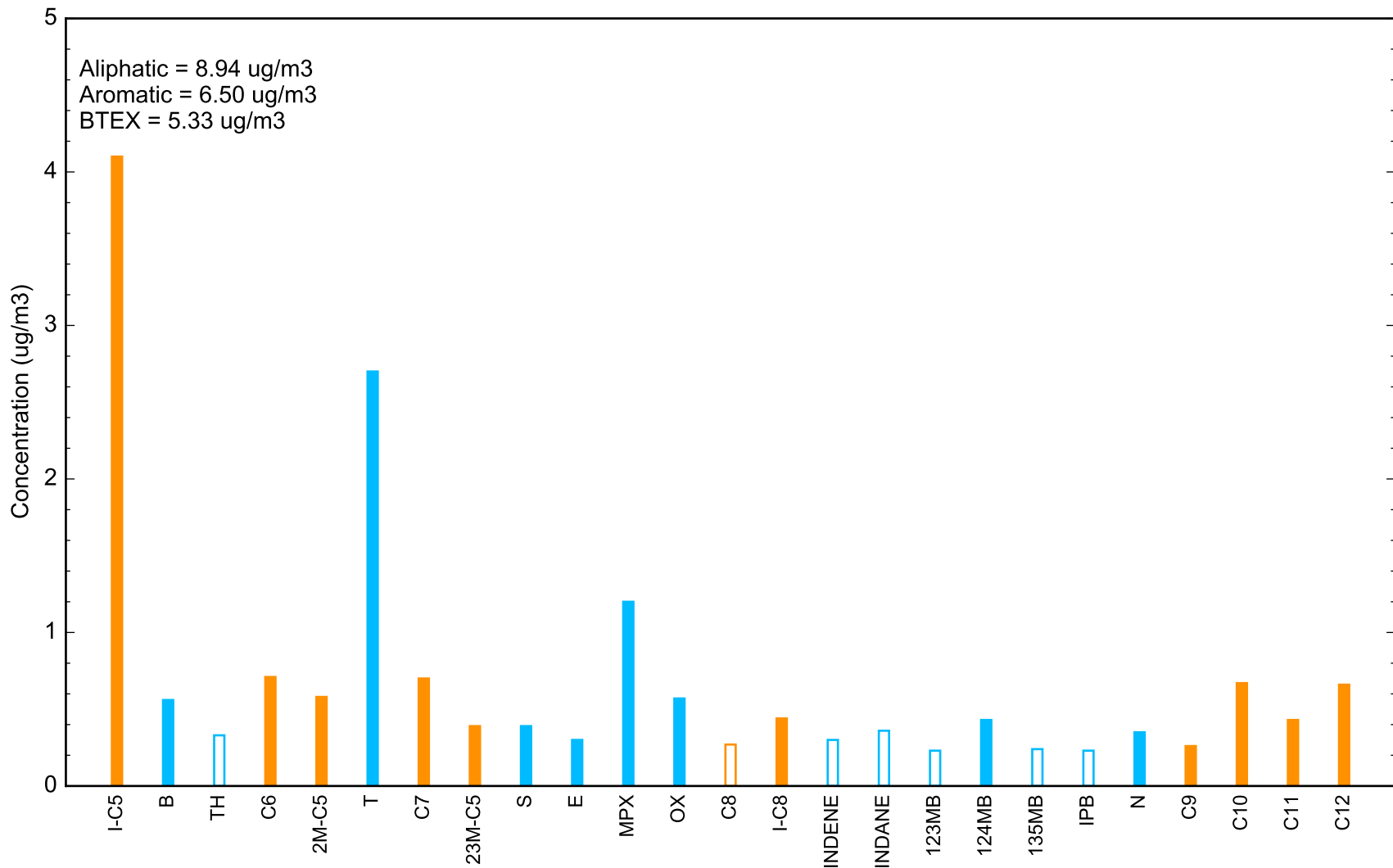
Peter Cooper Village, Figure 10

Concentration of Volatile Organic Compounds: IA-2-02-20171015

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Subfacility: 2
Date: 2017-10-15 16:35:00



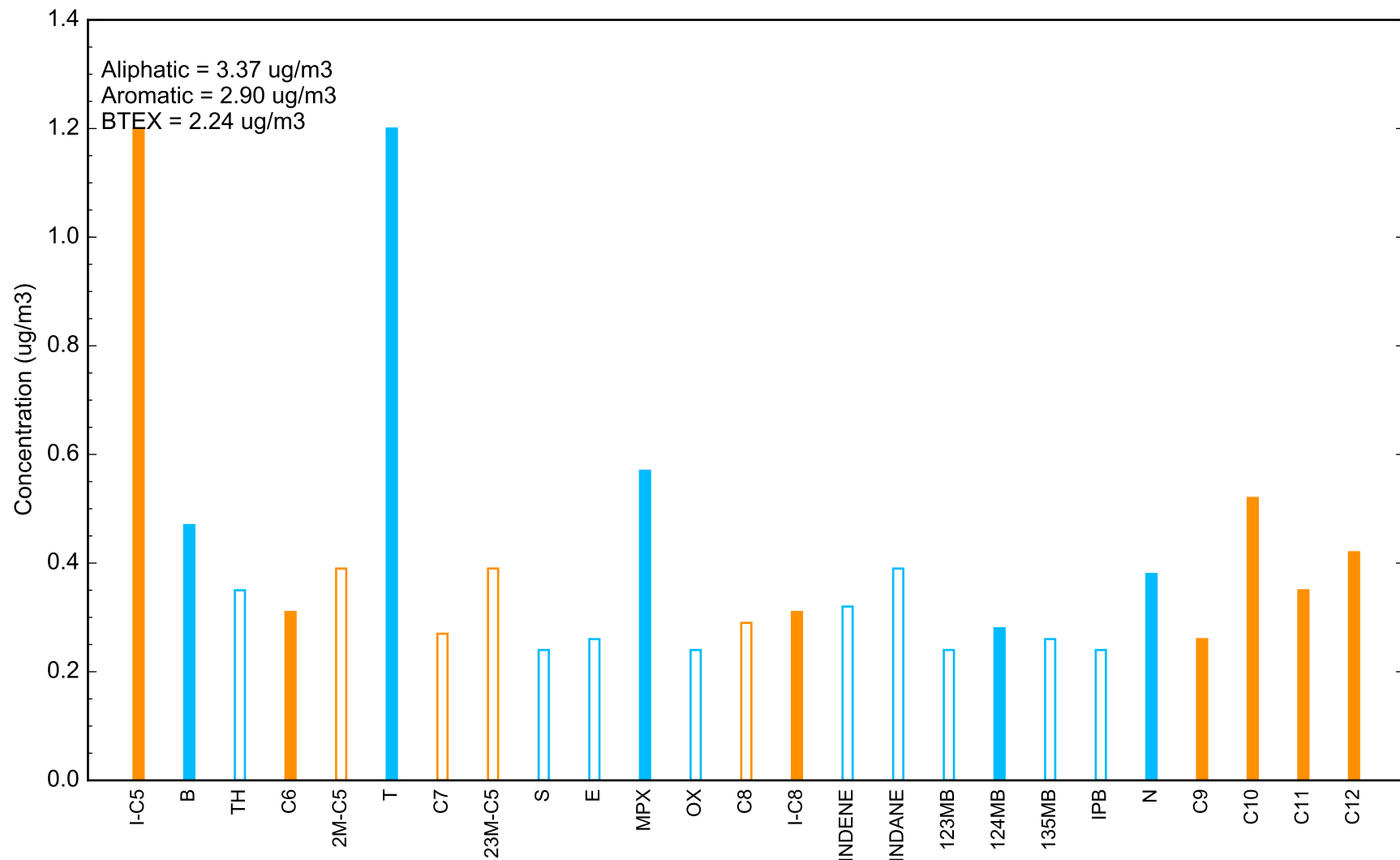
Peter Cooper Village, Figure 11

Concentration of Volatile Organic Compounds: IA-2-03-20171015

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Location: IA-245ST-01
Subfacility: 245ST
Date: 2017-10-17 07:50:00



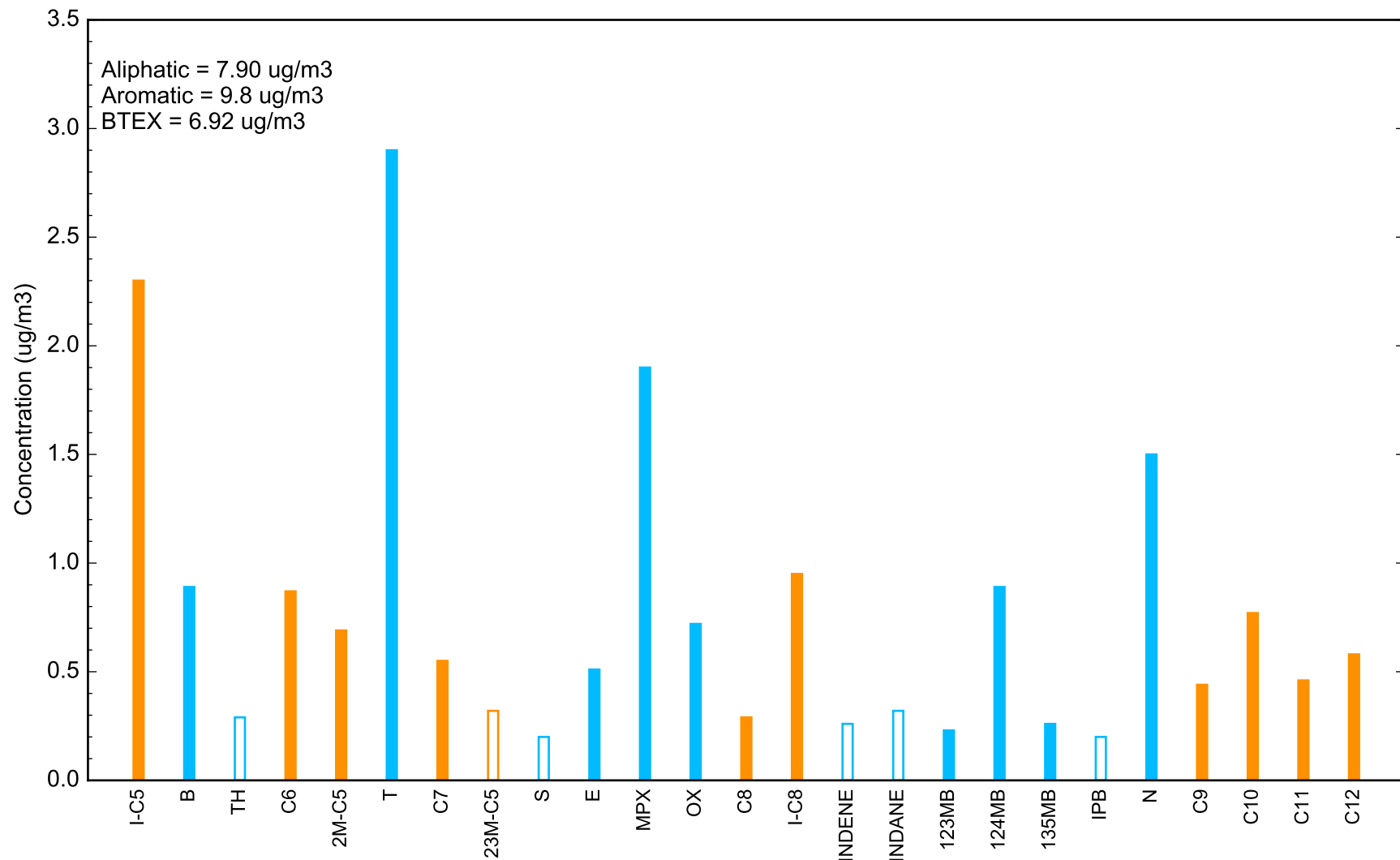
Peter Cooper Village, Figure 12

Concentration of Volatile Organic Compounds: IA-245ST-01-20171017

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-245ST-02
Subfacility: 245ST
Date: 2017-10-17 07:52:00



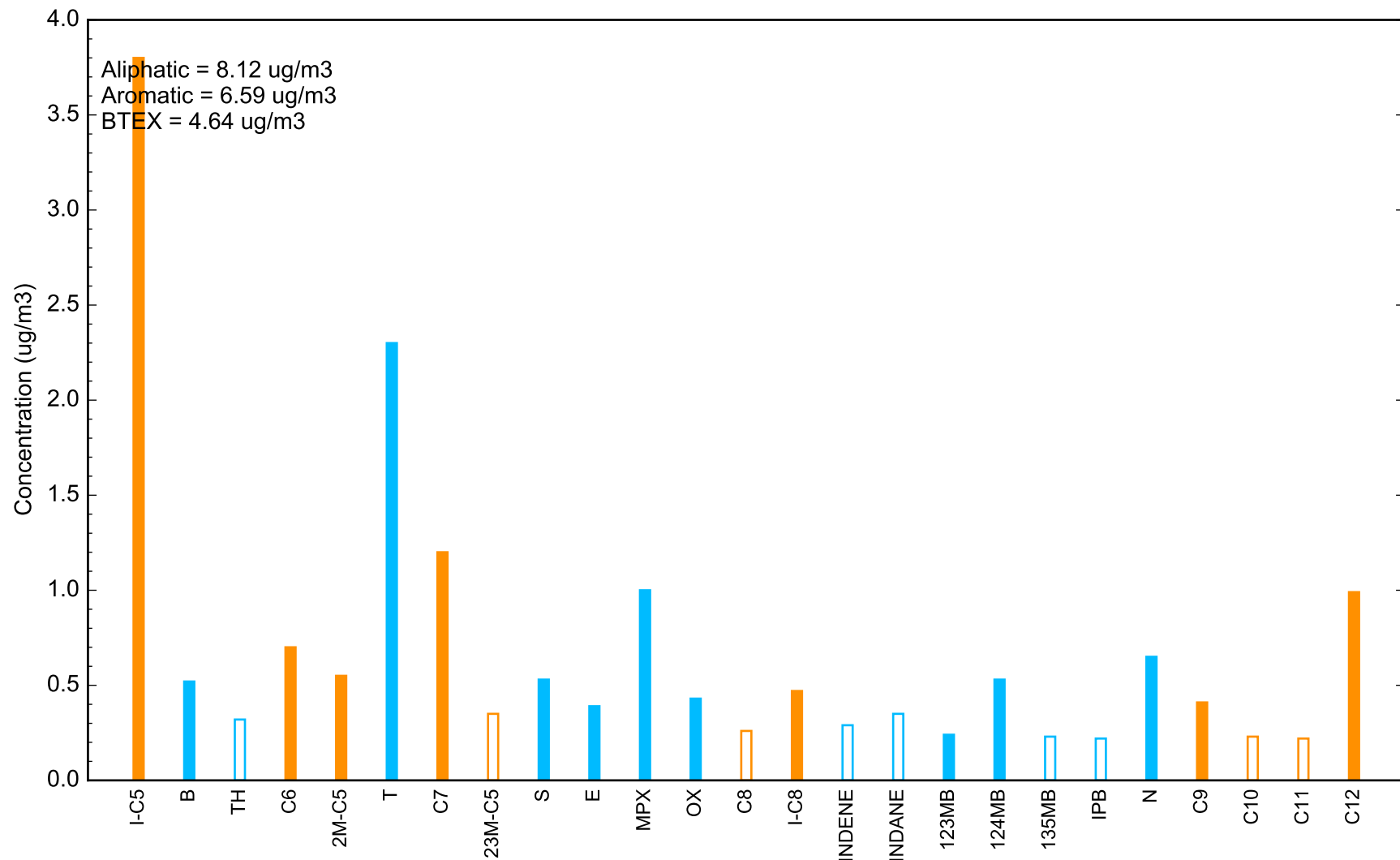
Peter Cooper Village, Figure 13

Concentration of Volatile Organic Compounds: IA-245ST-02-20171017

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Location: IA-3-01
Subfacility: 3
Date: 2017-10-14 16:18:00



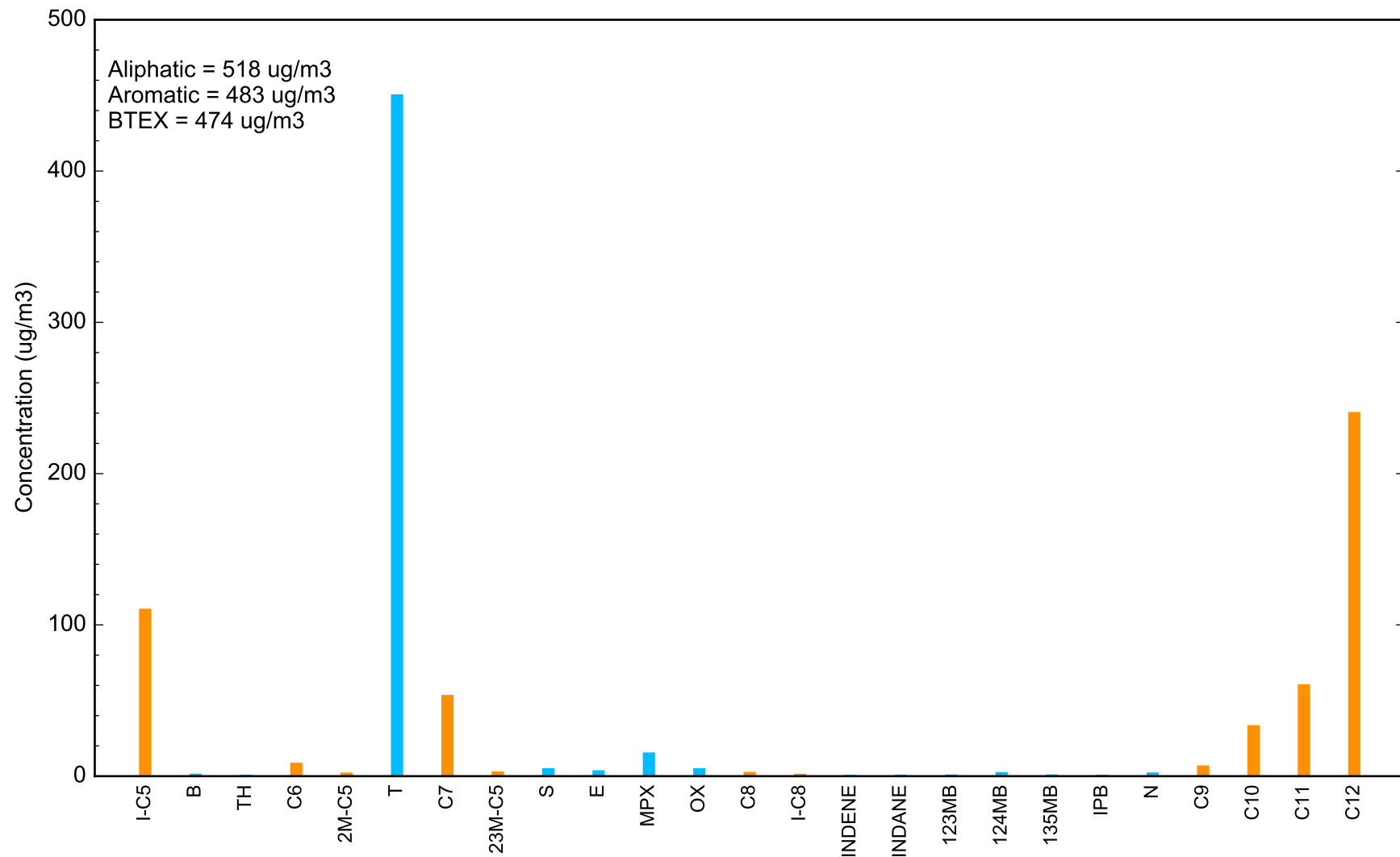
Peter Cooper Village, Figure 14

Concentration of Volatile Organic Compounds: IA-3-01-20171014

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Subfacility: 3
Date: 2017-10-14 16:20:00



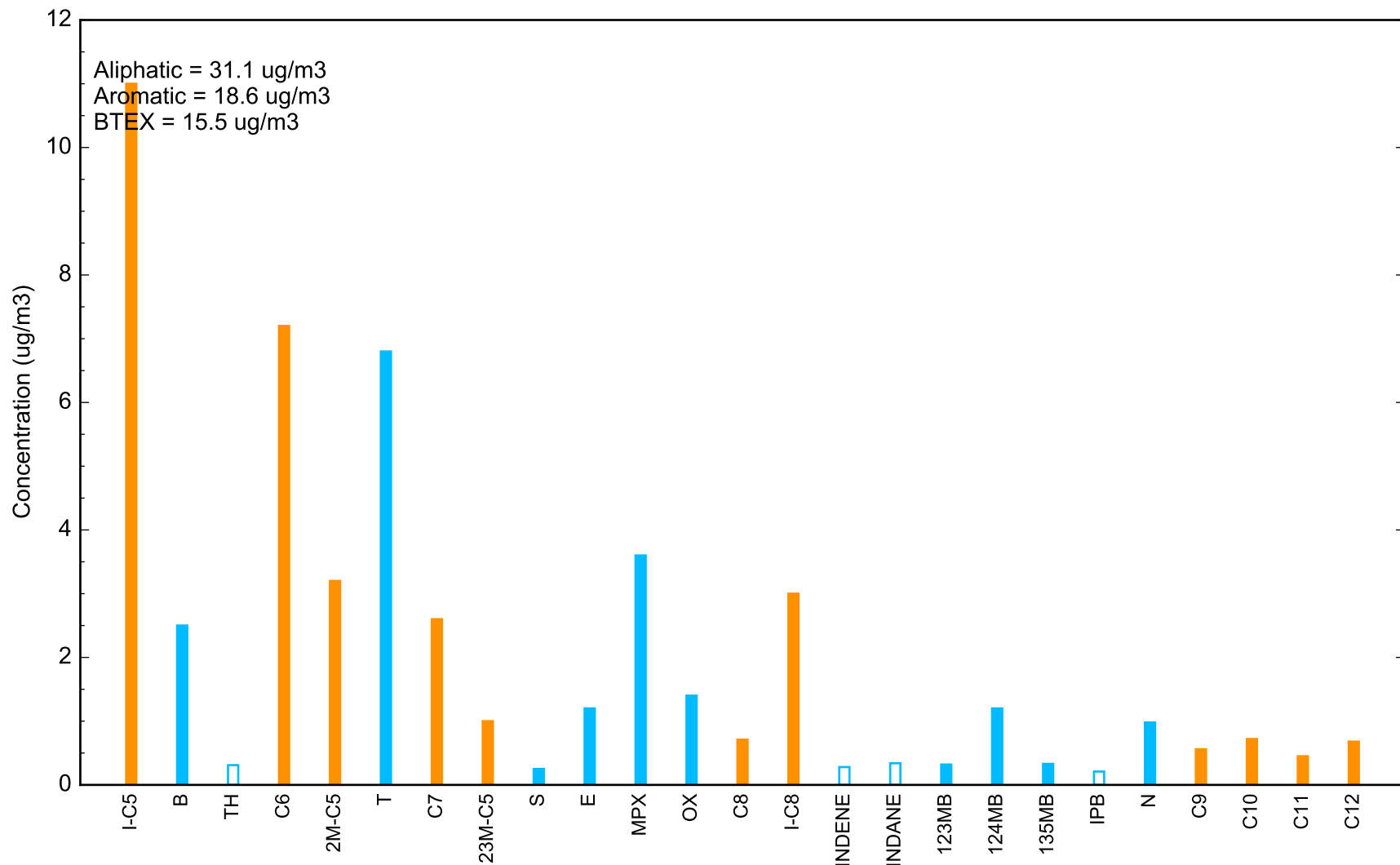
Peter Cooper Village, Figure 15

Concentration of Volatile Organic Compounds: IA-3-02-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-315ST-DAYCARE
Subfacility: 315ST
Date: 2017-10-17 15:35:00



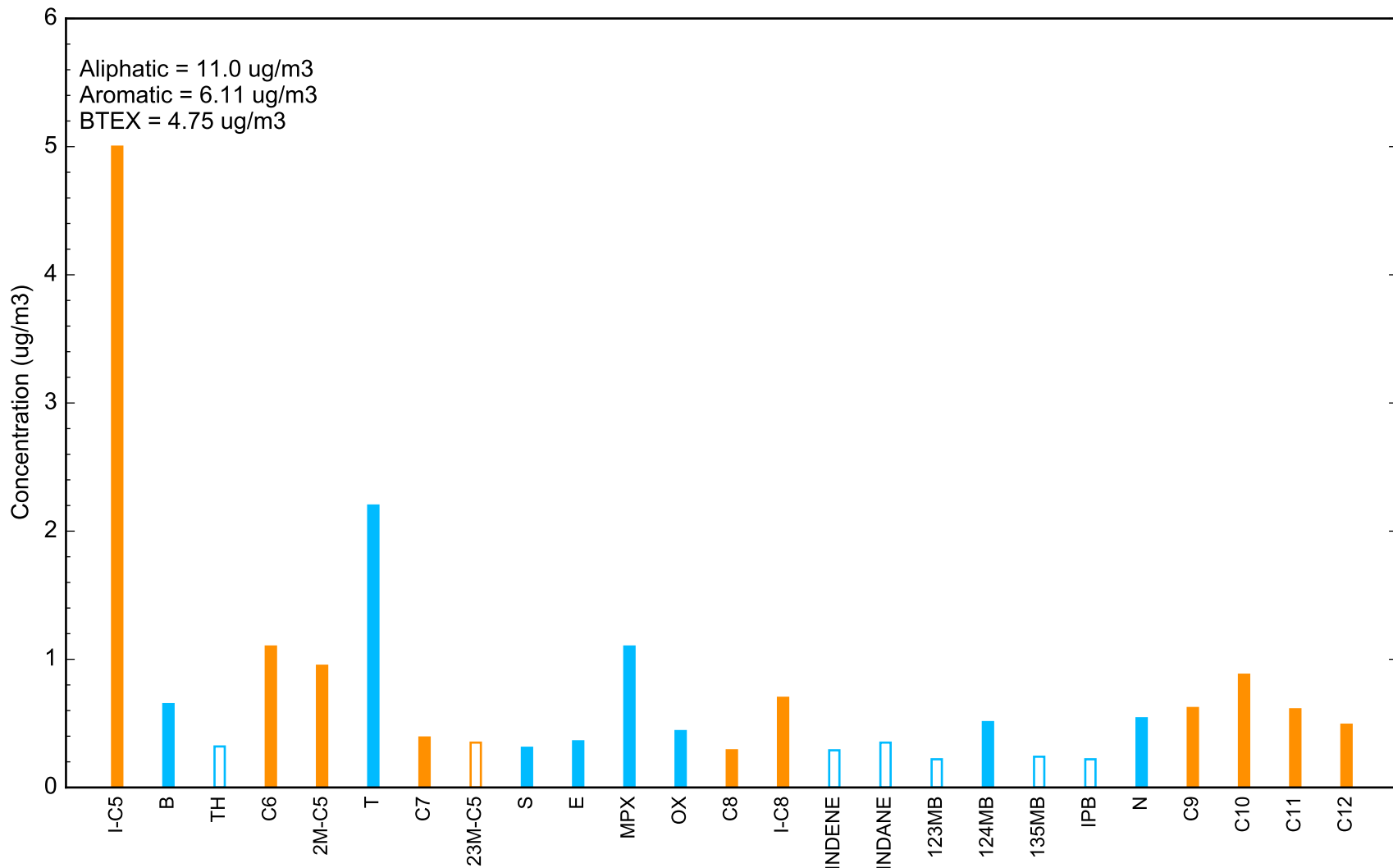
Peter Cooper Village, Figure 16

Concentration of Volatile Organic Compounds: IA-315ST-DAYCARE-20171017

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Location: IA-350-01
Subfacility: 350
Date: 2017-10-15 15:57:00



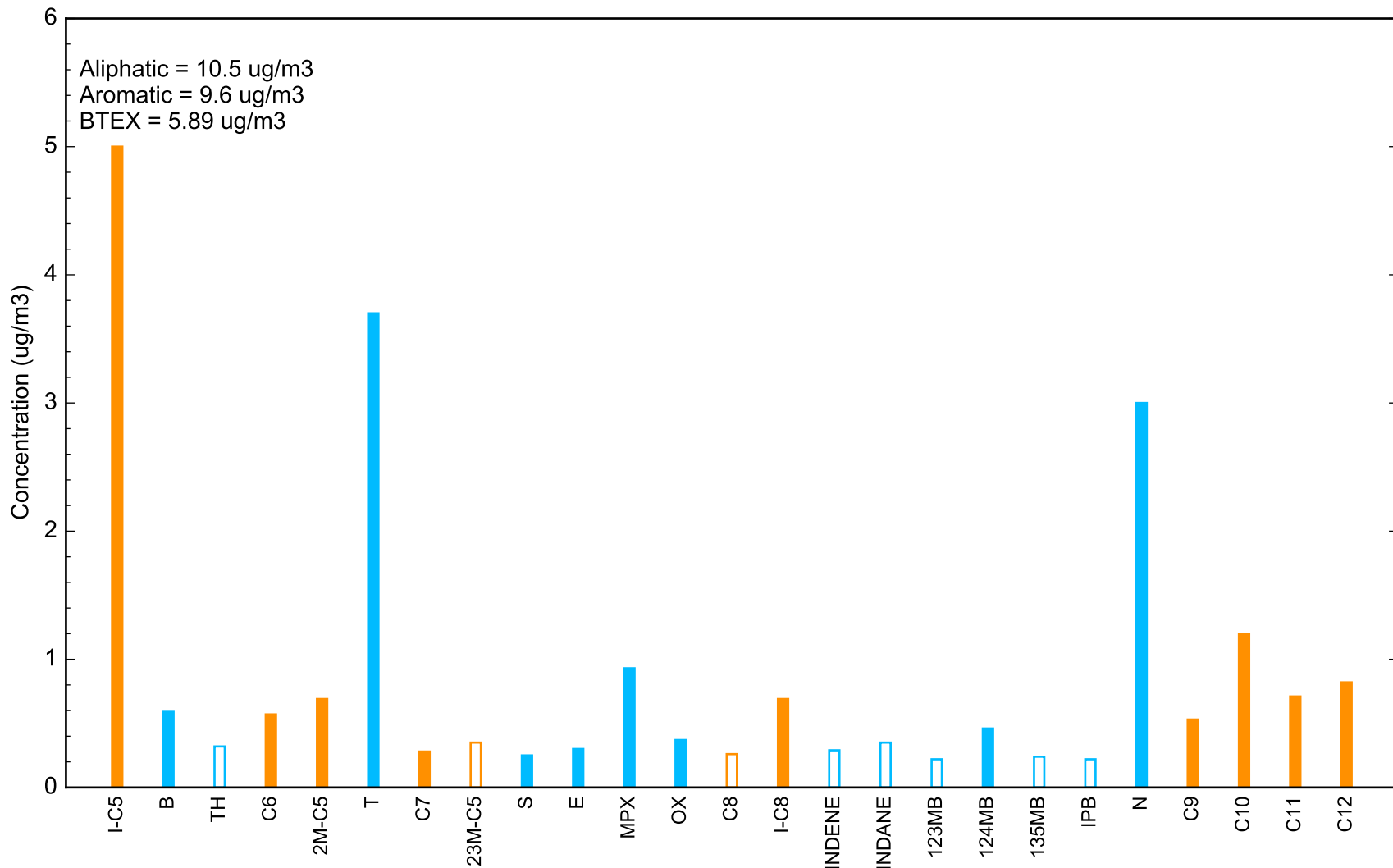
Peter Cooper Village, Figure 17

Concentration of Volatile Organic Compounds: IA-350-01-20171015

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Location: IA-350-02
Subfacility: 350
Date: 2017-10-15 15:58:00



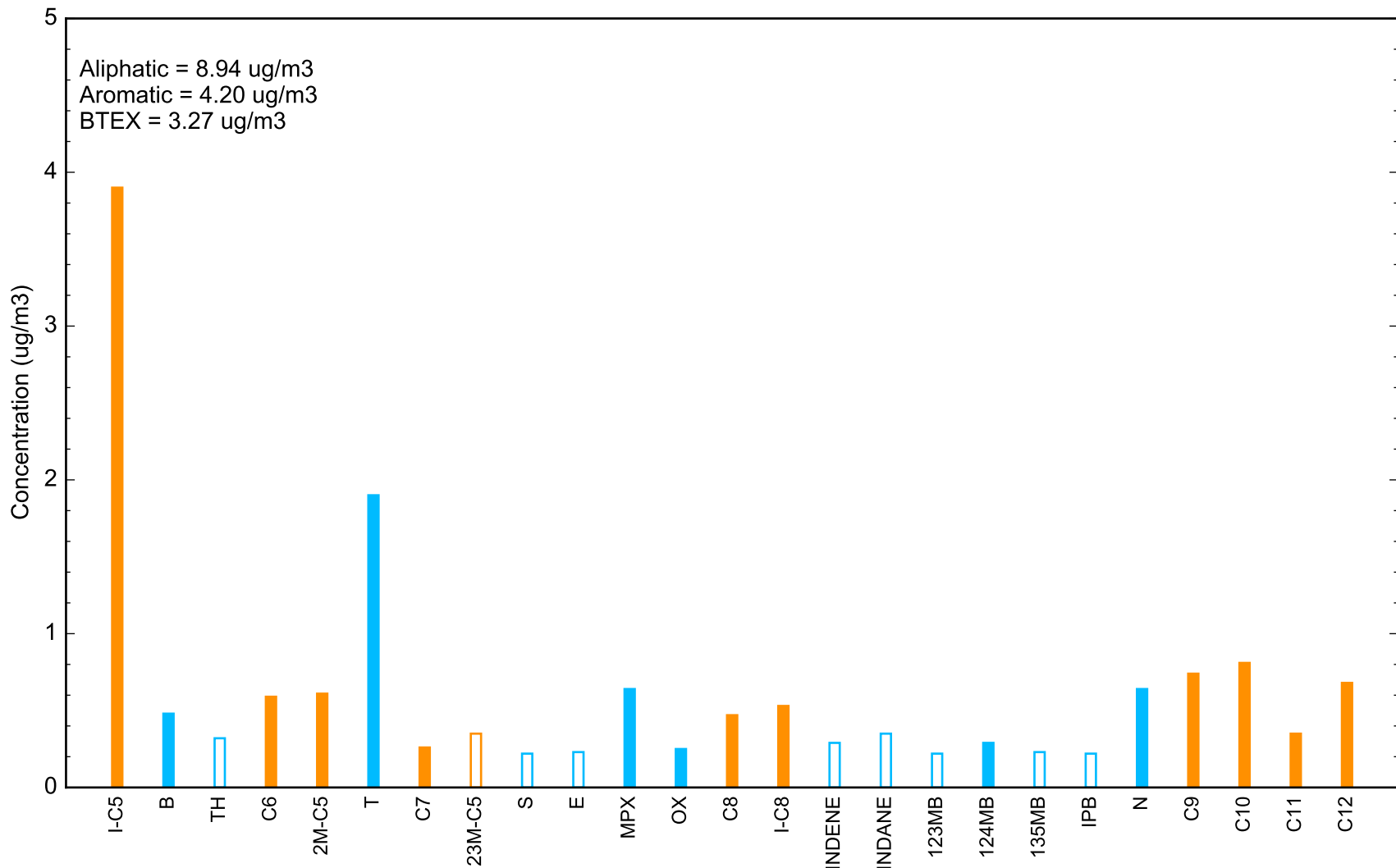
Peter Cooper Village, Figure 18

Concentration of Volatile Organic Compounds: IA-350-02-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-350-03
Subfacility: 350
Date: 2017-10-15 16:54:00



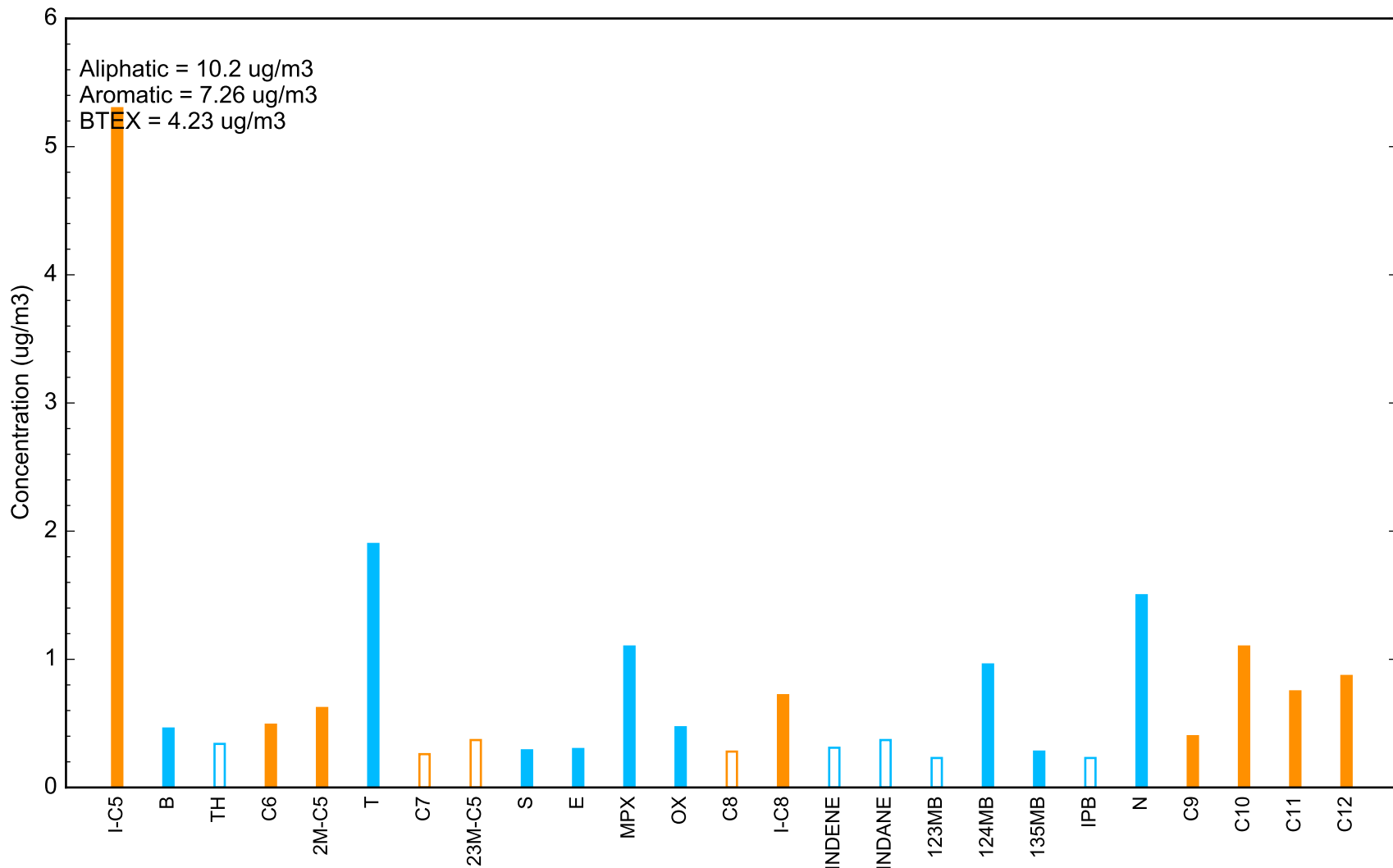
Peter Cooper Village, Figure 19

Concentration of Volatile Organic Compounds: IA-350-03-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-360-01
Subfacility: 360
Date: 2017-10-15 17:46:00



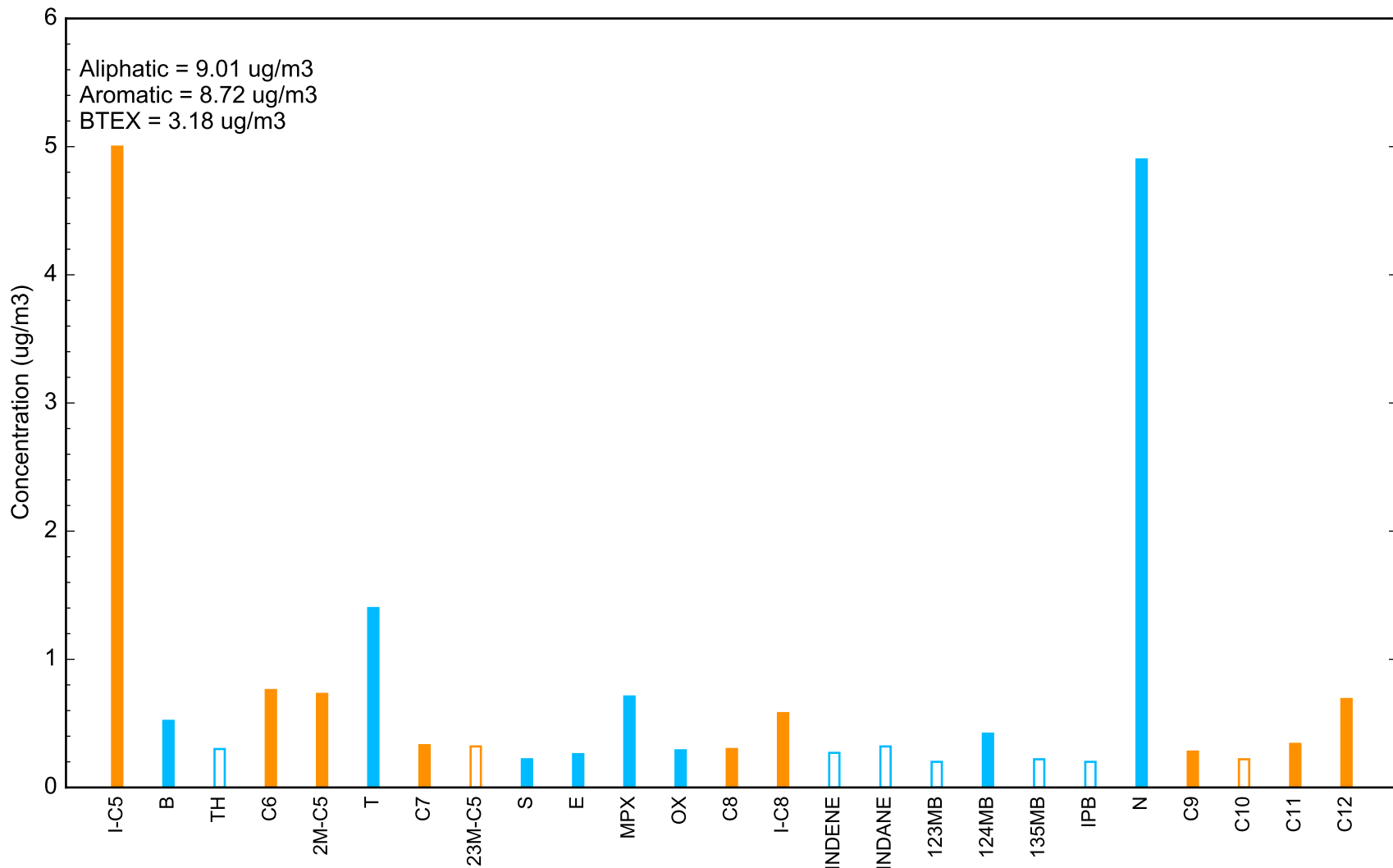
Peter Cooper Village, Figure 20

Concentration of Volatile Organic Compounds: IA-360-01-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-360-02
Subfacility: 360
Date: 2017-10-15 11:12:00



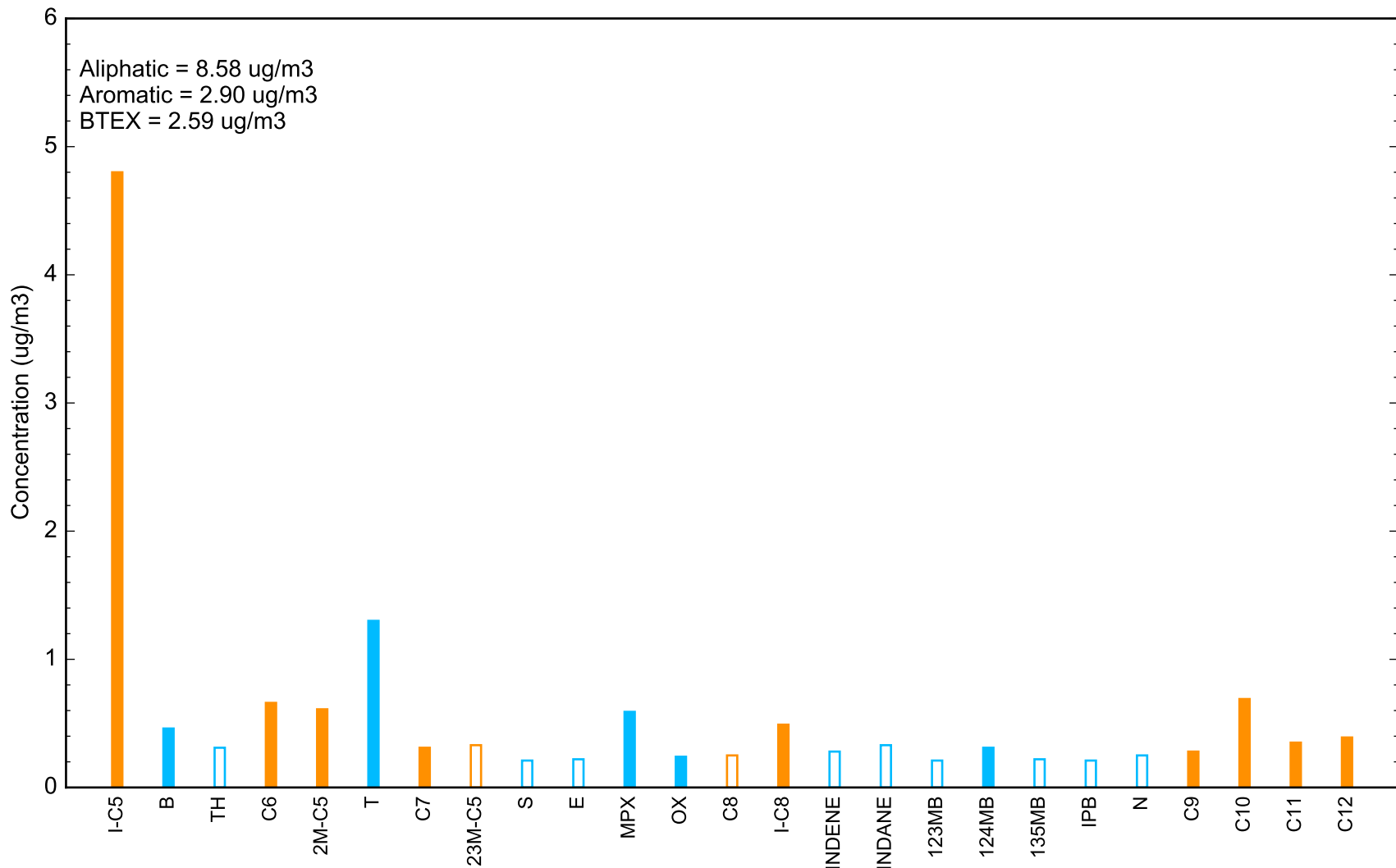
Peter Cooper Village, Figure 21

Concentration of Volatile Organic Compounds: IA-360-02-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-360-03
Subfacility: 360
Date: 2017-10-15 17:05:00



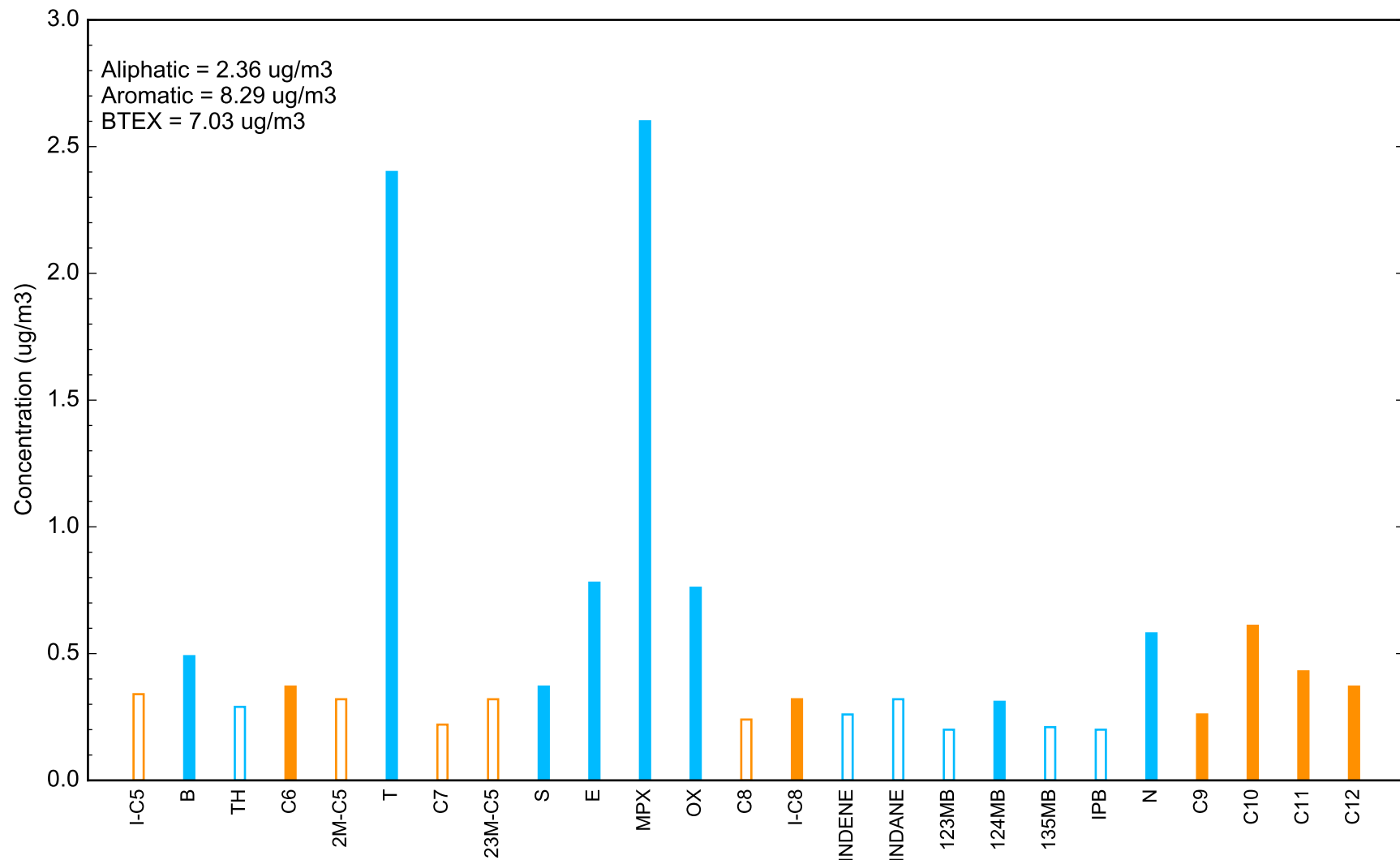
Peter Cooper Village, Figure 22

Concentration of Volatile Organic Compounds: IA-360-03-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-370-01
Subfacility: 370
Date: 2017-10-13 16:28:00



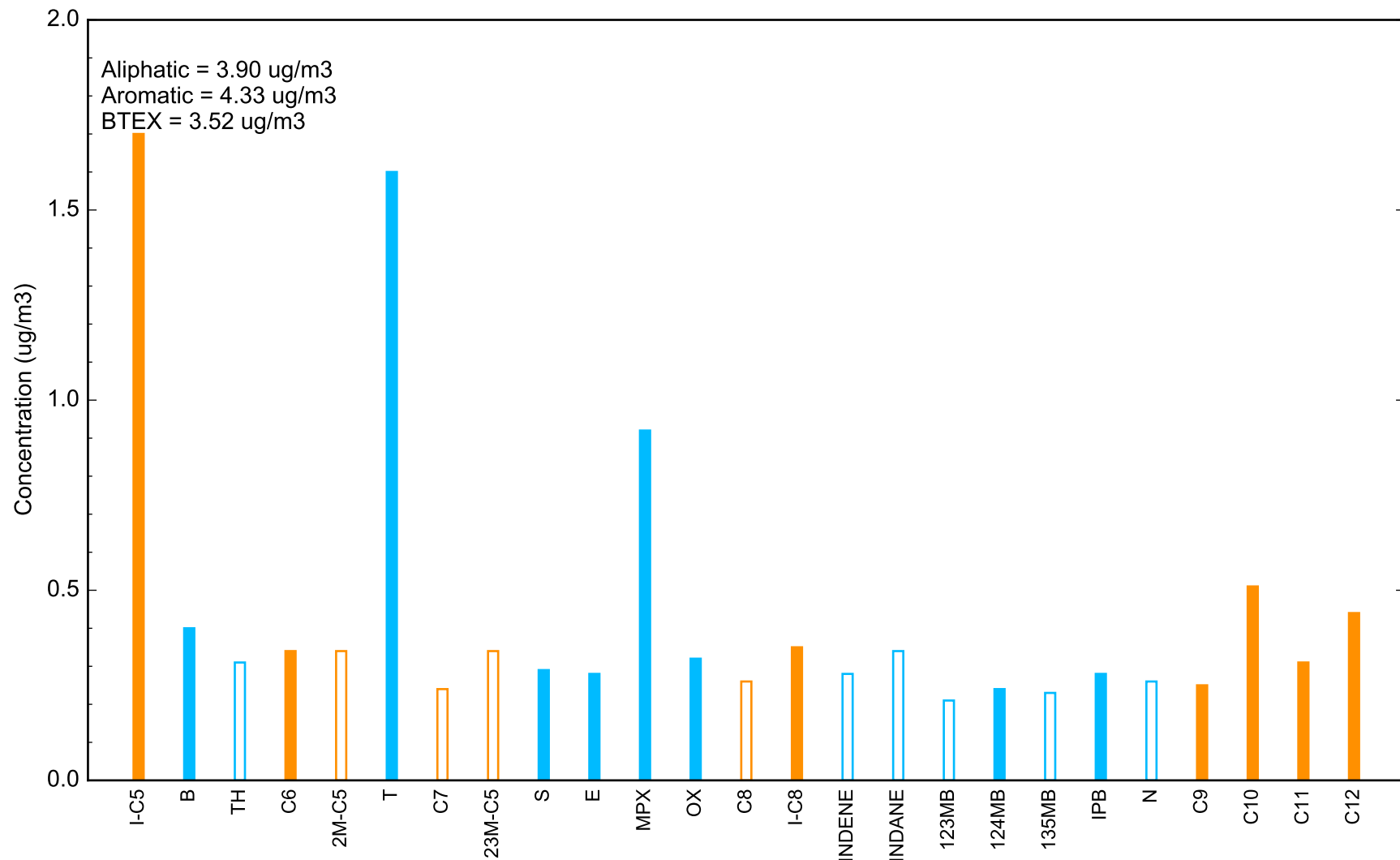
Peter Cooper Village, Figure 23

Concentration of Volatile Organic Compounds: IA-370-01-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-370-02
 Subfacility: 370
 Date: 2017-10-13 16:34:00



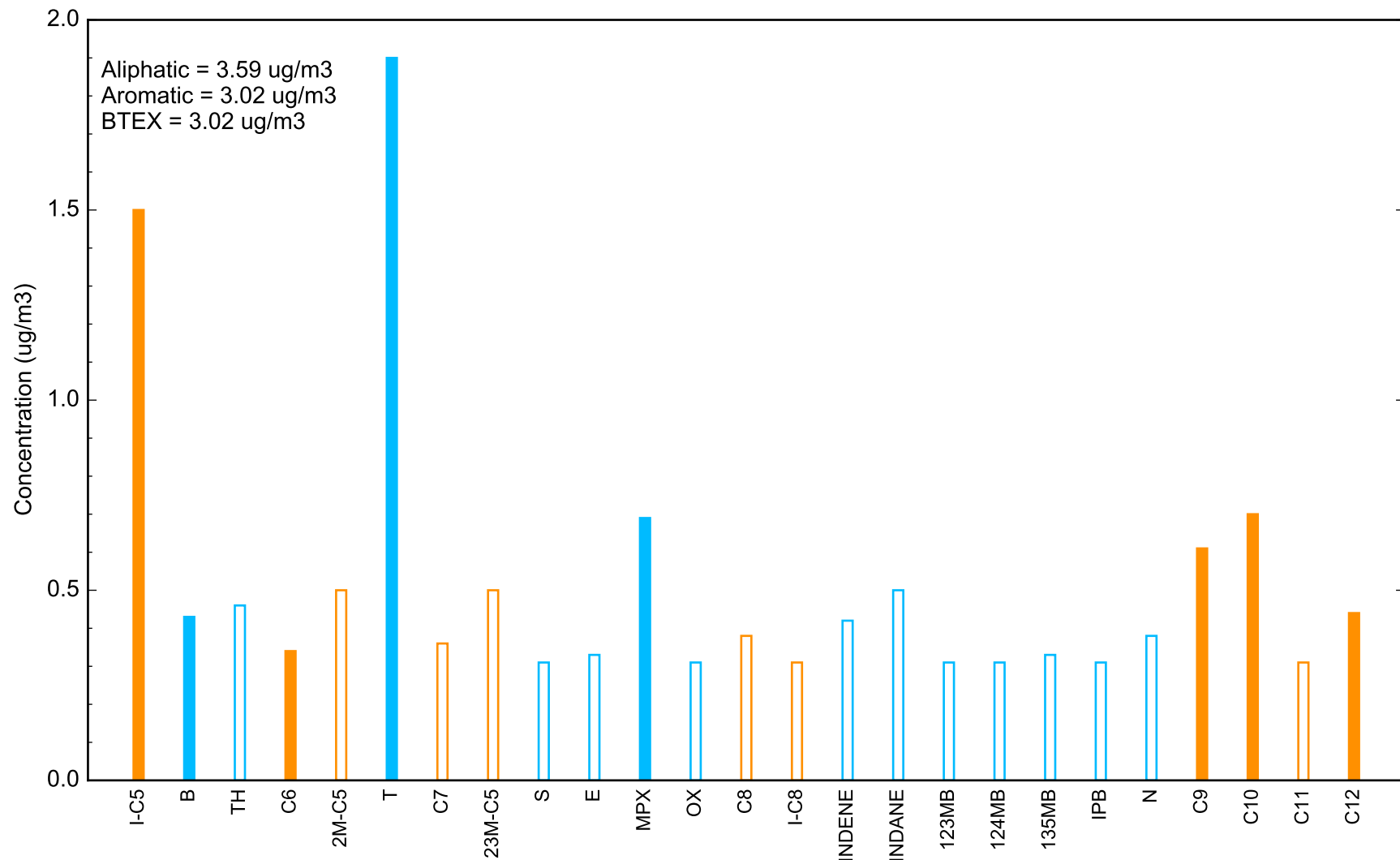
Peter Cooper Village, Figure 24

Concentration of Volatile Organic Compounds: IA-370-02-20171013

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-370-03
Subfacility: 370
Date: 2017-10-14 07:37:00



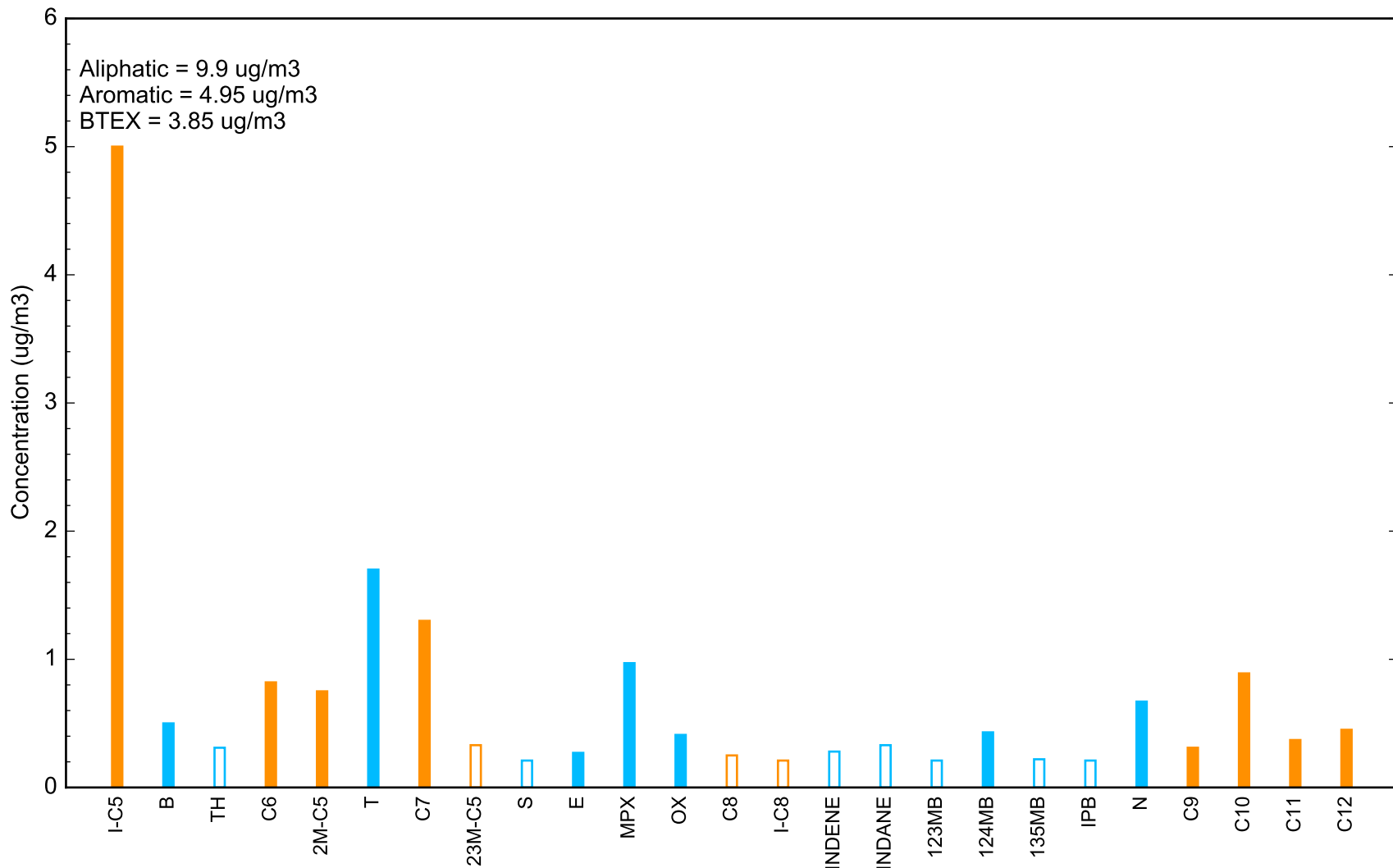
Peter Cooper Village, Figure 25

Concentration of Volatile Organic Compounds: IA-370-03-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-390-01
Subfacility: 390
Date: 2017-10-15 14:12:00



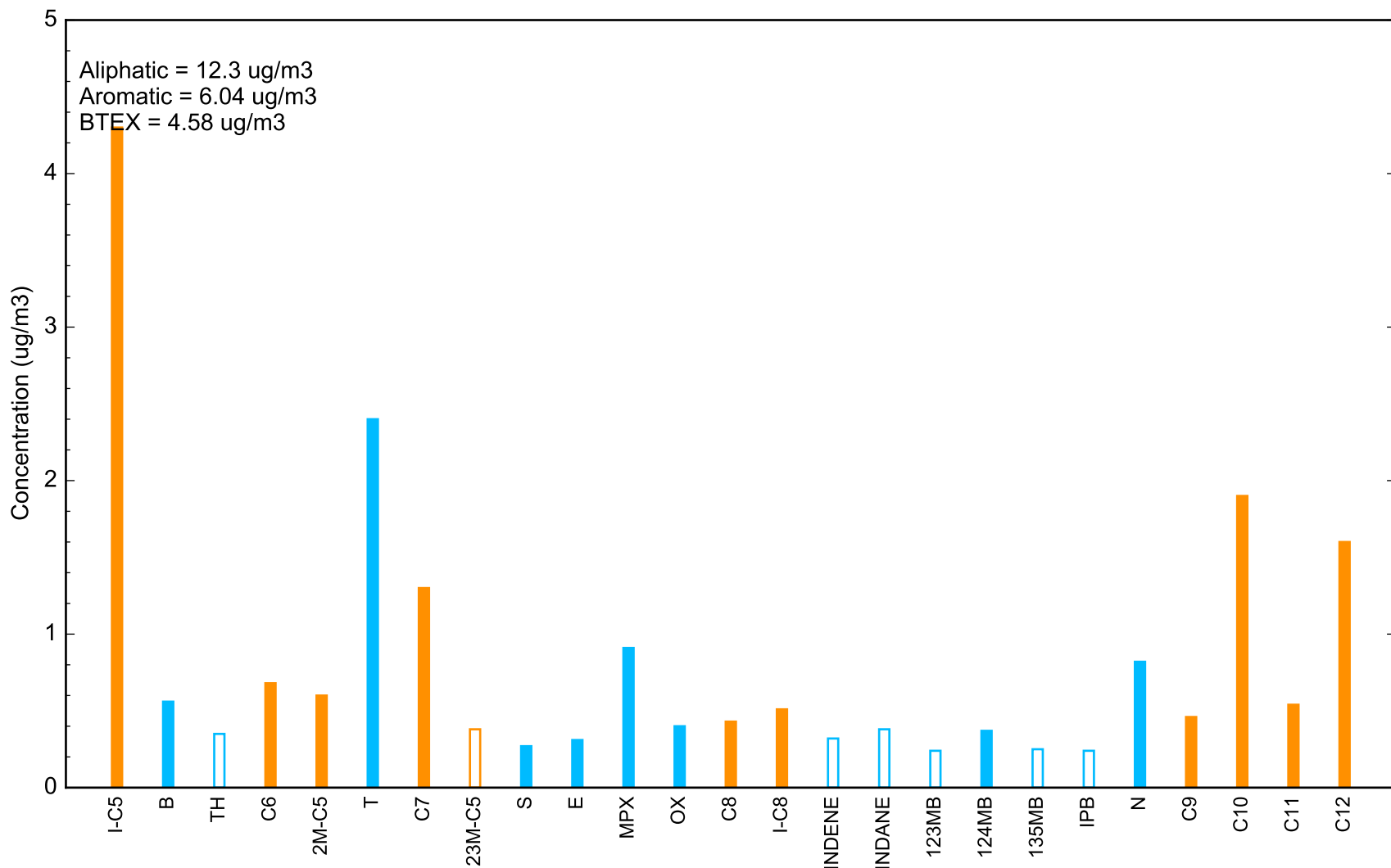
Peter Cooper Village, Figure 26

Concentration of Volatile Organic Compounds: IA-390-01-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-390-02
Subfacility: 390
Date: 2017-10-15 16:08:00



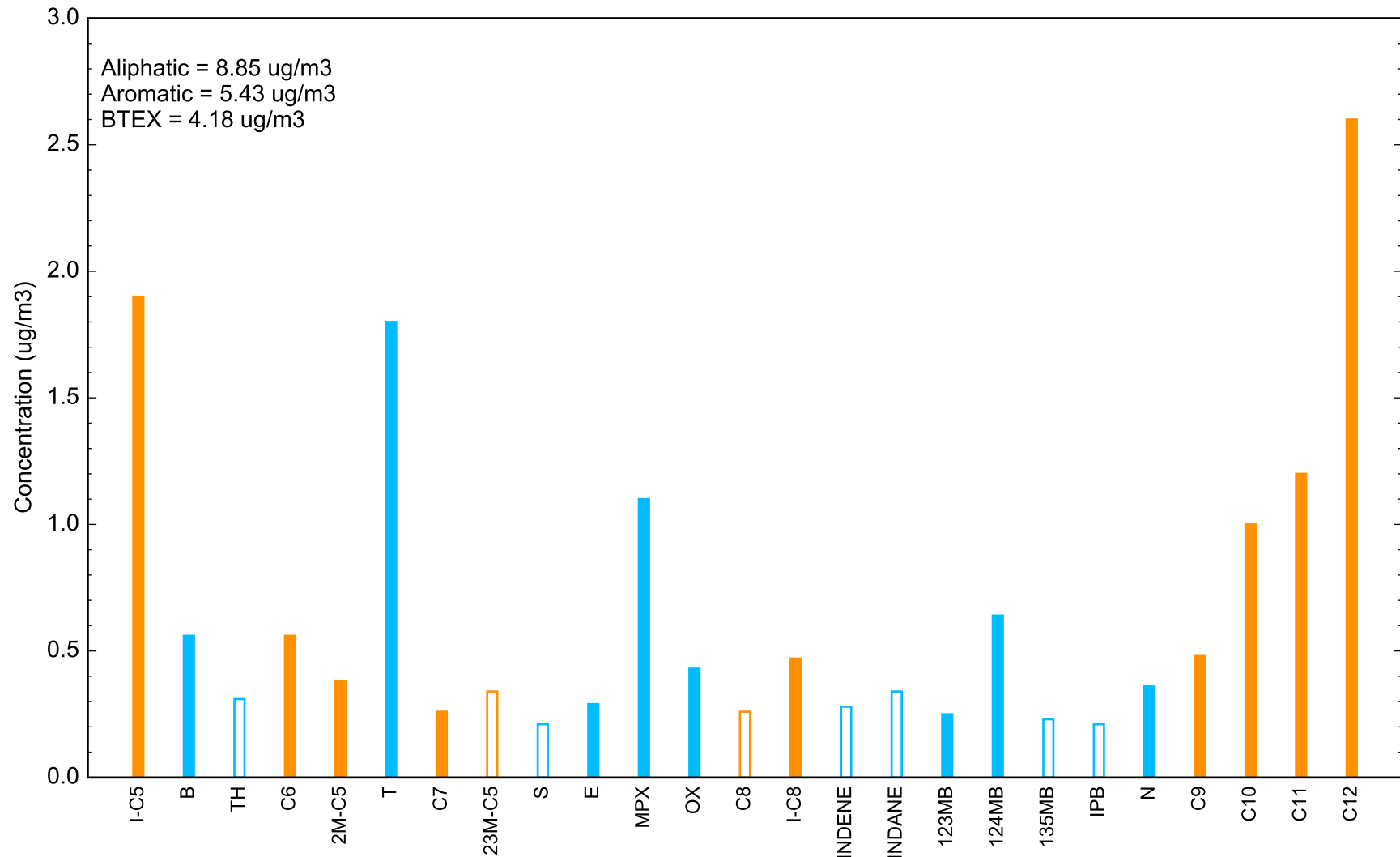
Peter Cooper Village, Figure 27

Concentration of Volatile Organic Compounds: IA-390-02-20171015

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-4-01
Subfacility: 4
Date: 2017-10-14 16:37:00



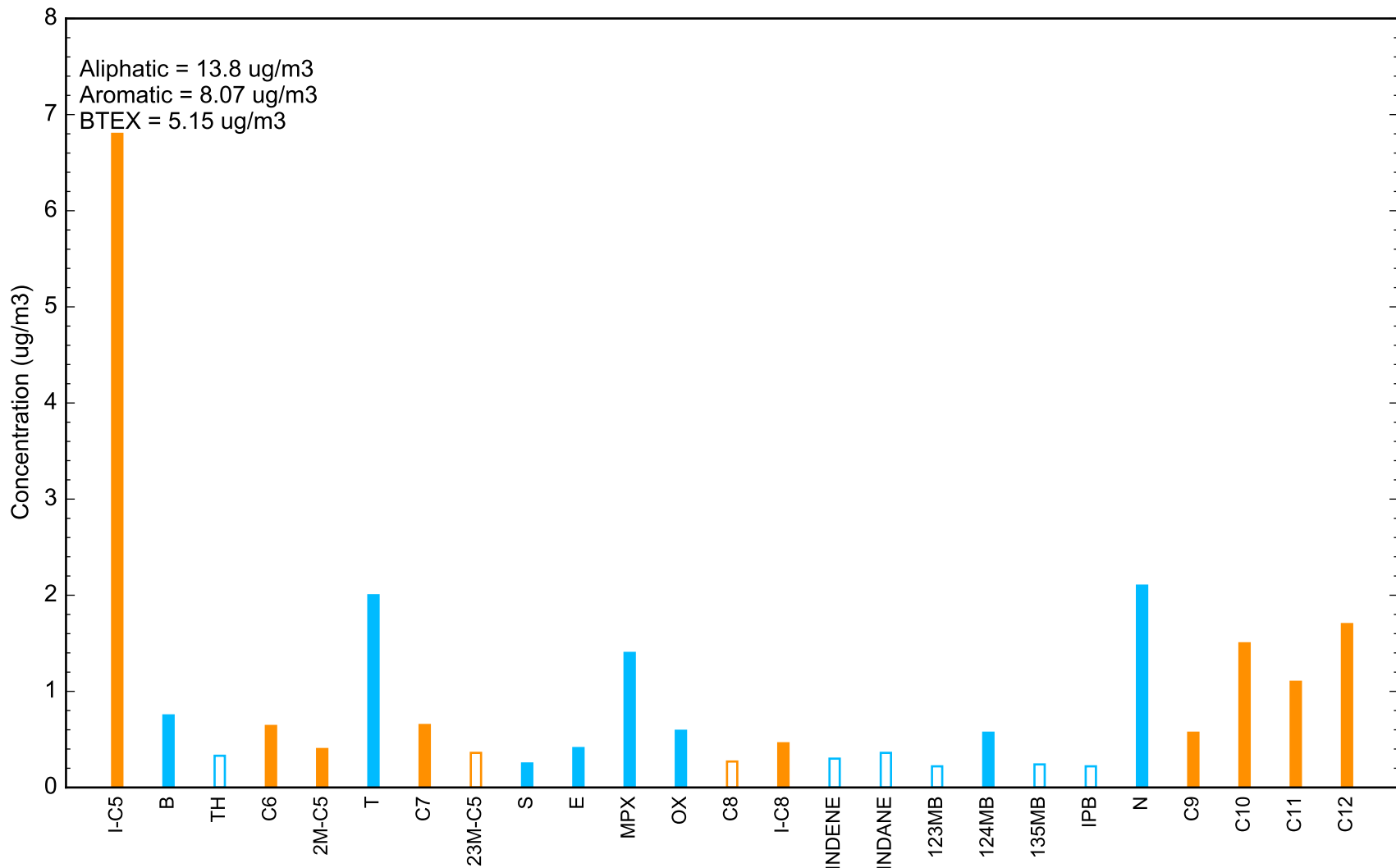
Peter Cooper Village, Figure 28

Concentration of Volatile Organic Compounds: IA-4-01-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-4-02
Subfacility: 4
Date: 2017-10-14 16:40:00



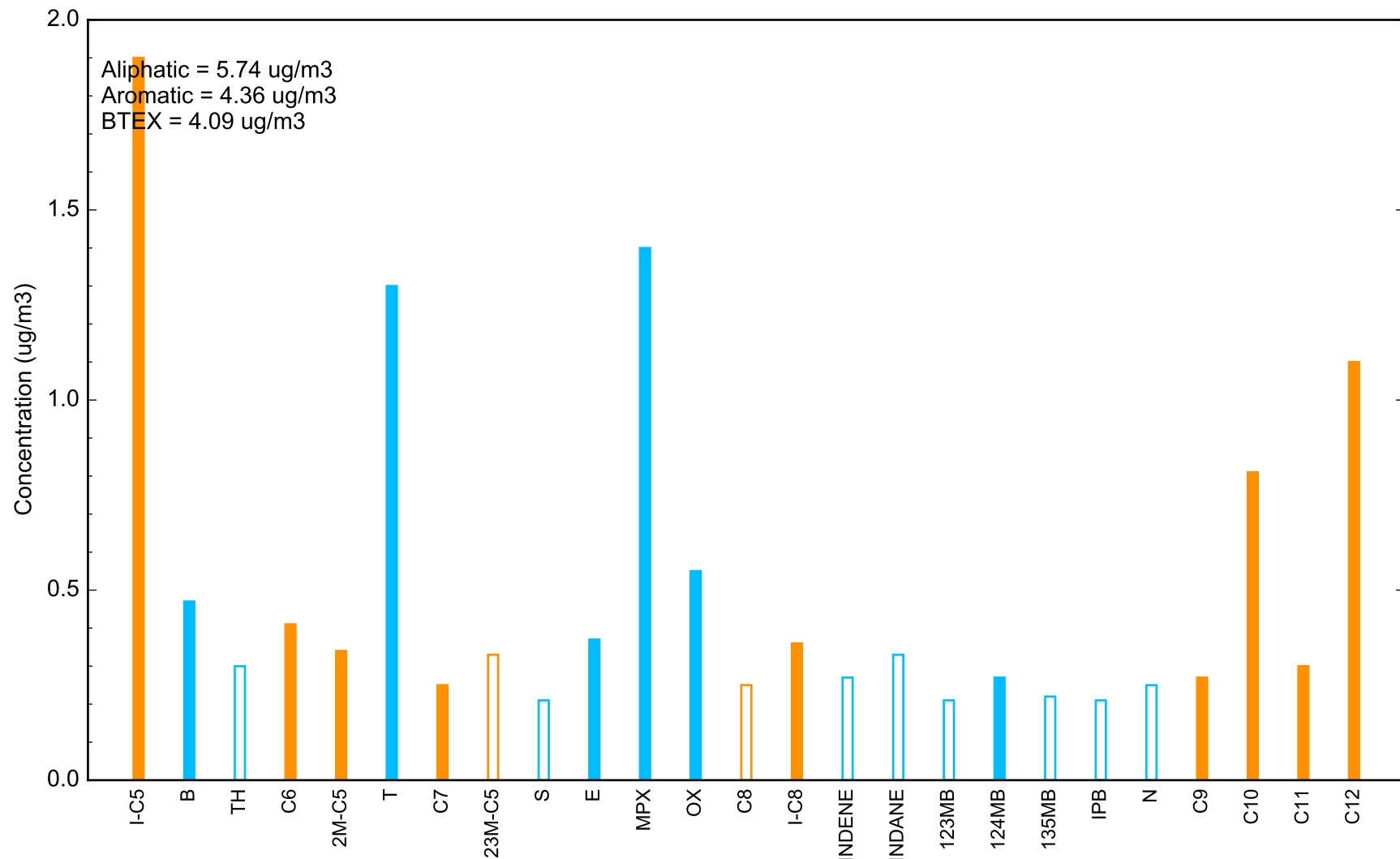
Peter Cooper Village, Figure 29

Concentration of Volatile Organic Compounds: IA-4-02-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-420-01
Subfacility: 420
Date: 2017-10-13 15:00:00



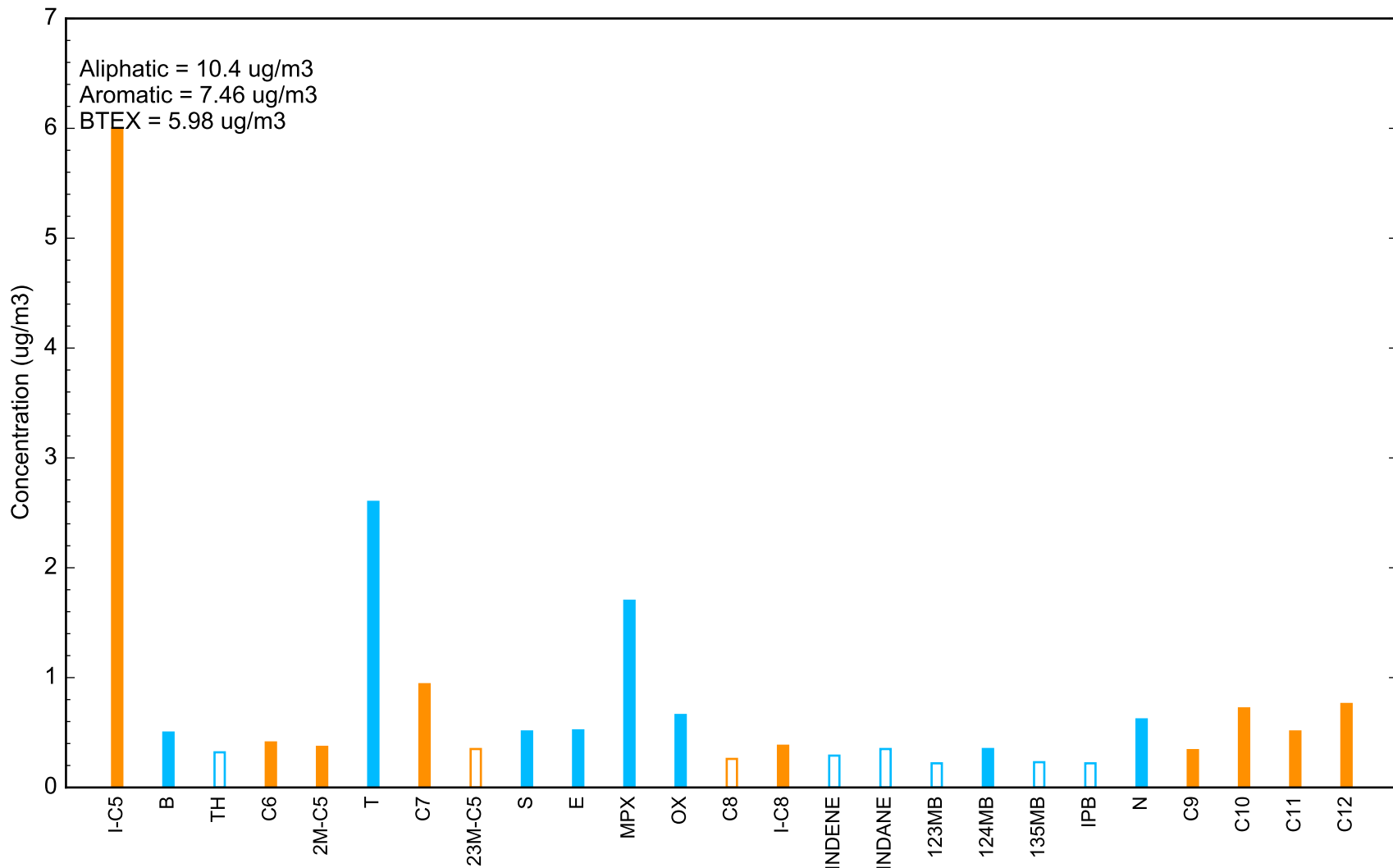
Peter Cooper Village, Figure 30

Concentration of Volatile Organic Compounds: IA-420-01-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-420-02
Subfacility: 420
Date: 2017-10-13 15:13:00



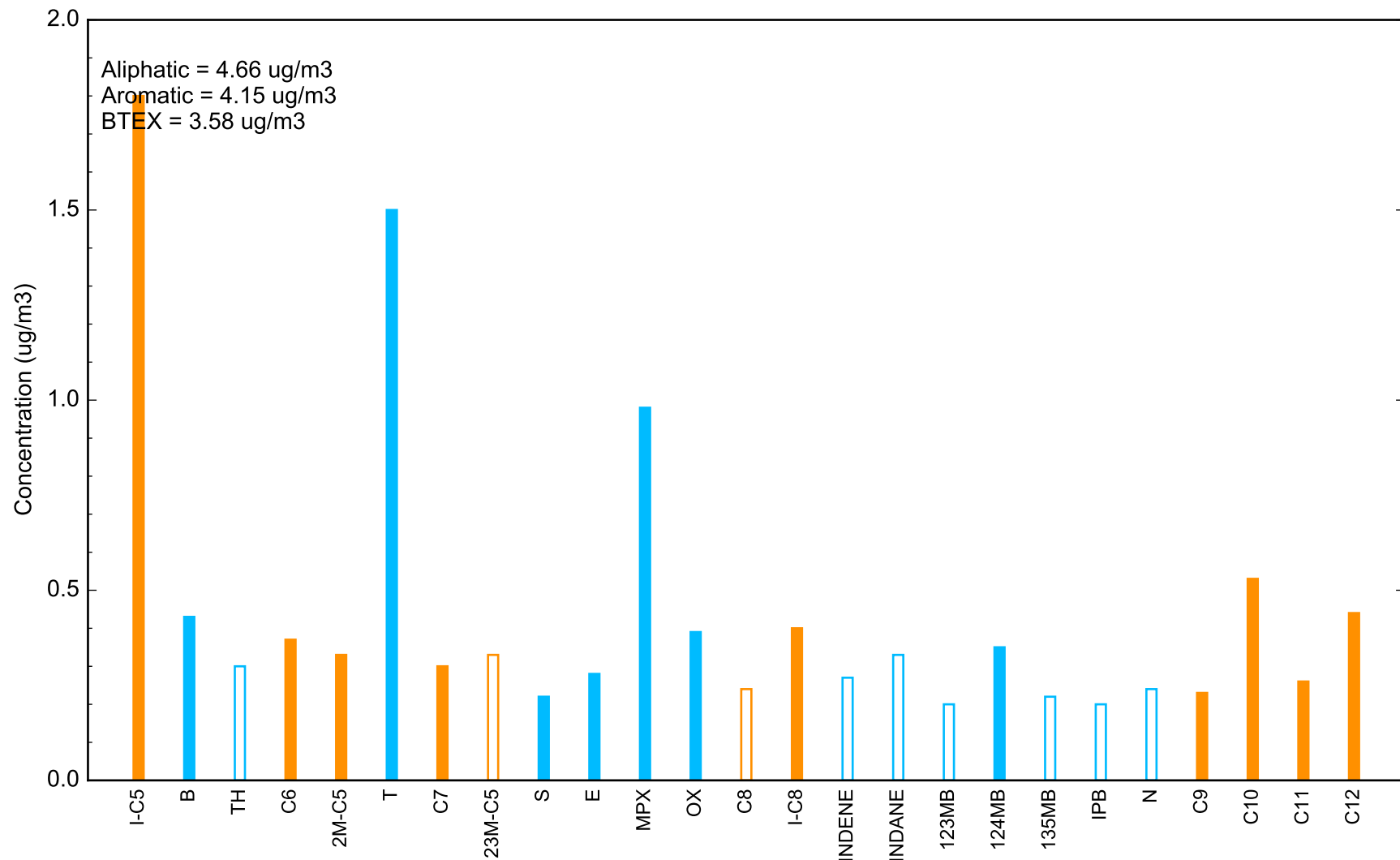
Peter Cooper Village, Figure 31

Concentration of Volatile Organic Compounds: IA-420-02-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-420-03
 Subfacility: 420
 Date: 2017-10-13 15:05:00



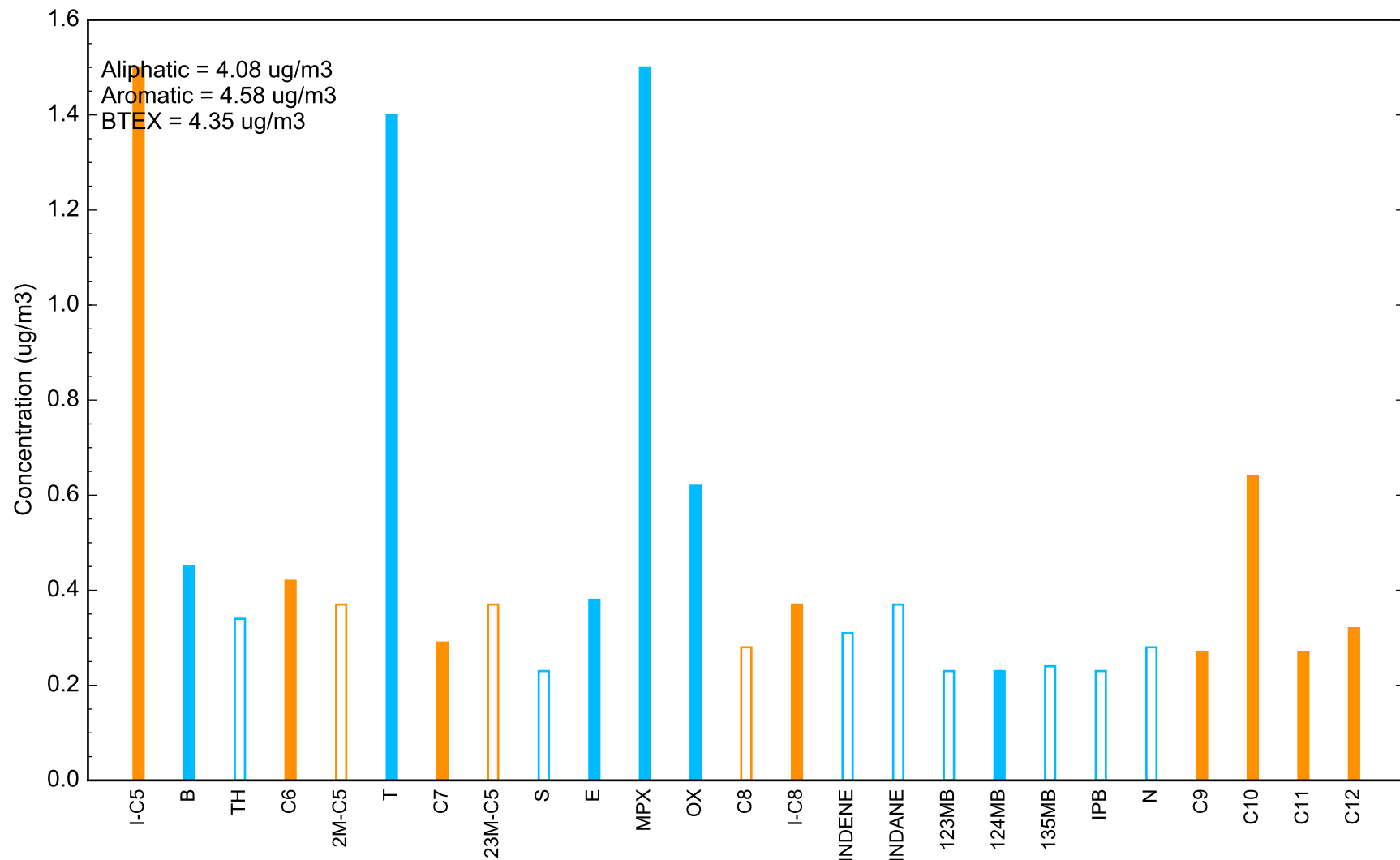
Peter Cooper Village, Figure 32

Concentration of Volatile Organic Compounds: IA-420-03-20171013

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-420-04
 Subfacility: 420
 Date: 2017-10-13 15:09:00



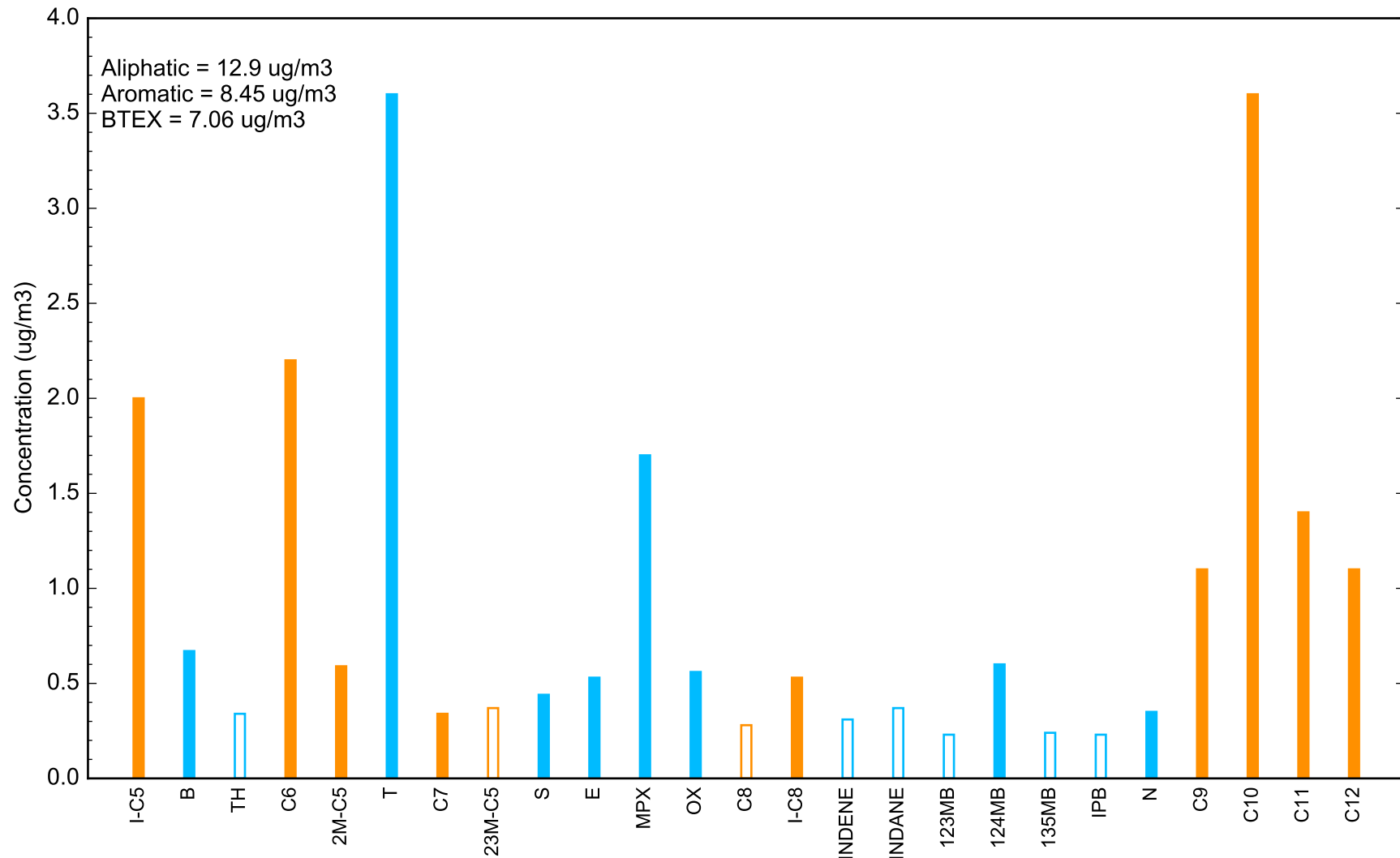
Peter Cooper Village, Figure 33

Concentration of Volatile Organic Compounds: IA-420-04-20171013

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-431-01
 Subfacility: 431
 Date: 2017-10-14 15:40:00



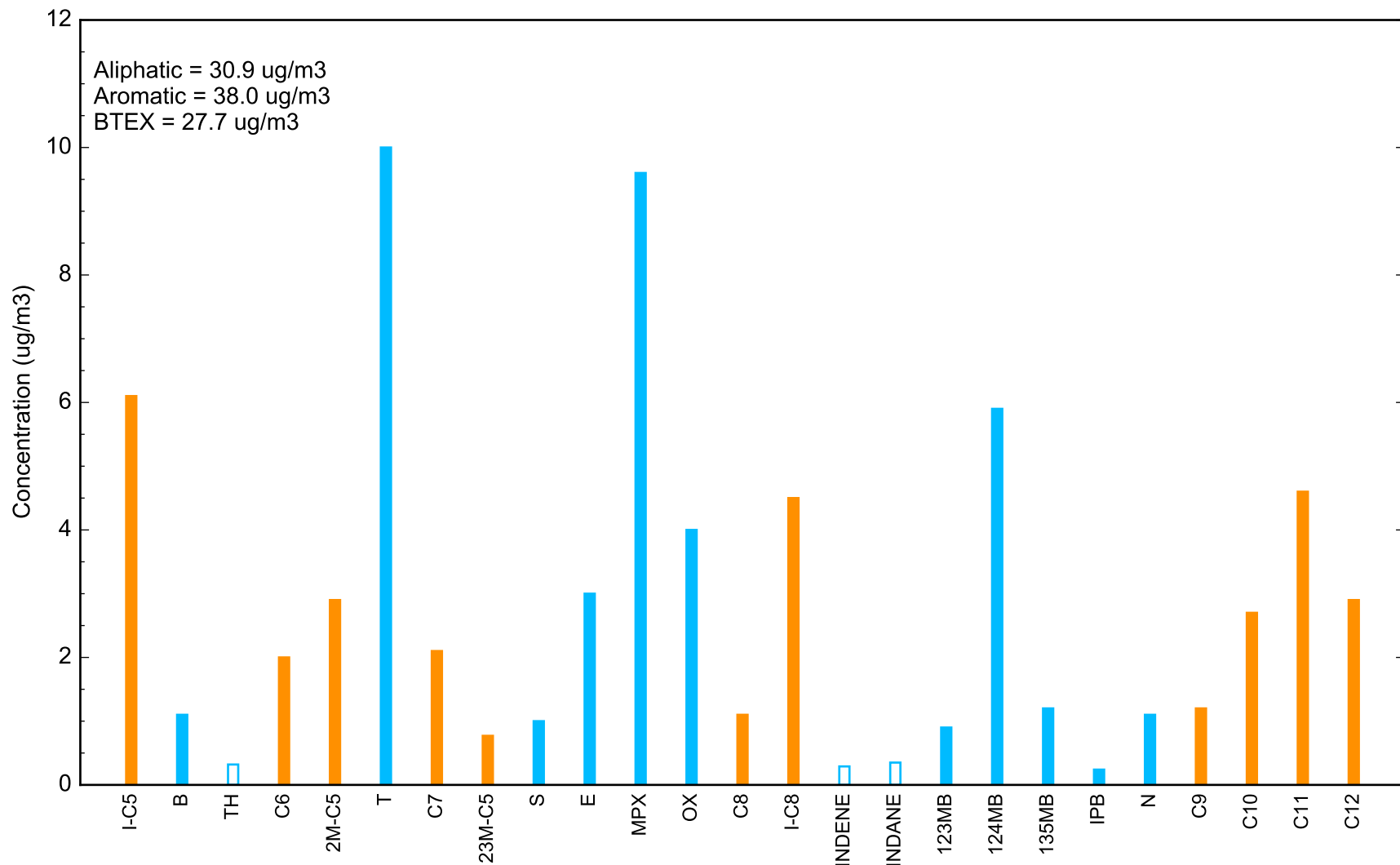
Peter Cooper Village, Figure 34

Concentration of Volatile Organic Compounds: IA-431-01-20171014

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-431-02
 Subfacility: 431
 Date: 2017-10-14 15:36:00



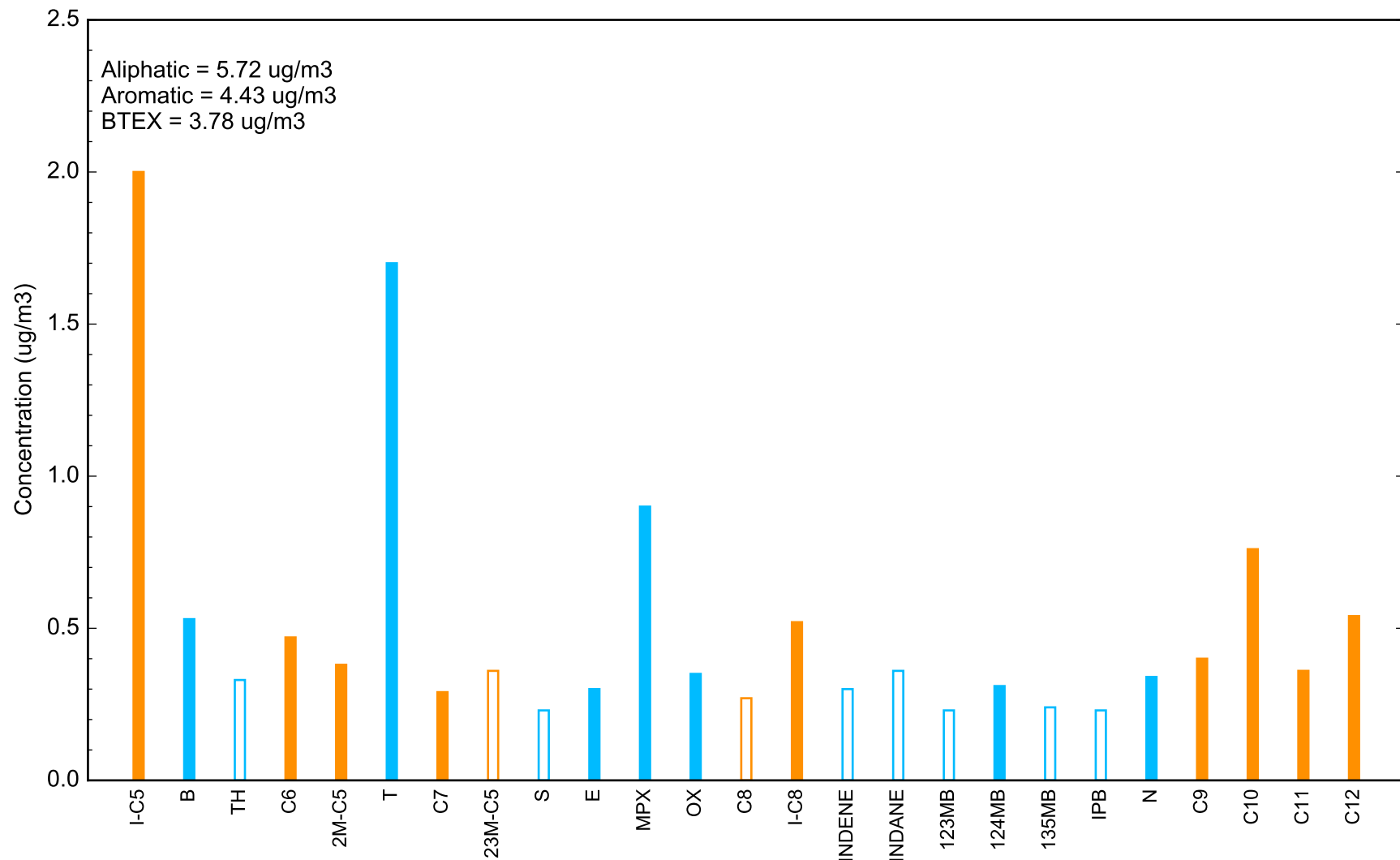
Peter Cooper Village, Figure 35

Concentration of Volatile Organic Compounds: IA-431-02-20171014

Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-431-03
 Subfacility: 431
 Date: 2017-10-14 15:34:00



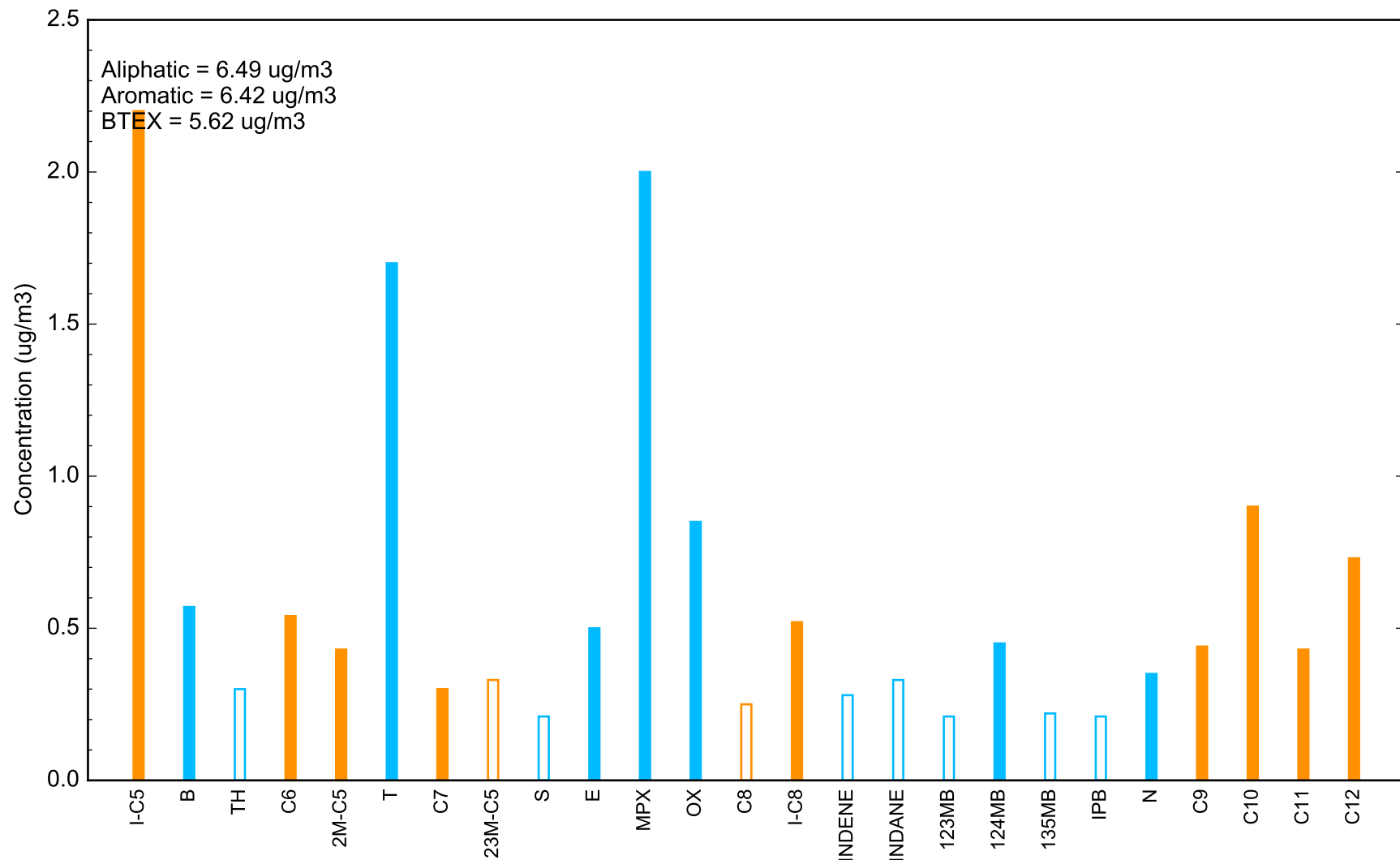
Peter Cooper Village, Figure 36

Concentration of Volatile Organic Compounds: IA-431-03-20171014

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-440-01
Subfacility: 440
Date: 2017-10-14 16:29:00



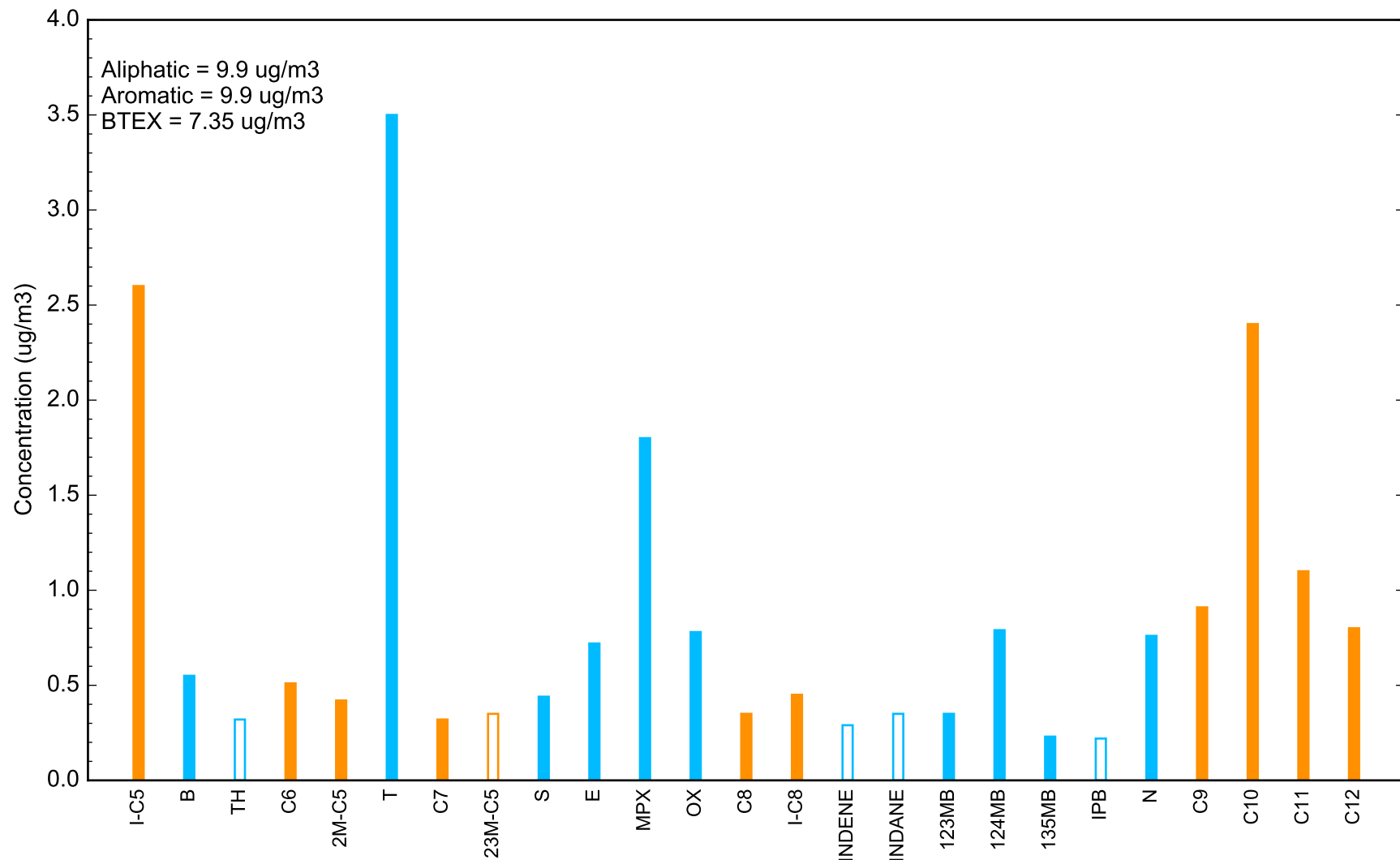
Peter Cooper Village, Figure 37

Concentration of Volatile Organic Compounds: IA-440-01-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-440-02
 Subfacility: 440
 Date: 2017-10-14 14:27:00



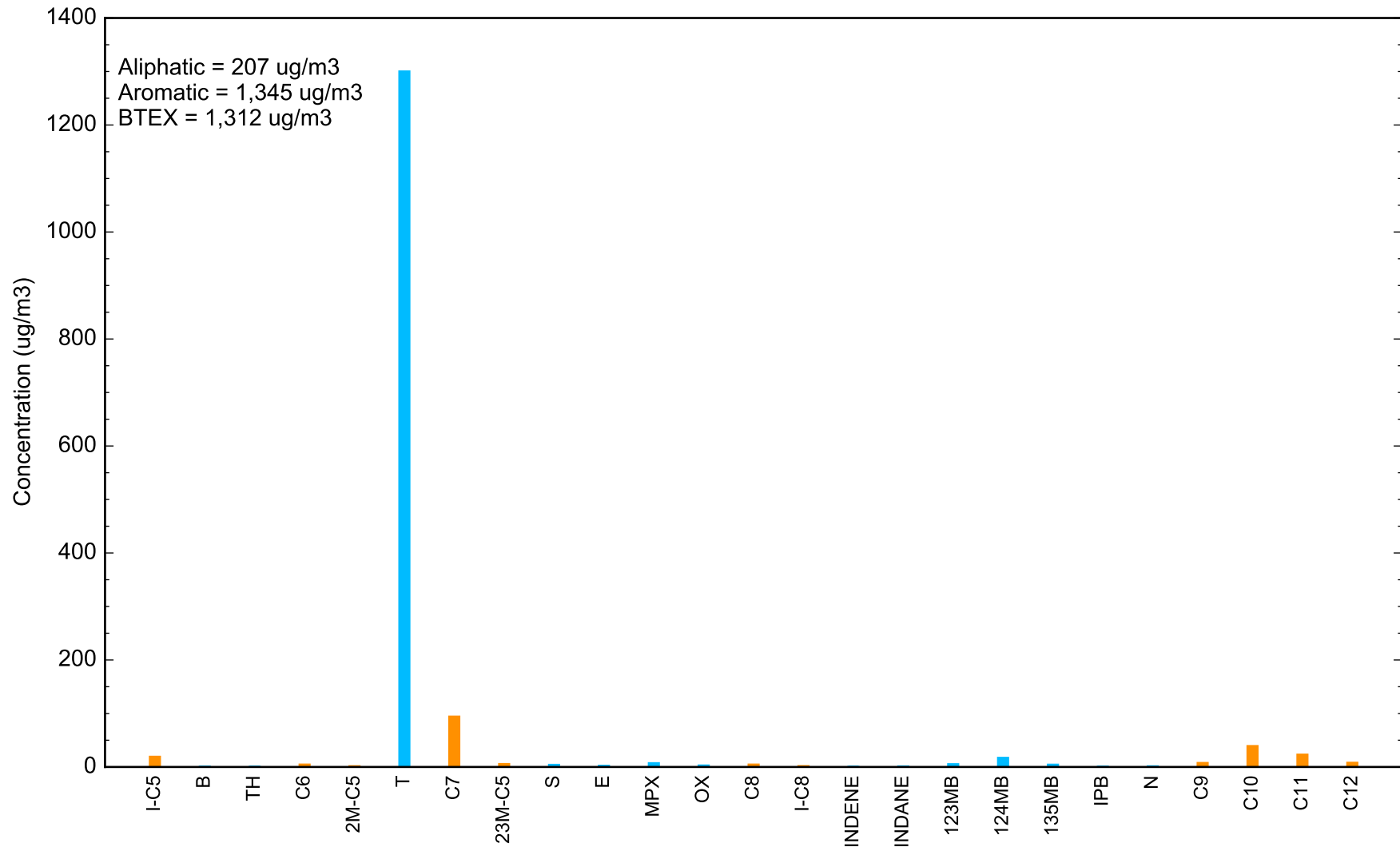
Peter Cooper Village, Figure 38

Concentration of Volatile Organic Compounds: IA-440-02-20171014

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-441-01PR
Subfacility: 441
Date: 2017-10-13 16:34:00



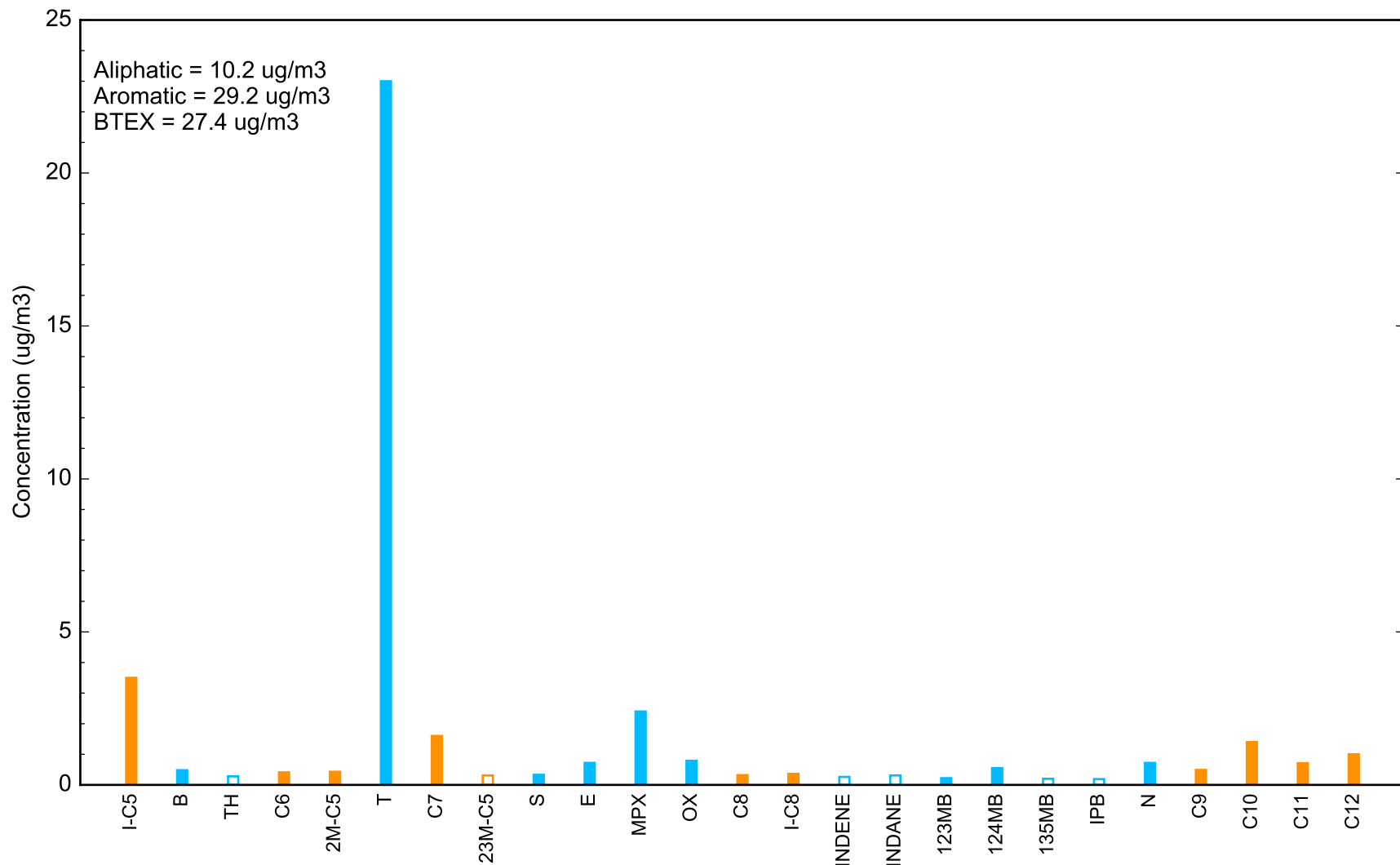
Peter Cooper Village, Figure 39

Concentration of Volatile Organic Compounds: IA-441-01PR-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-441-02
Subfacility: 441
Date: 2017-10-13 14:47:00



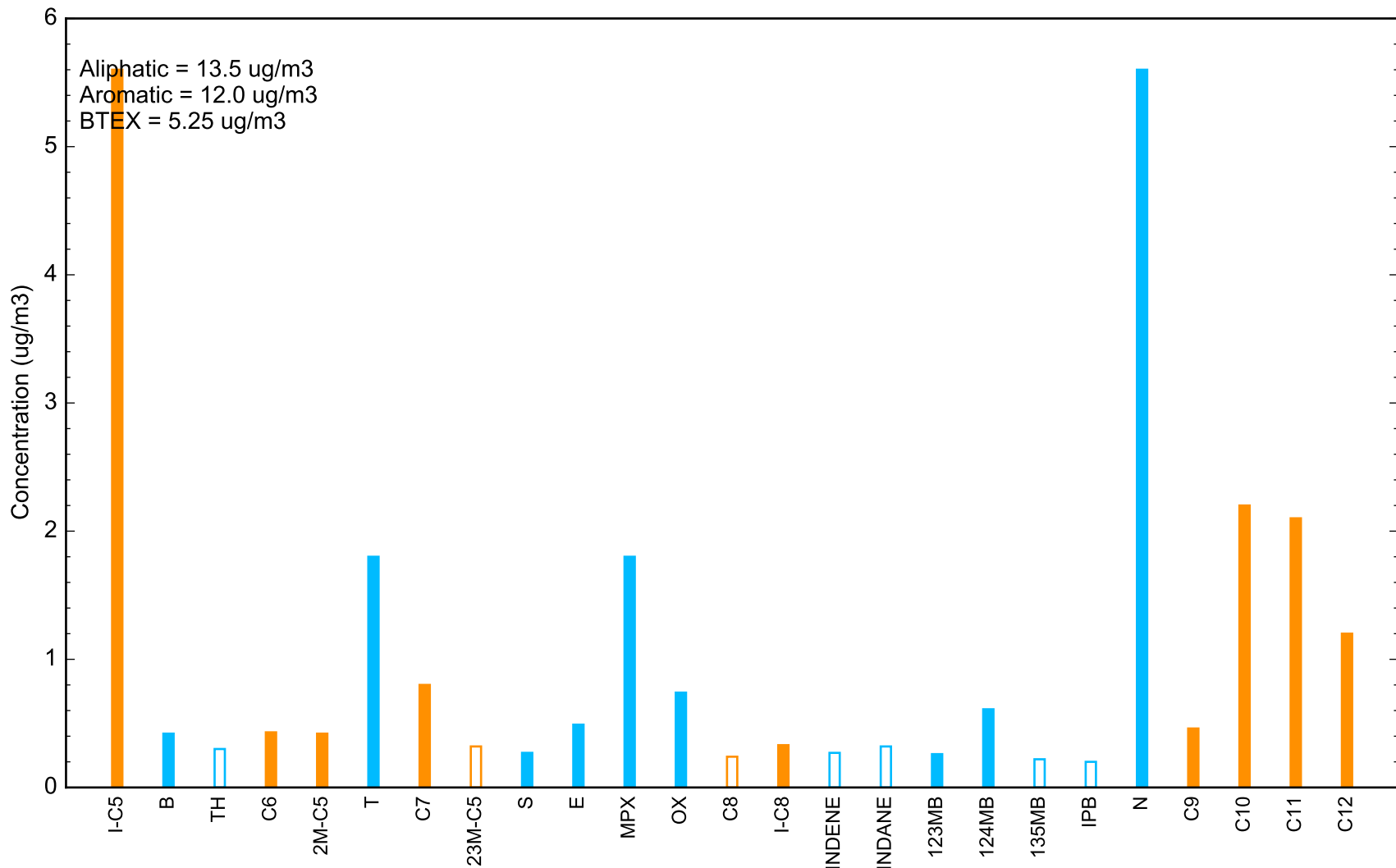
Peter Cooper Village, Figure 40

Concentration of Volatile Organic Compounds: IA-441-02-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-5-01
Subfacility: 5
Date: 2017-10-14 12:18:00



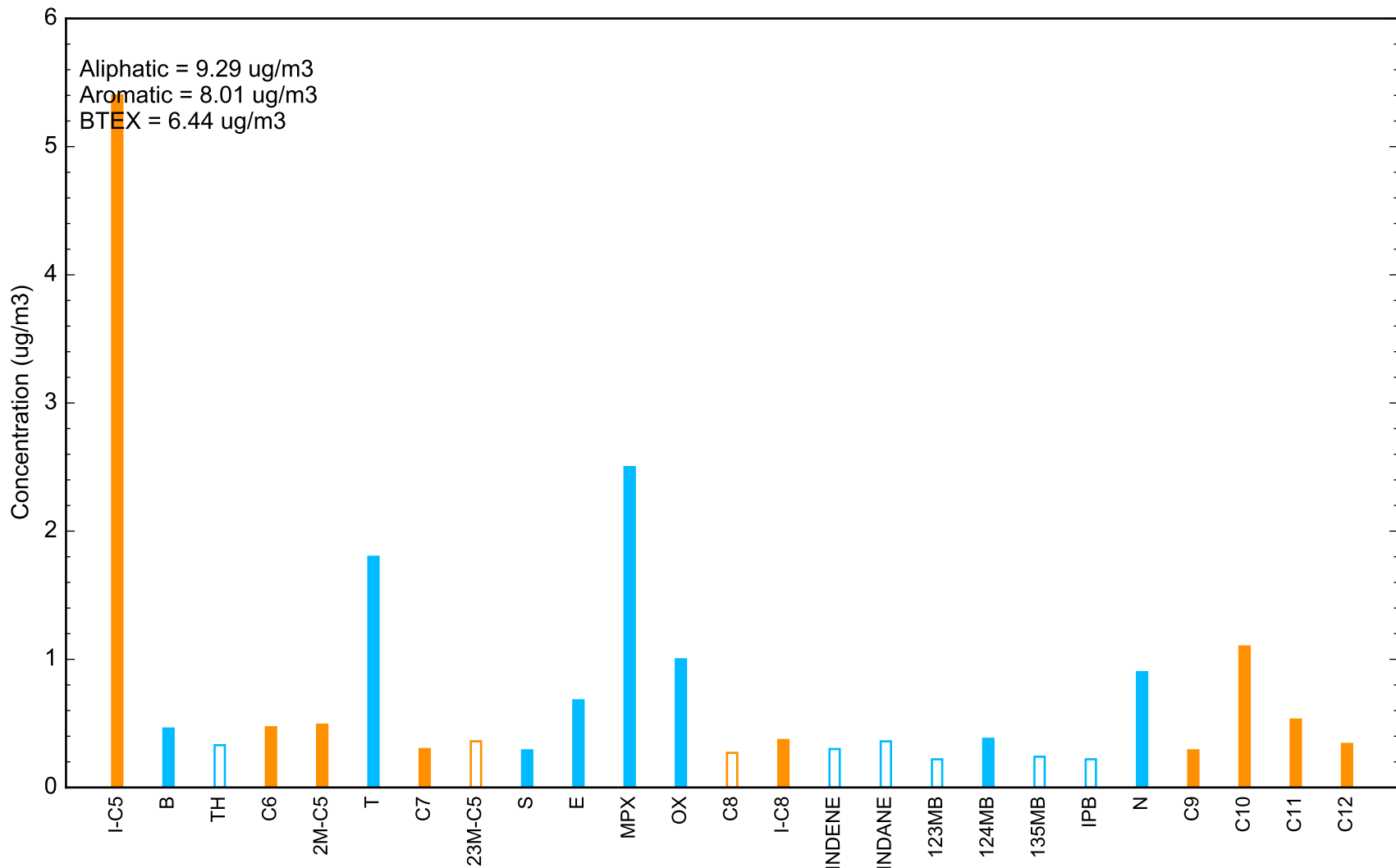
Peter Cooper Village, Figure 41

Concentration of Volatile Organic Compounds: IA-5-01-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-5-02
Subfacility: 5
Date: 2017-10-14 14:05:00



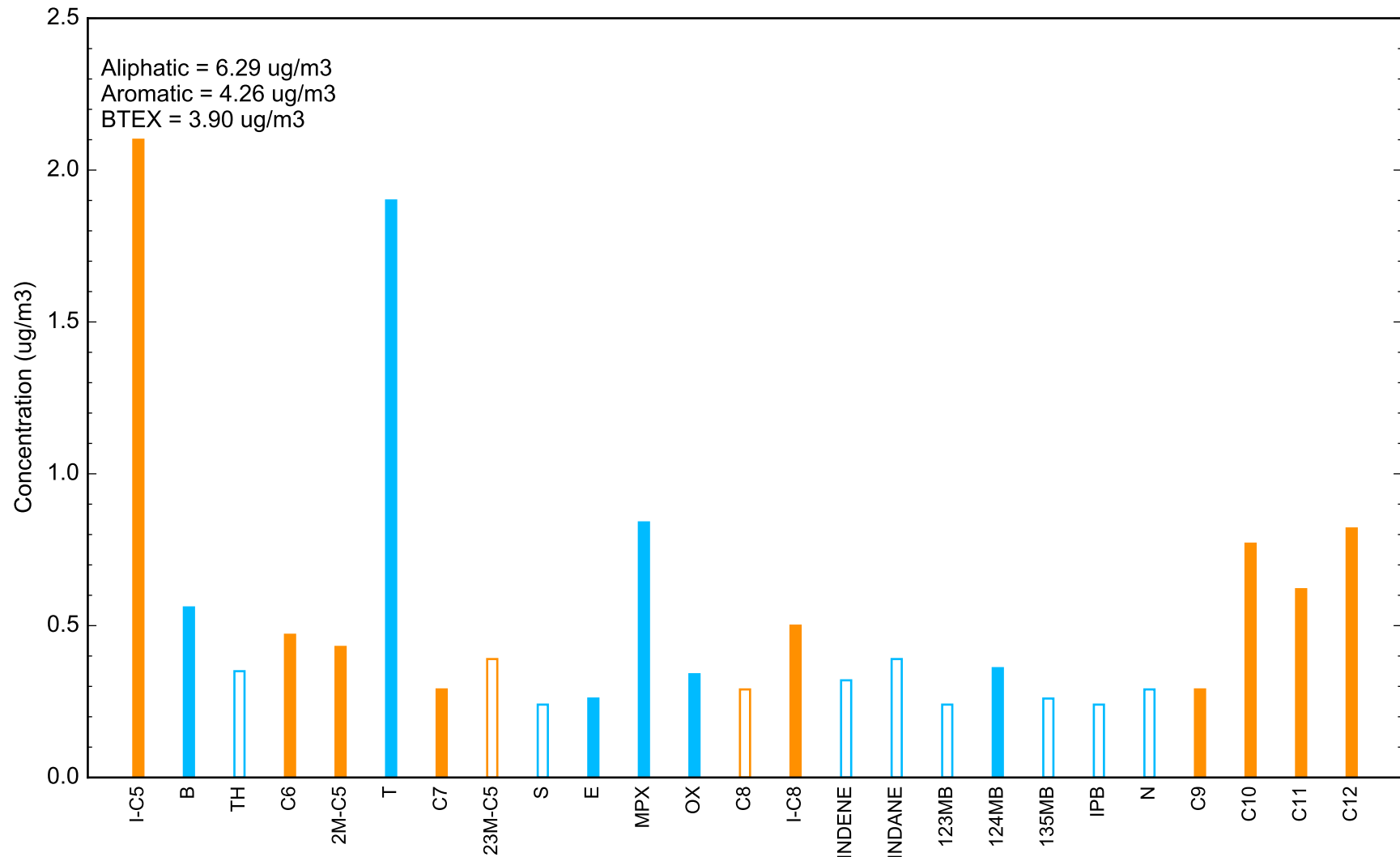
Peter Cooper Village, Figure 42

Concentration of Volatile Organic Compounds: IA-5-02-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-5-03
Subfacility: 5
Date: 2017-10-14 16:10:00



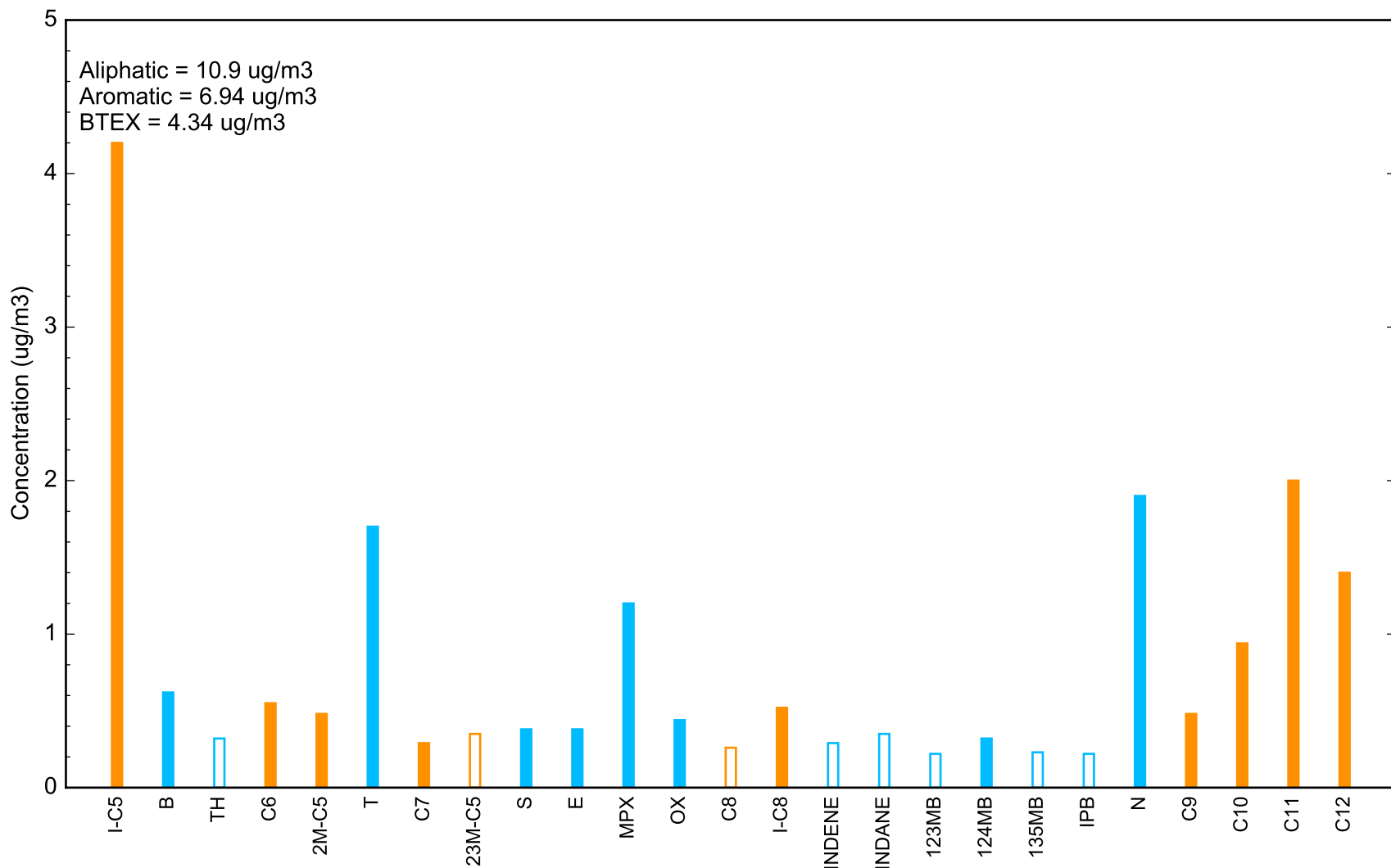
Peter Cooper Village, Figure 43

Concentration of Volatile Organic Compounds: IA-5-03-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-5-04
Subfacility: 5
Date: 2017-10-14 16:51:00



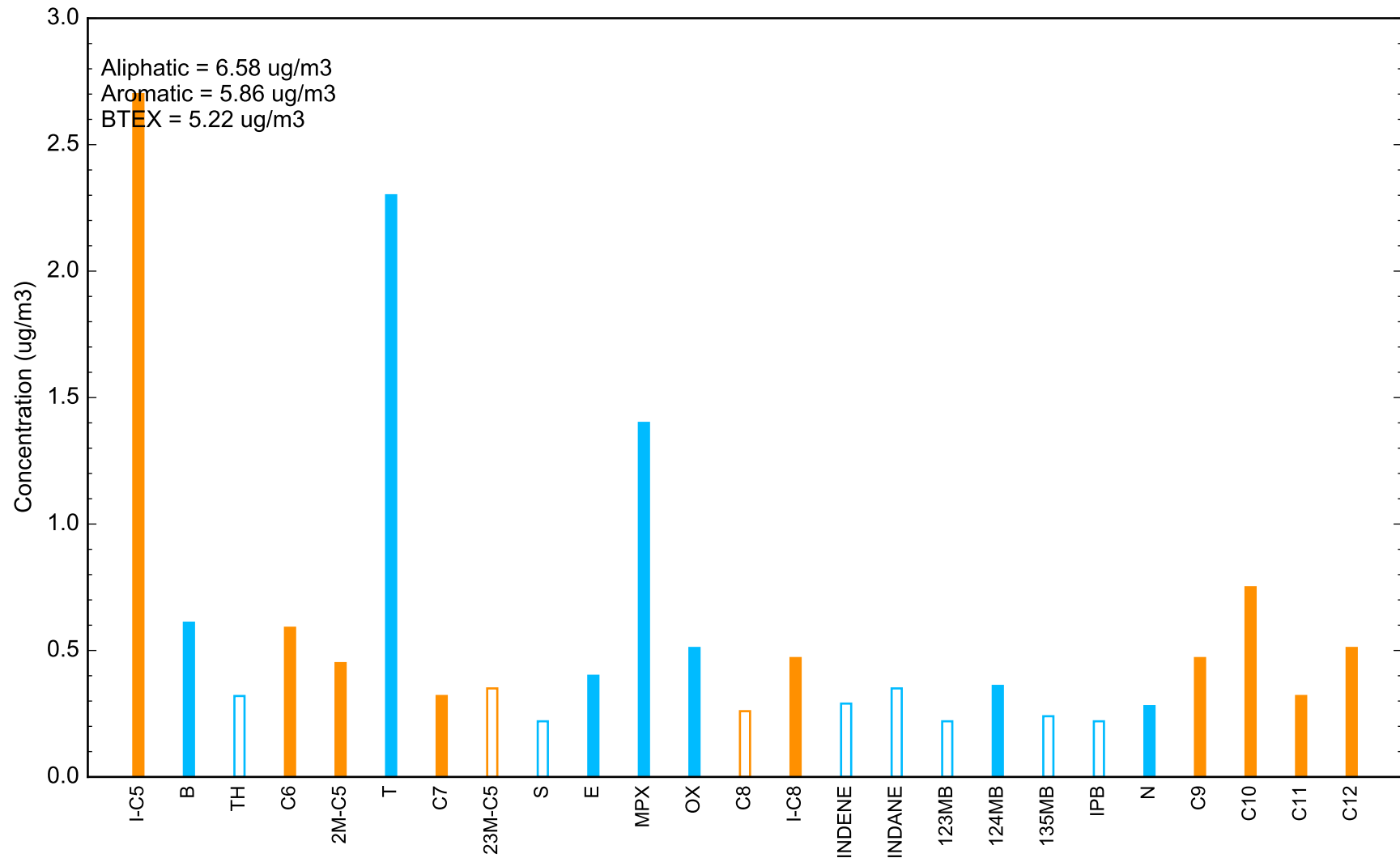
Peter Cooper Village, Figure 44

Concentration of Volatile Organic Compounds: IA-5-04-20171014

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-510-01
Subfacility: 510
Date: 2017-10-13 13:50:00



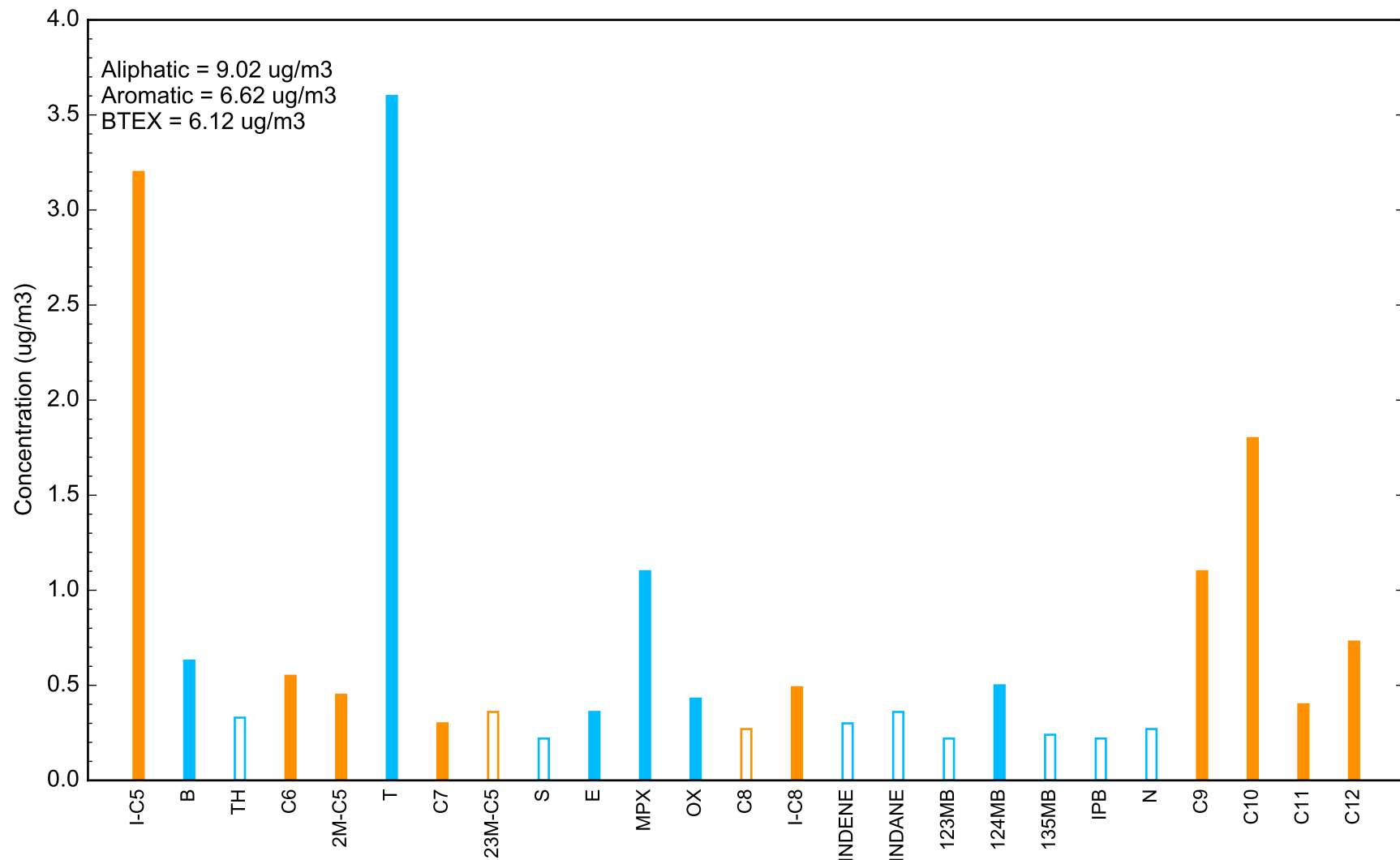
Peter Cooper Village, Figure 45

Concentration of Volatile Organic Compounds: IA-510-01-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-510-02
Subfacility: 510
Date: 2017-10-13 15:38:00



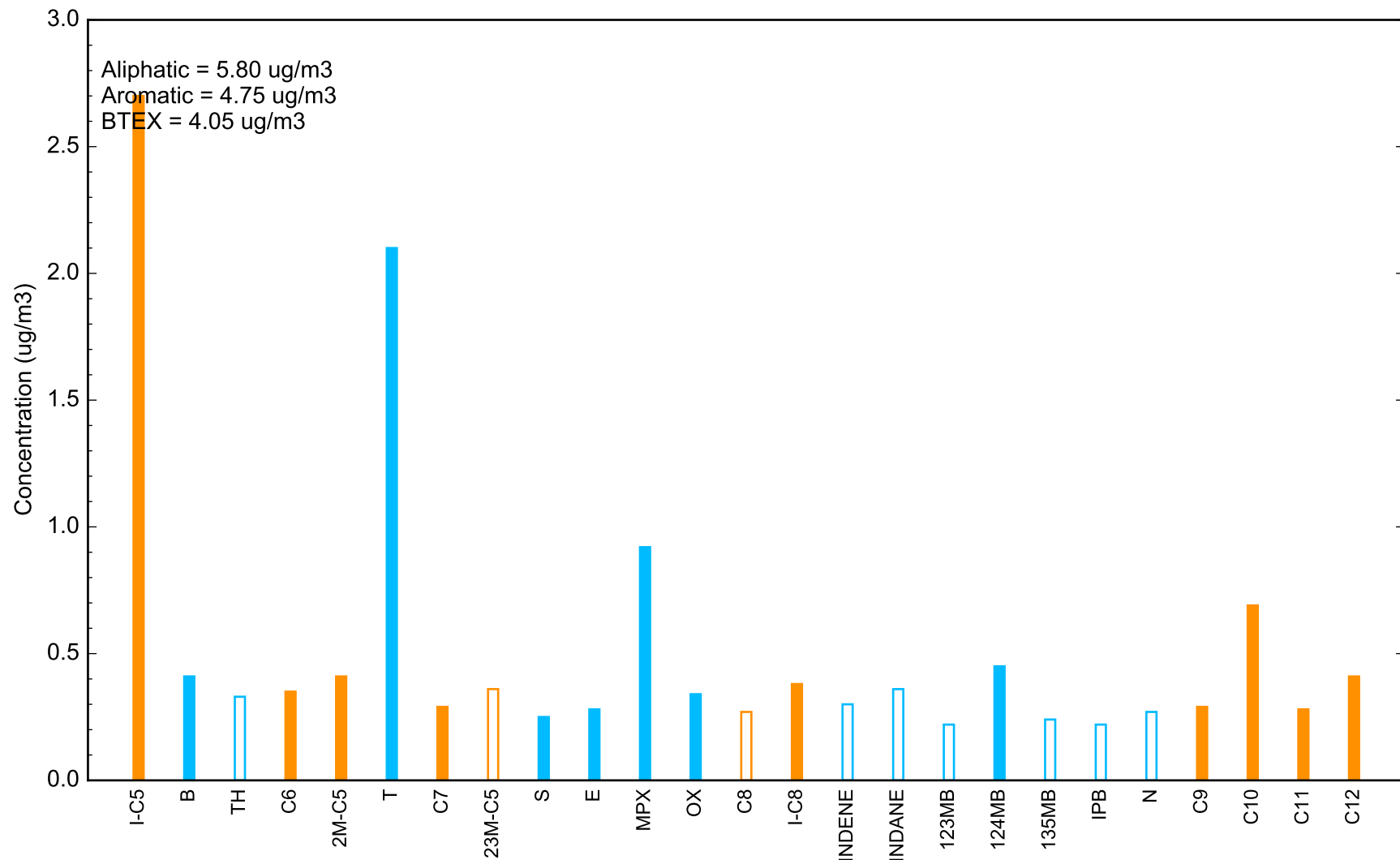
Peter Cooper Village, Figure 46

Concentration of Volatile Organic Compounds: IA-510-02-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-511-01
Subfacility: 511
Date: 2017-10-13 16:38:00



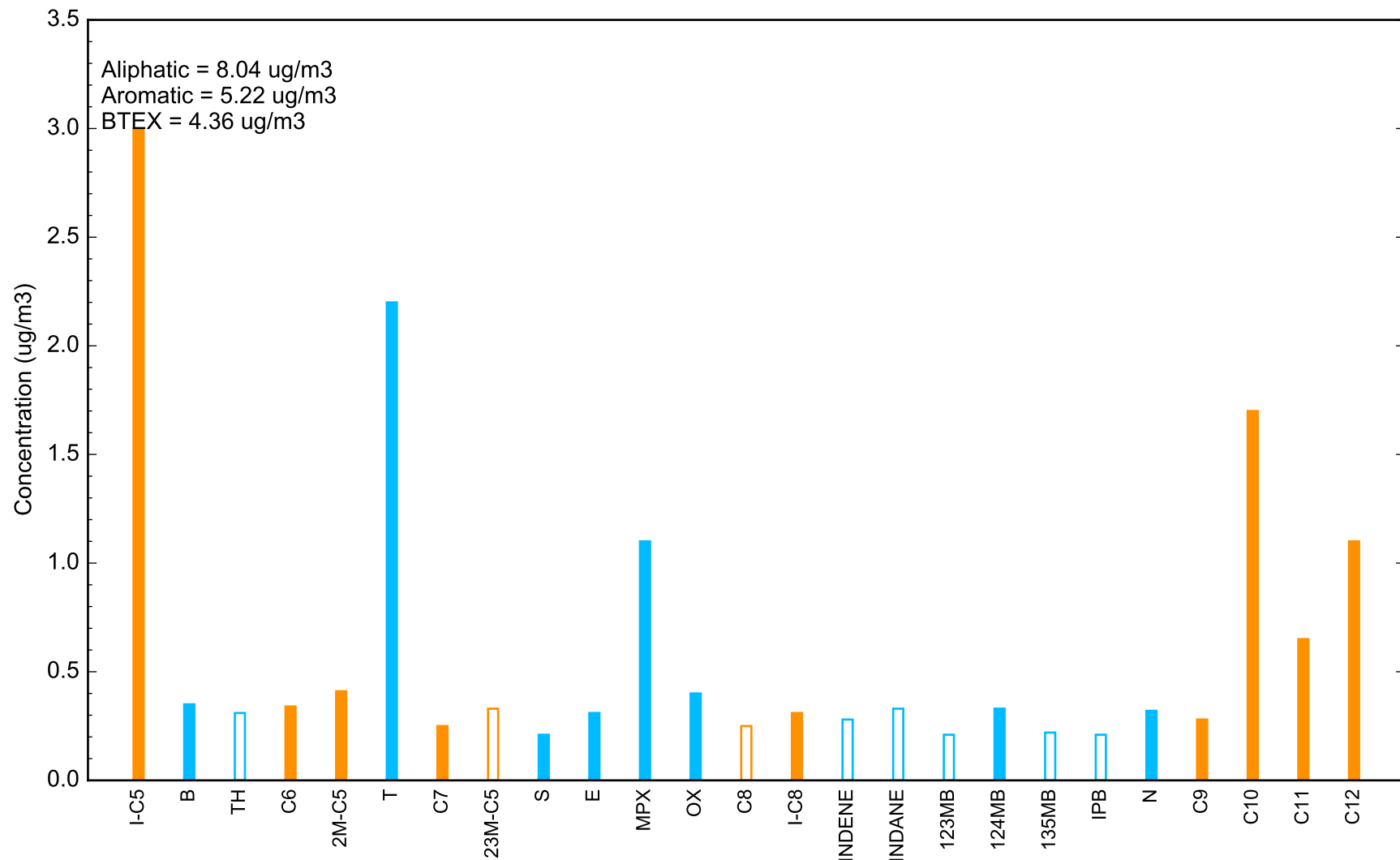
Peter Cooper Village, Figure 47

Concentration of Volatile Organic Compounds: IA-511-01-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-511-02
Subfacility: 511
Date: 2017-10-13 15:33:00



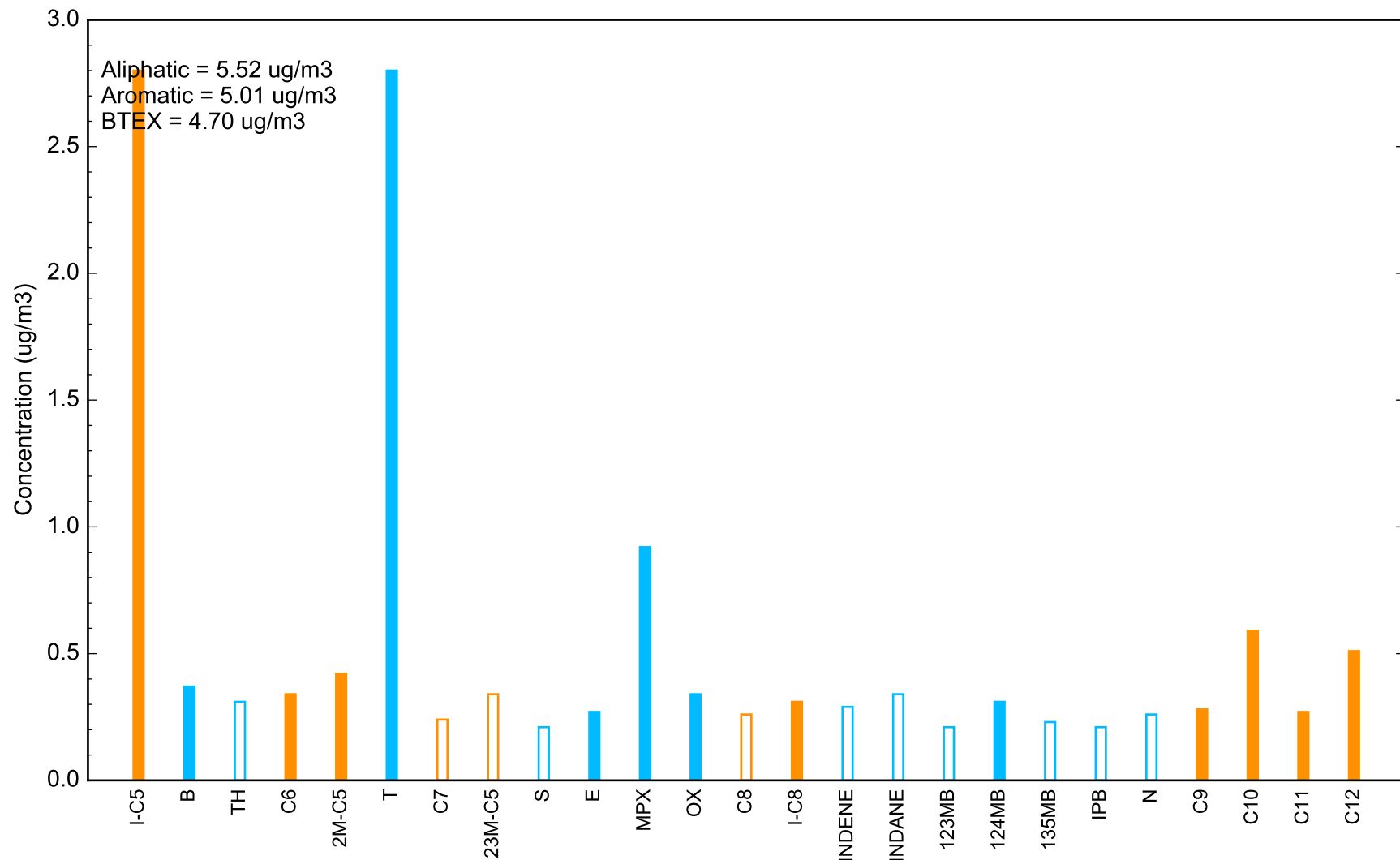
Peter Cooper Village, Figure 48

Concentration of Volatile Organic Compounds: IA-511-02-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-511-03
Subfacility: 511
Date: 2017-10-13 14:40:00



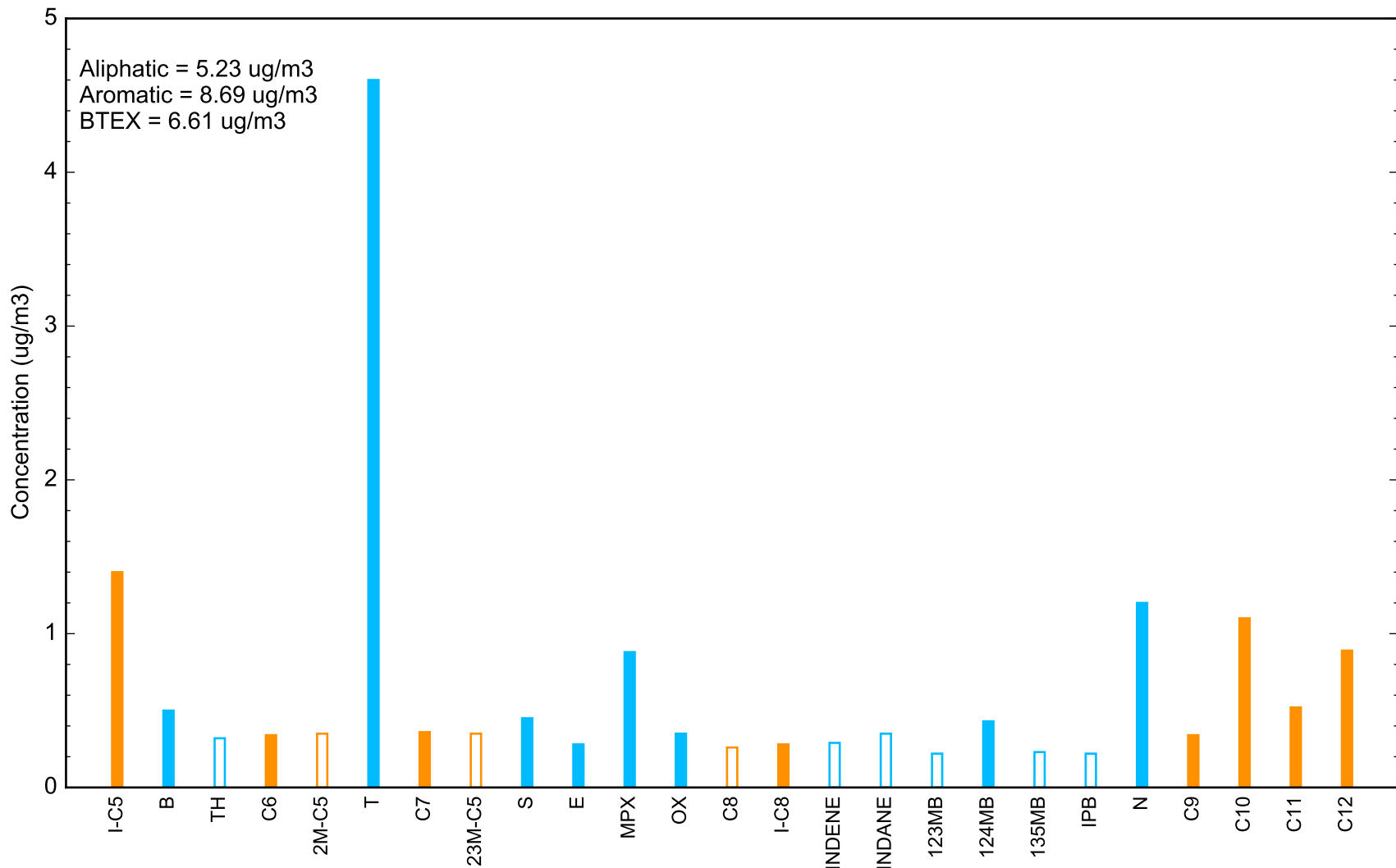
Peter Cooper Village, Figure 49

Concentration of Volatile Organic Compounds: IA-511-03-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-524ST-01
Subfacility: 524ST
Date: 2017-10-16 16:28:00



Peter Cooper Village, Figure 50

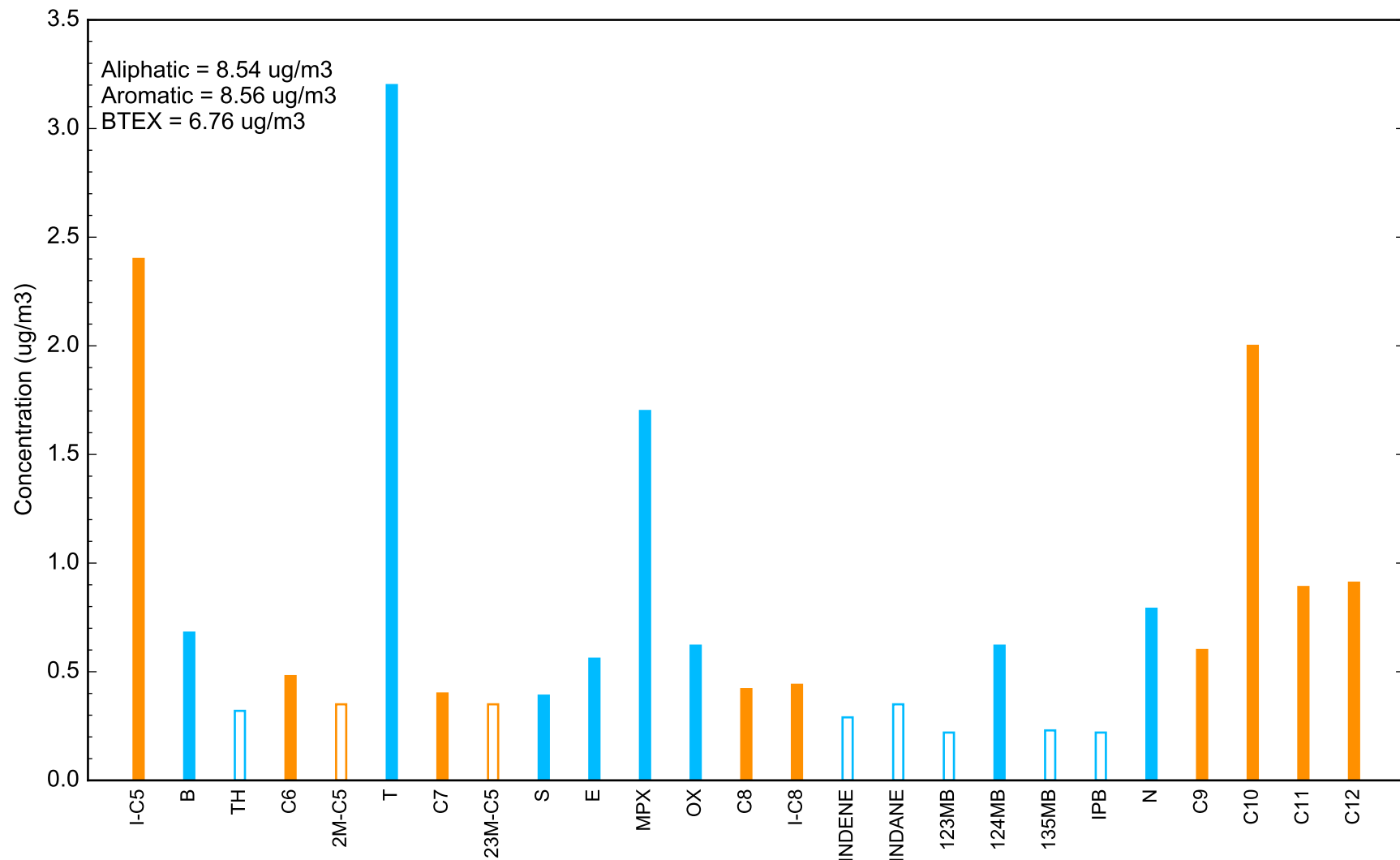
Concentration of Volatile Organic Compounds: IA-524ST-01-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-524ST-02
Subfacility: 524ST
Date: 2017-10-16 17:48:00

Aliphatic
Aromatic



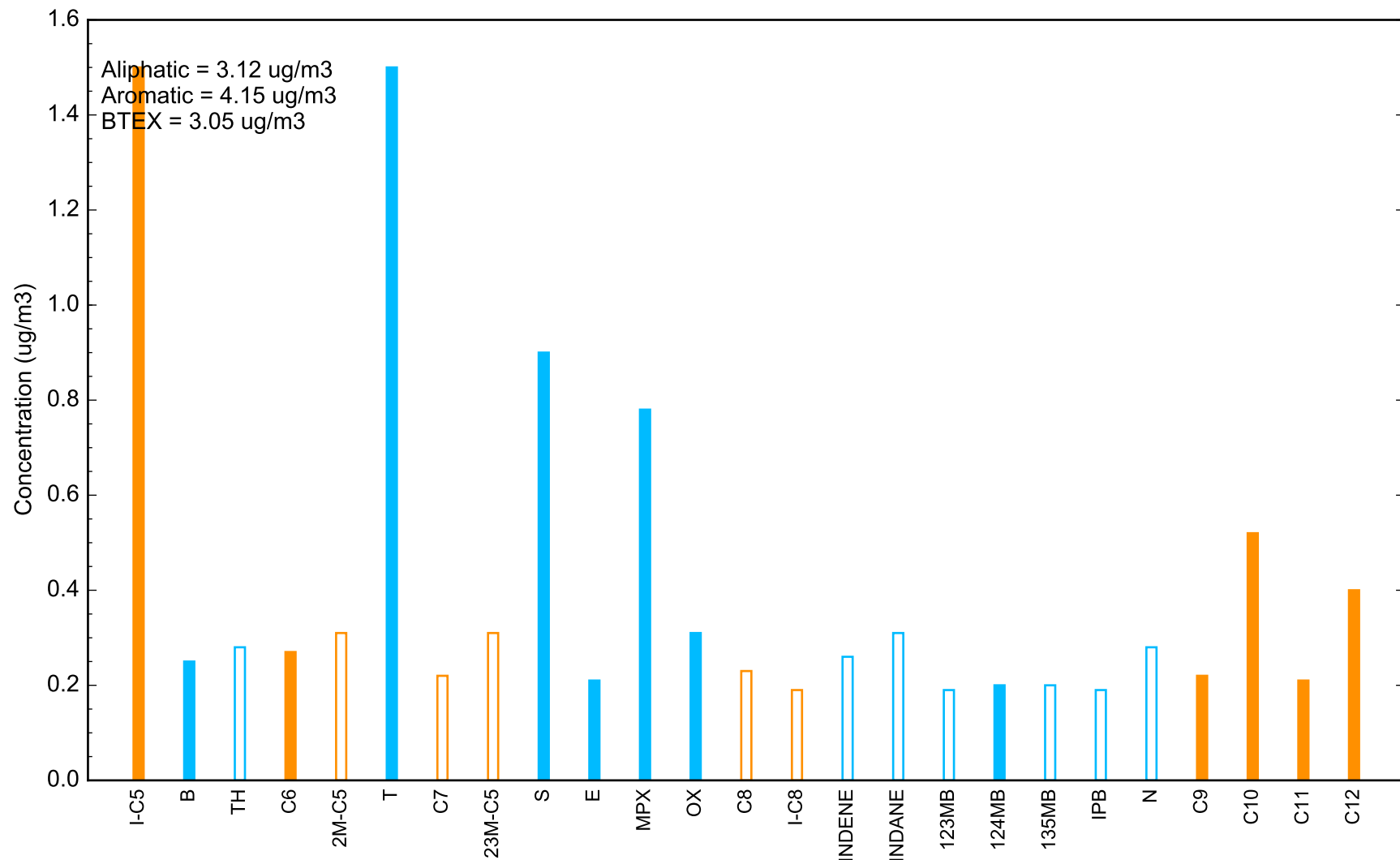
Peter Cooper Village, Figure 51

Concentration of Volatile Organic Compounds: IA-524ST-02-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-530-01
Subfacility: 530
Date: 2017-10-12 13:08:00



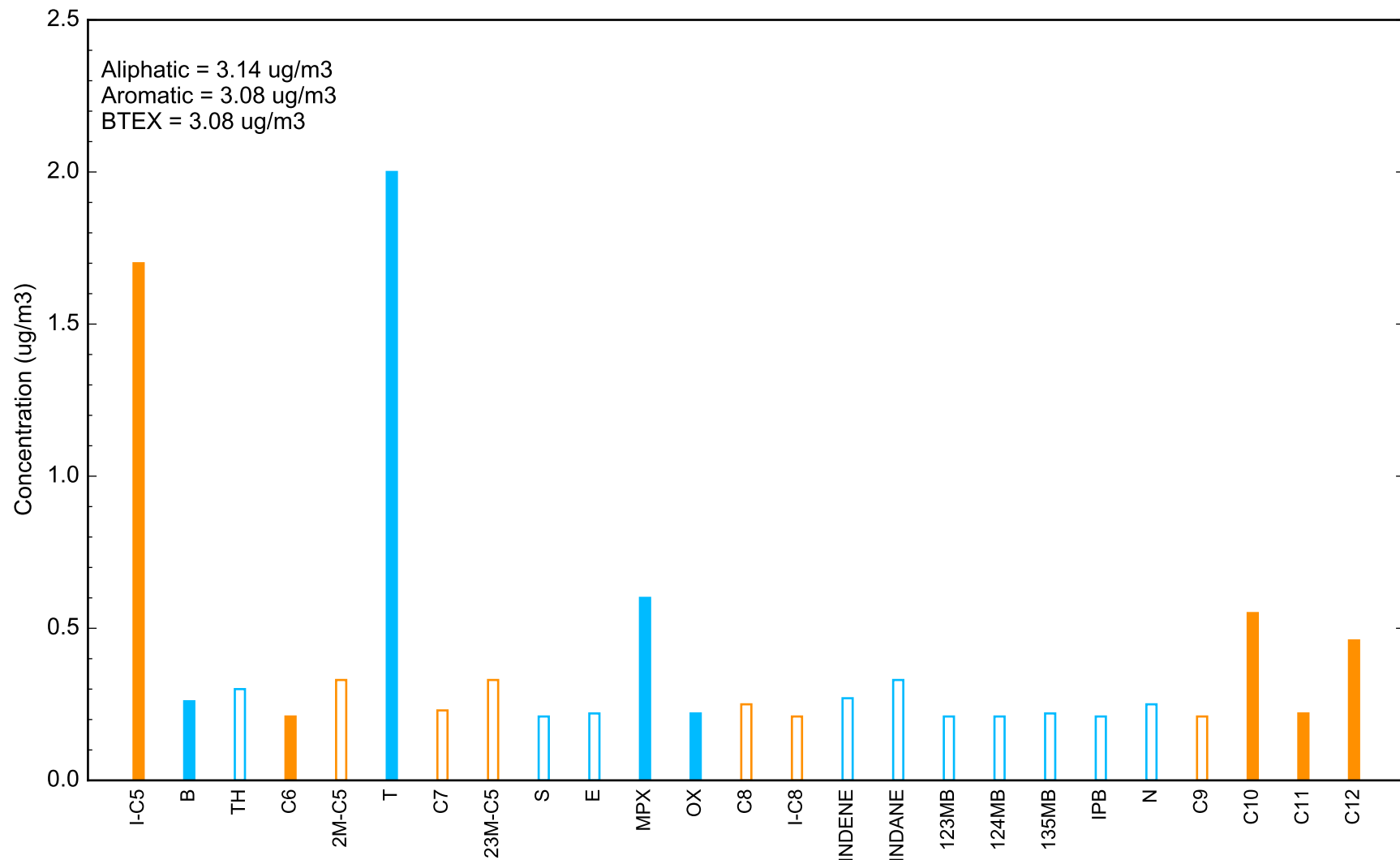
Peter Cooper Village, Figure 52

Concentration of Volatile Organic Compounds: IA-530-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-530-02
Subfacility: 530
Date: 2017-10-12 16:26:00



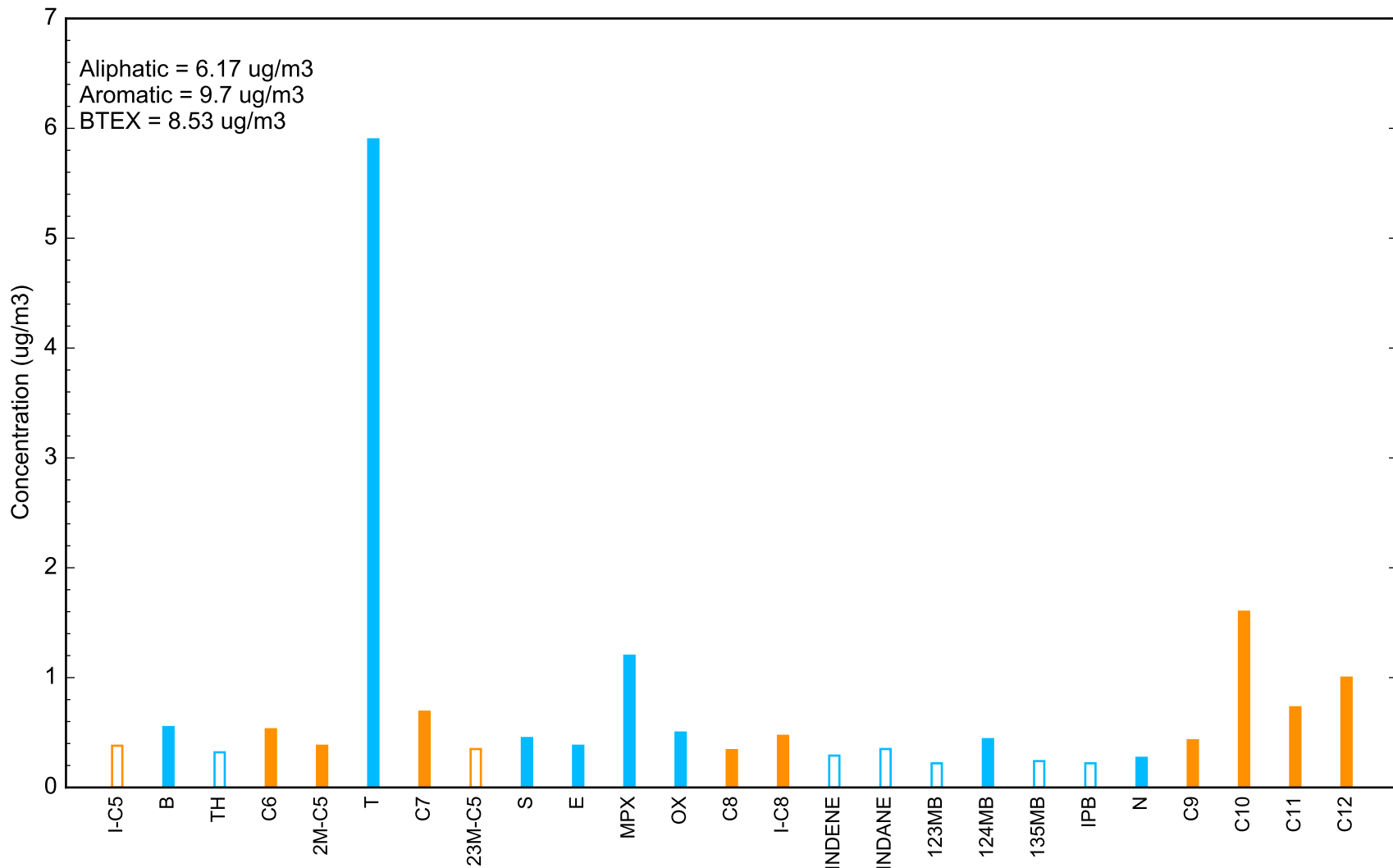
Peter Cooper Village, Figure 53

Concentration of Volatile Organic Compounds: IA-530-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-531-01
Subfacility: 531
Date: 2017-10-13 15:27:00



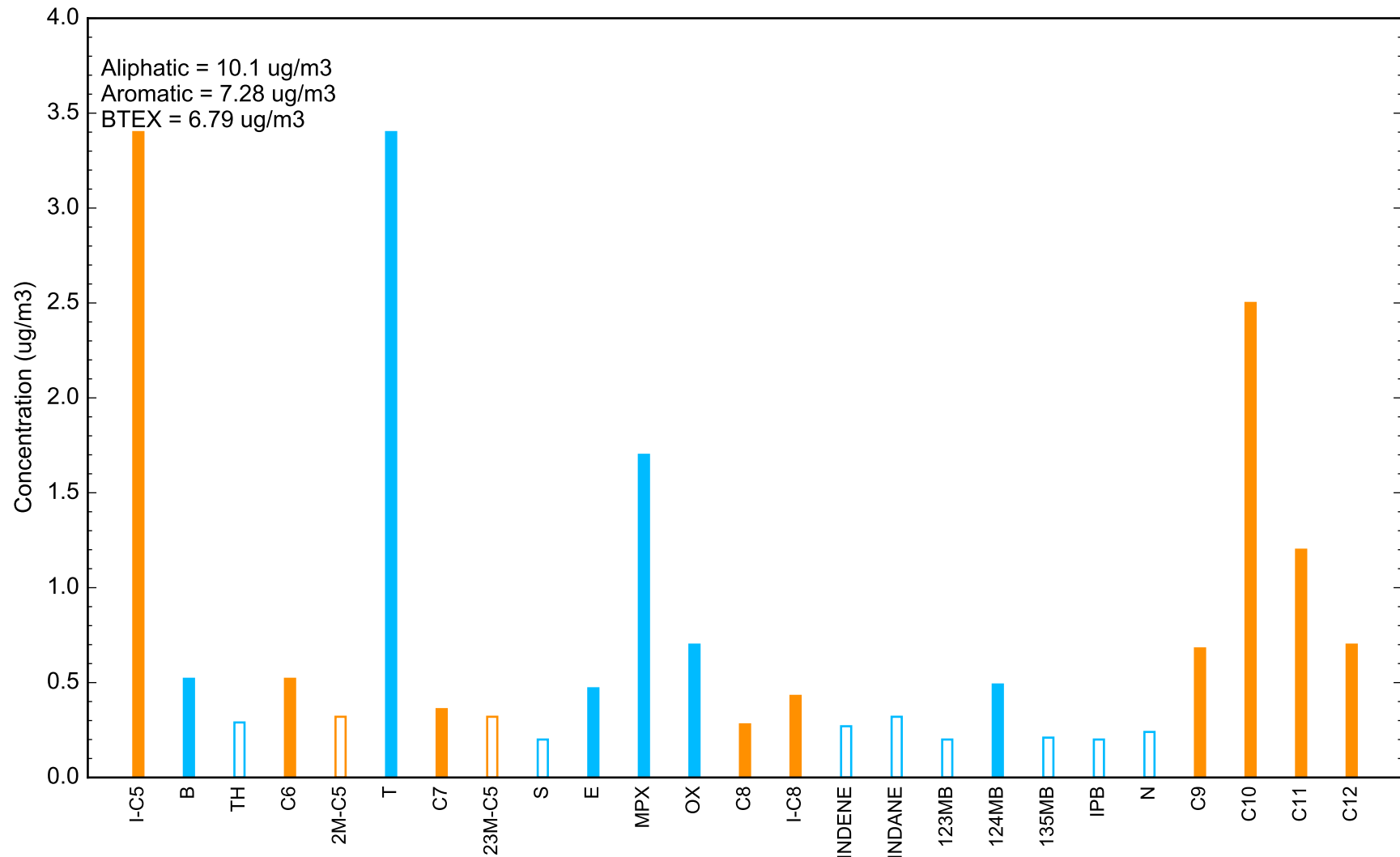
Peter Cooper Village, Figure 54

Concentration of Volatile Organic Compounds: IA-531-01-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-531-02
Subfacility: 531
Date: 2017-10-13 16:32:00



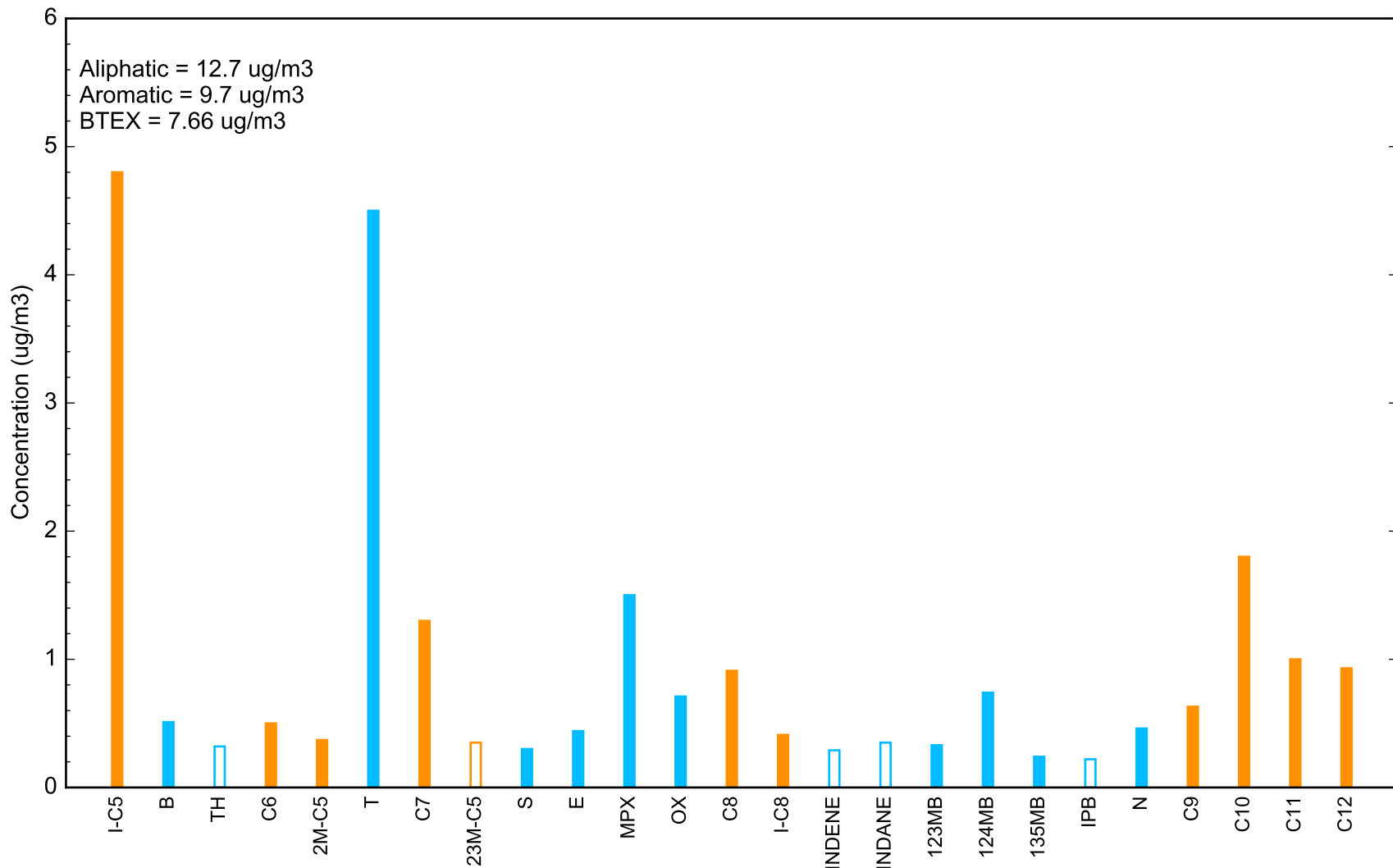
Peter Cooper Village, Figure 55

Concentration of Volatile Organic Compounds: IA-531-02-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-531-03
Subfacility: 531
Date: 2017-10-13 16:35:00



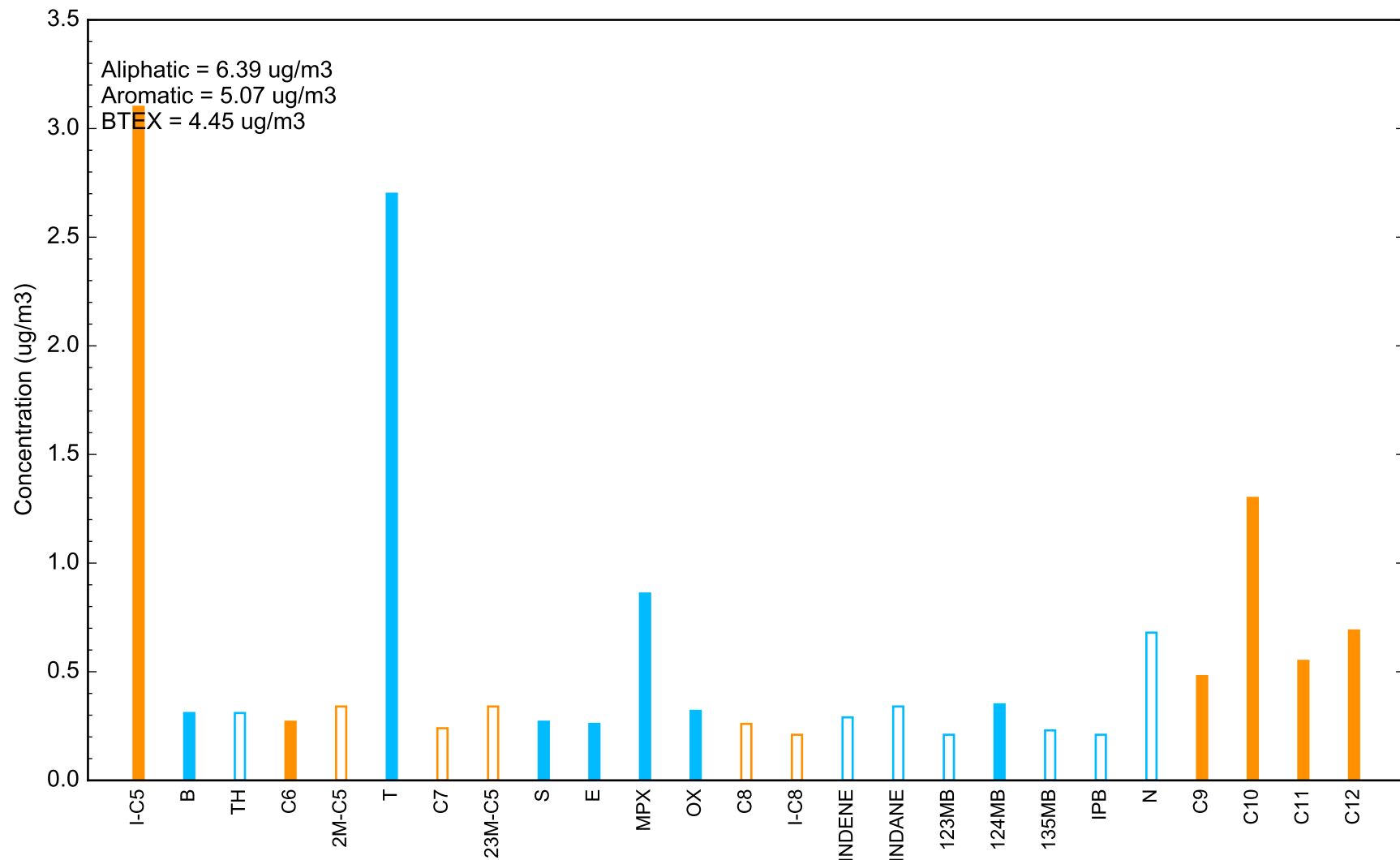
Peter Cooper Village, Figure 56

Concentration of Volatile Organic Compounds: IA-531-03-20171013

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-541-01
Subfacility: 541
Date: 2017-10-12 16:58:00



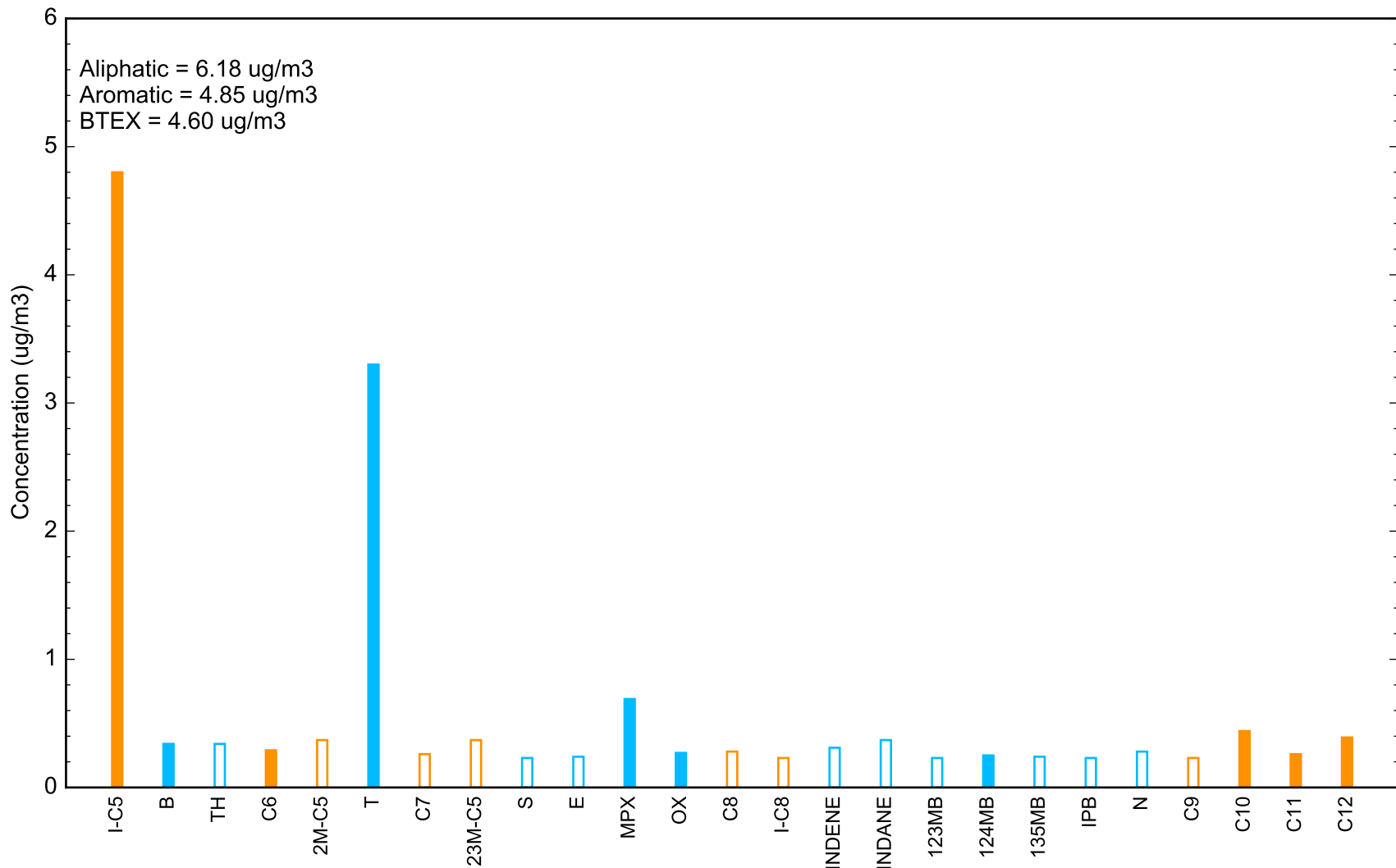
Peter Cooper Village, Figure 57

Concentration of Volatile Organic Compounds: IA-541-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-541-02
Subfacility: 541
Date: 2017-10-12 14:48:00



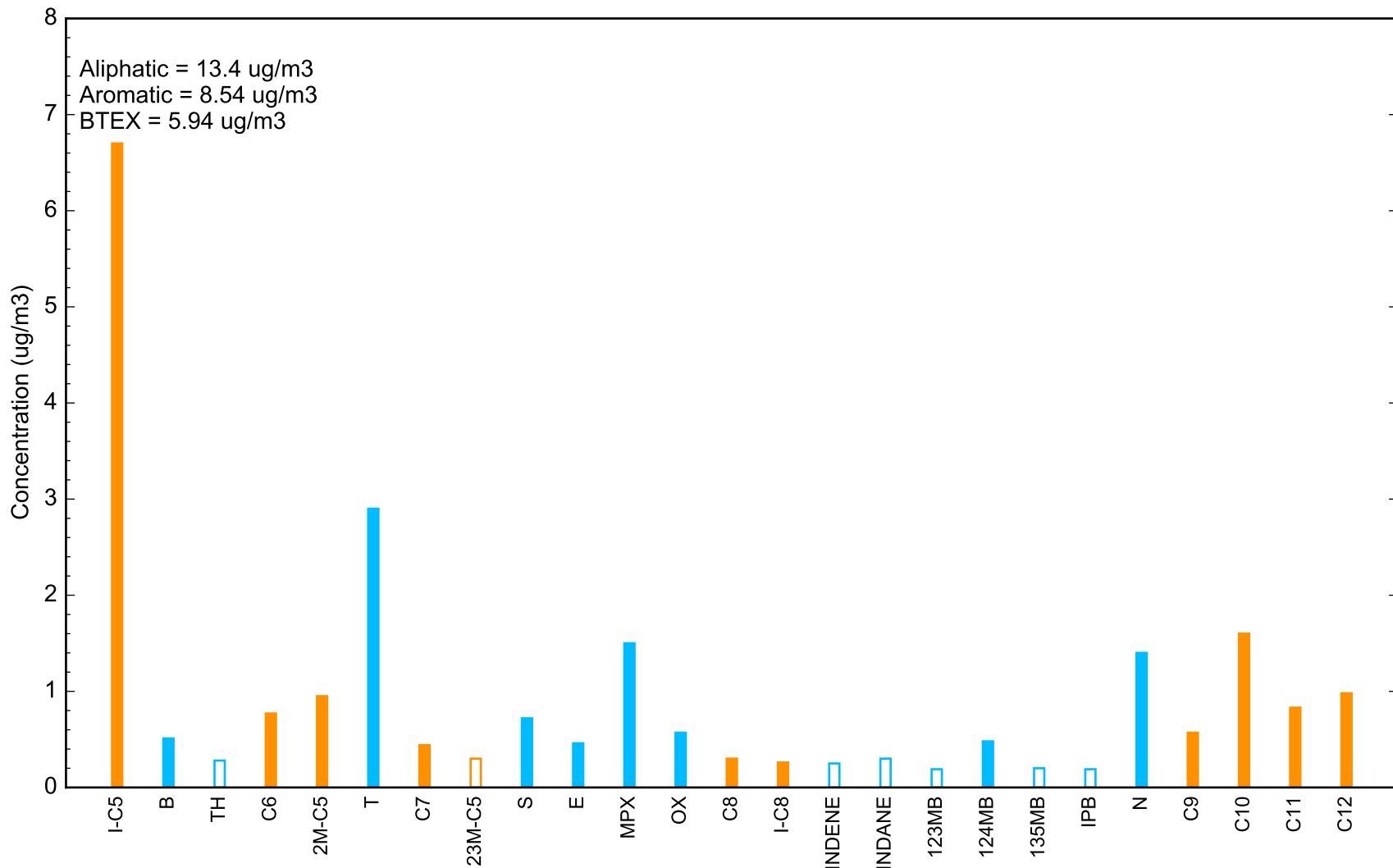
Peter Cooper Village, Figure 58

Concentration of Volatile Organic Compounds: IA-541-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-541-03
Subfacility: 541
Date: 2017-10-12 16:54:00



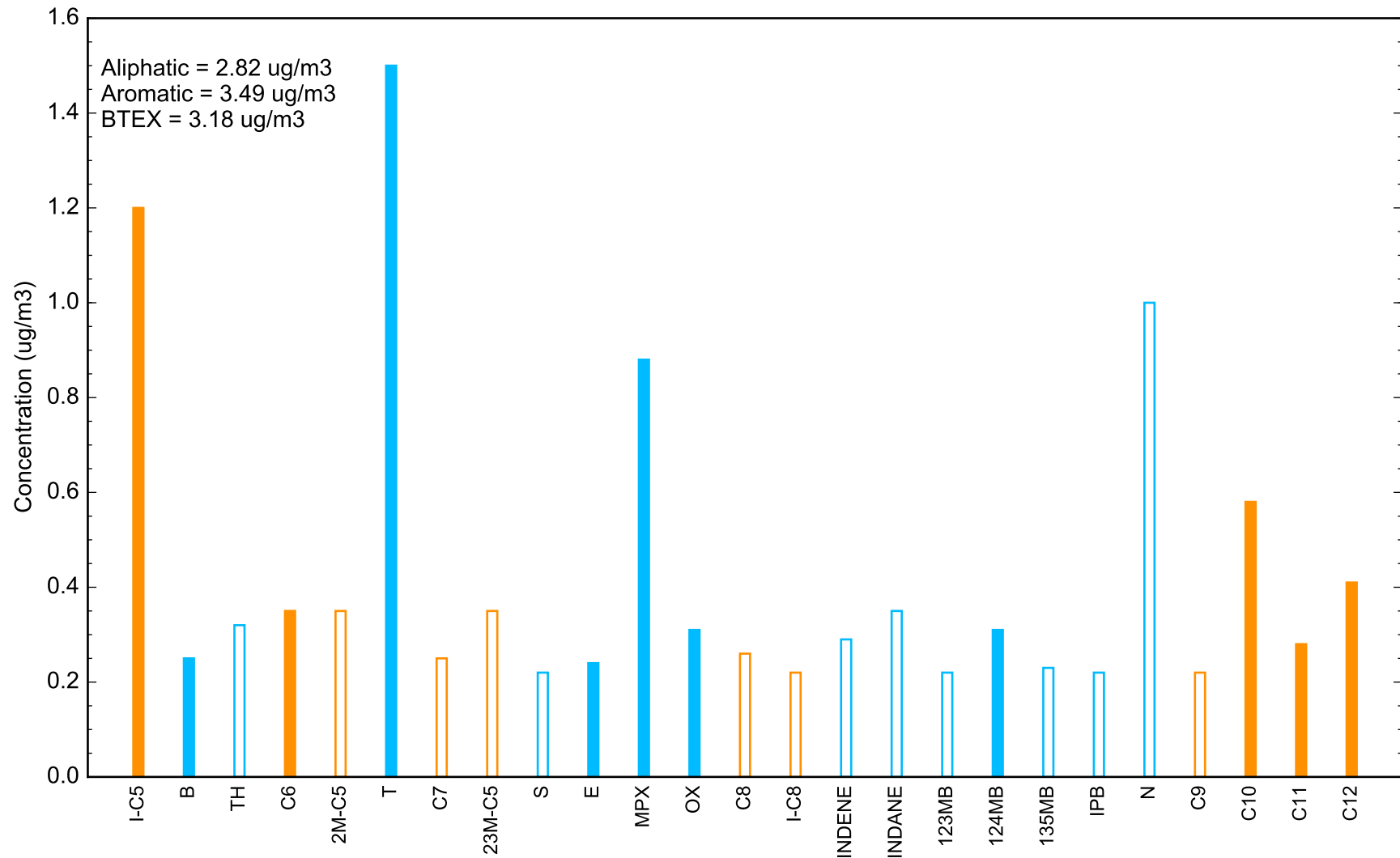
Peter Cooper Village, Figure 59

Concentration of Volatile Organic Compounds: IA-541-03-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-6-01
Subfacility: 6
Date: 2017-10-12 17:15:00



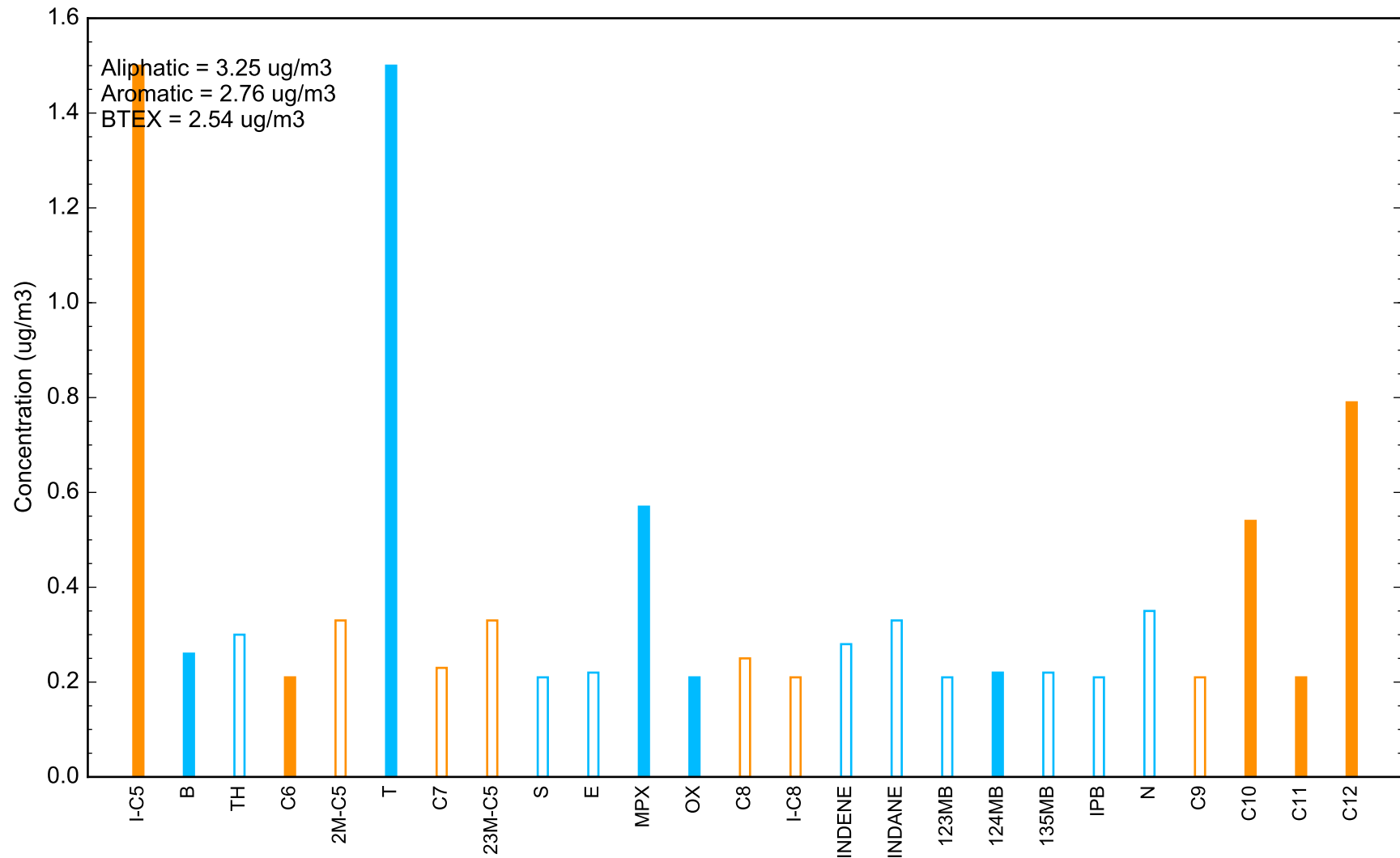
Peter Cooper Village, Figure 60

Concentration of Volatile Organic Compounds: IA-6-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-601-01
Subfacility: 601
Date: 2017-10-12 17:00:00



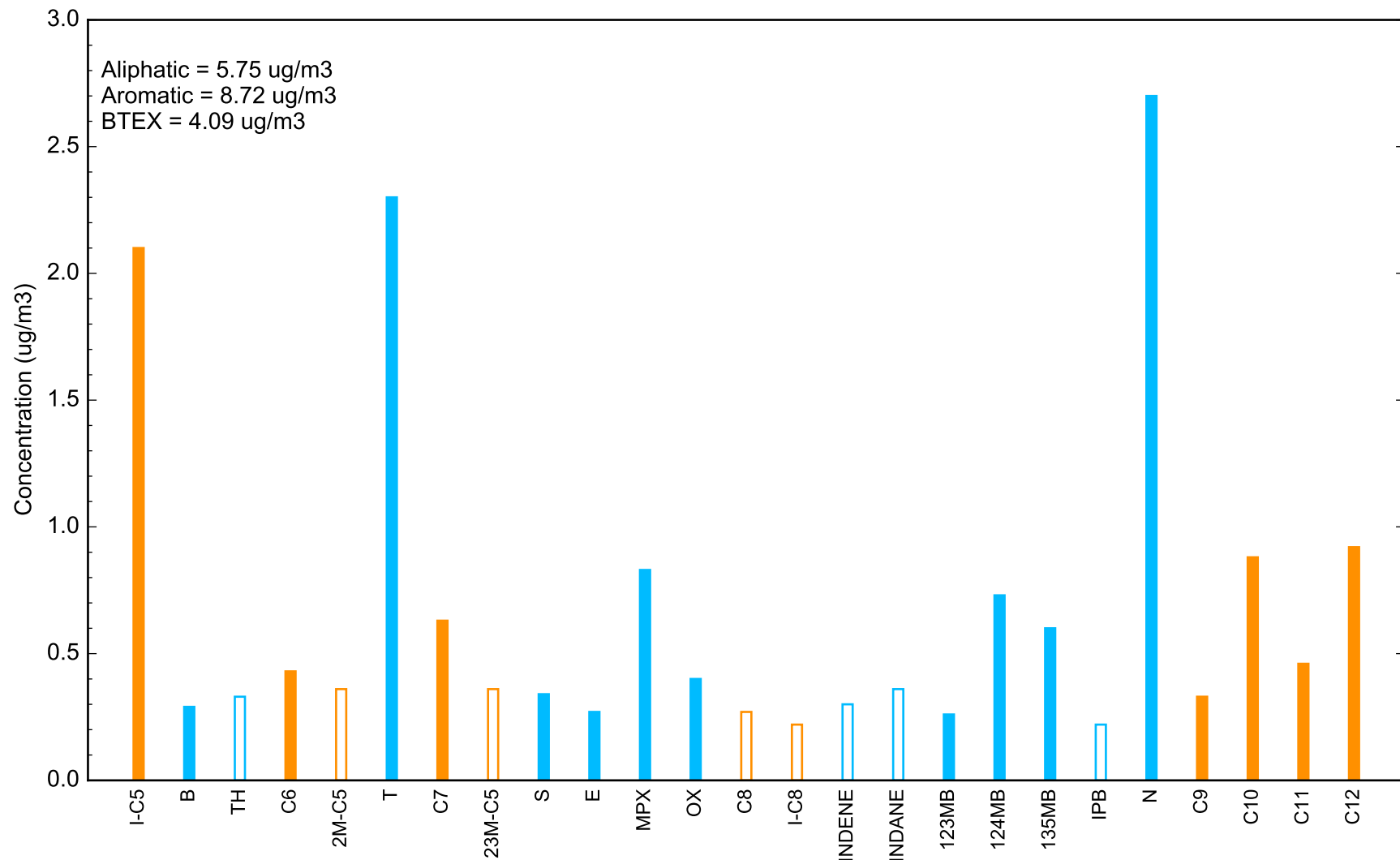
Peter Cooper Village, Figure 61

Concentration of Volatile Organic Compounds: IA-601-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-601-02
Subfacility: 601
Date: 2017-10-12 17:05:00



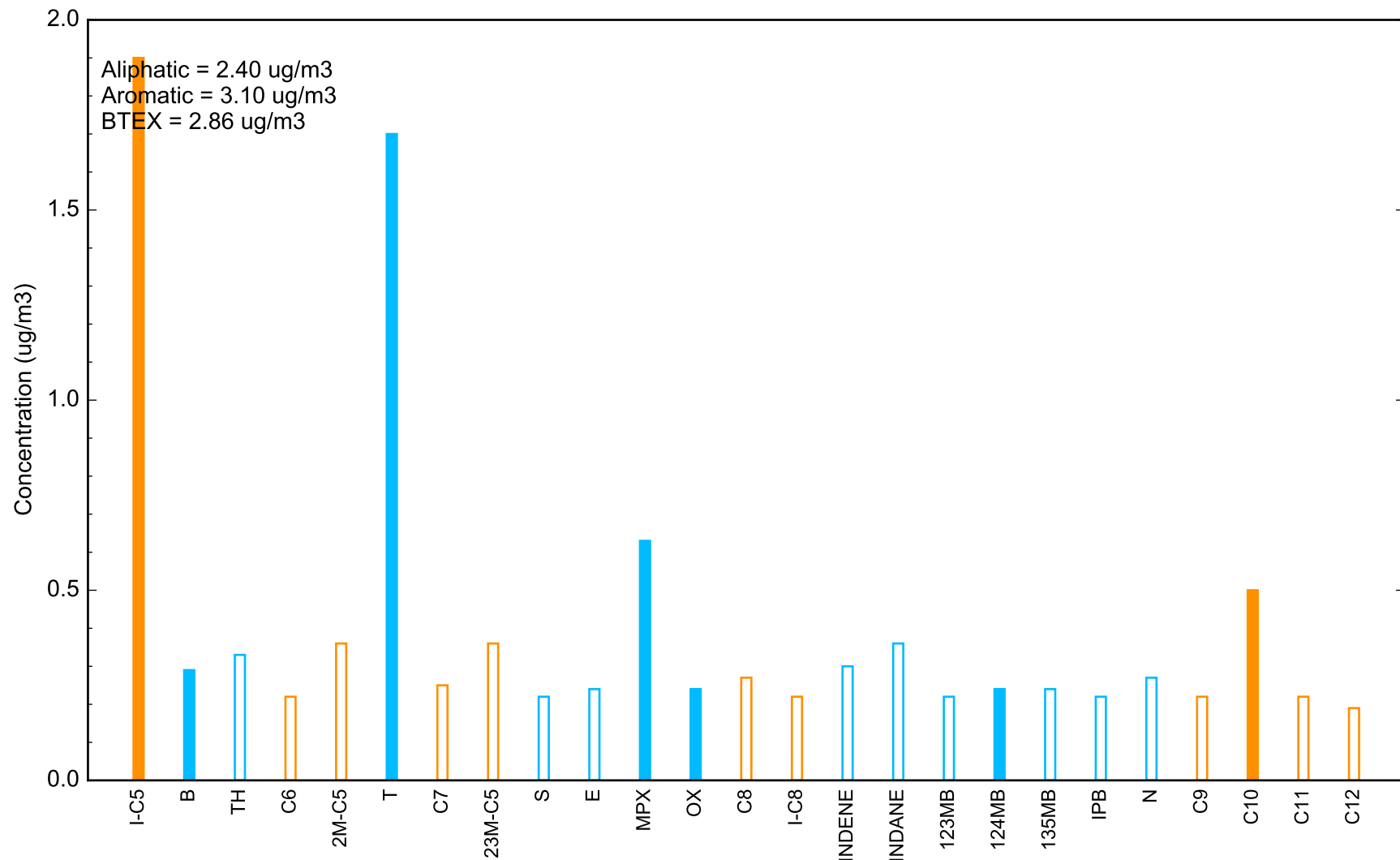
Peter Cooper Village, Figure 62

Concentration of Volatile Organic Compounds: IA-601-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-601-03
Subfacility: 601
Date: 2017-10-12 16:55:00



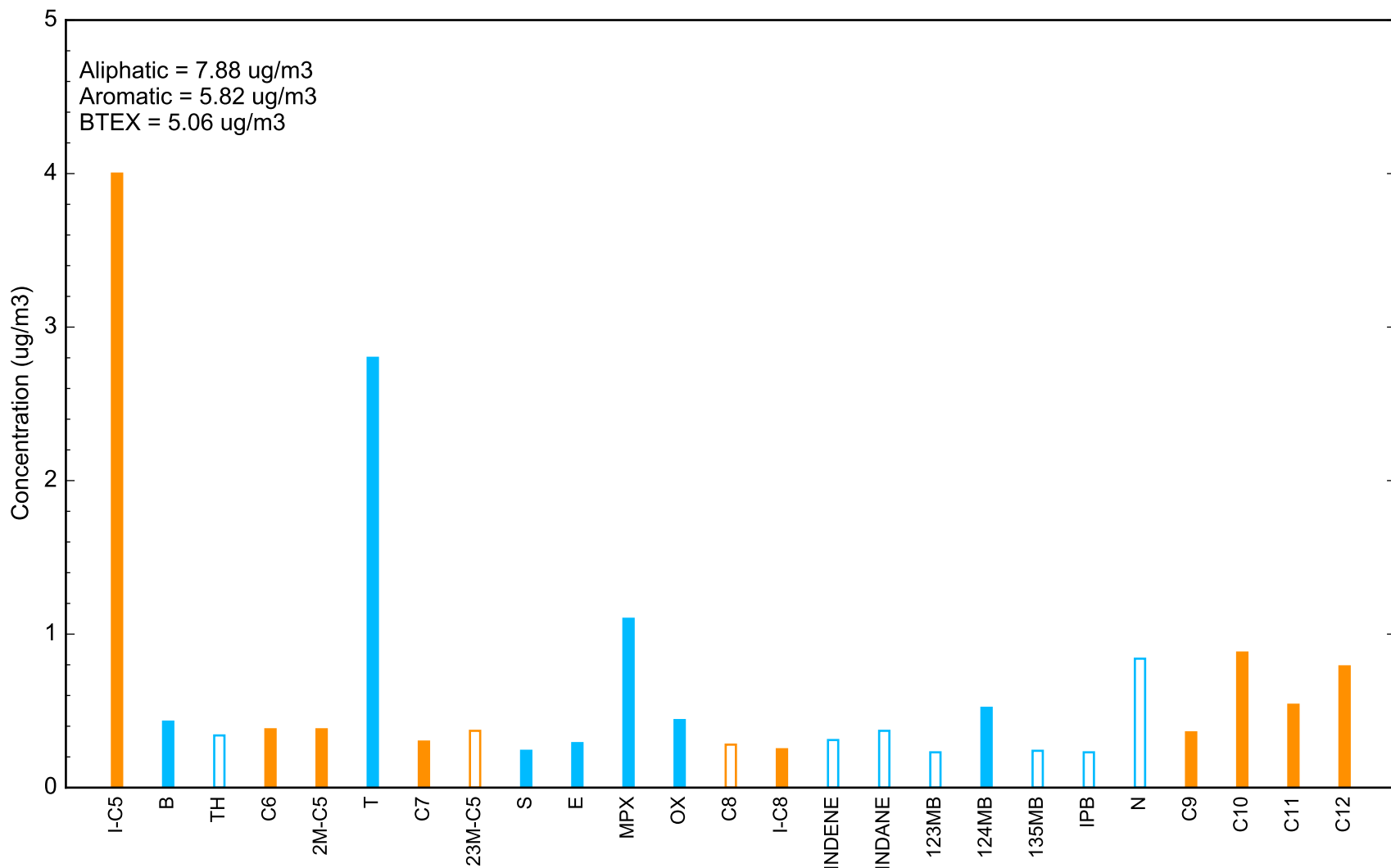
Peter Cooper Village, Figure 63

Concentration of Volatile Organic Compounds: IA-601-03-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-601-04
Subfacility: 601
Date: 2017-10-12 17:25:00



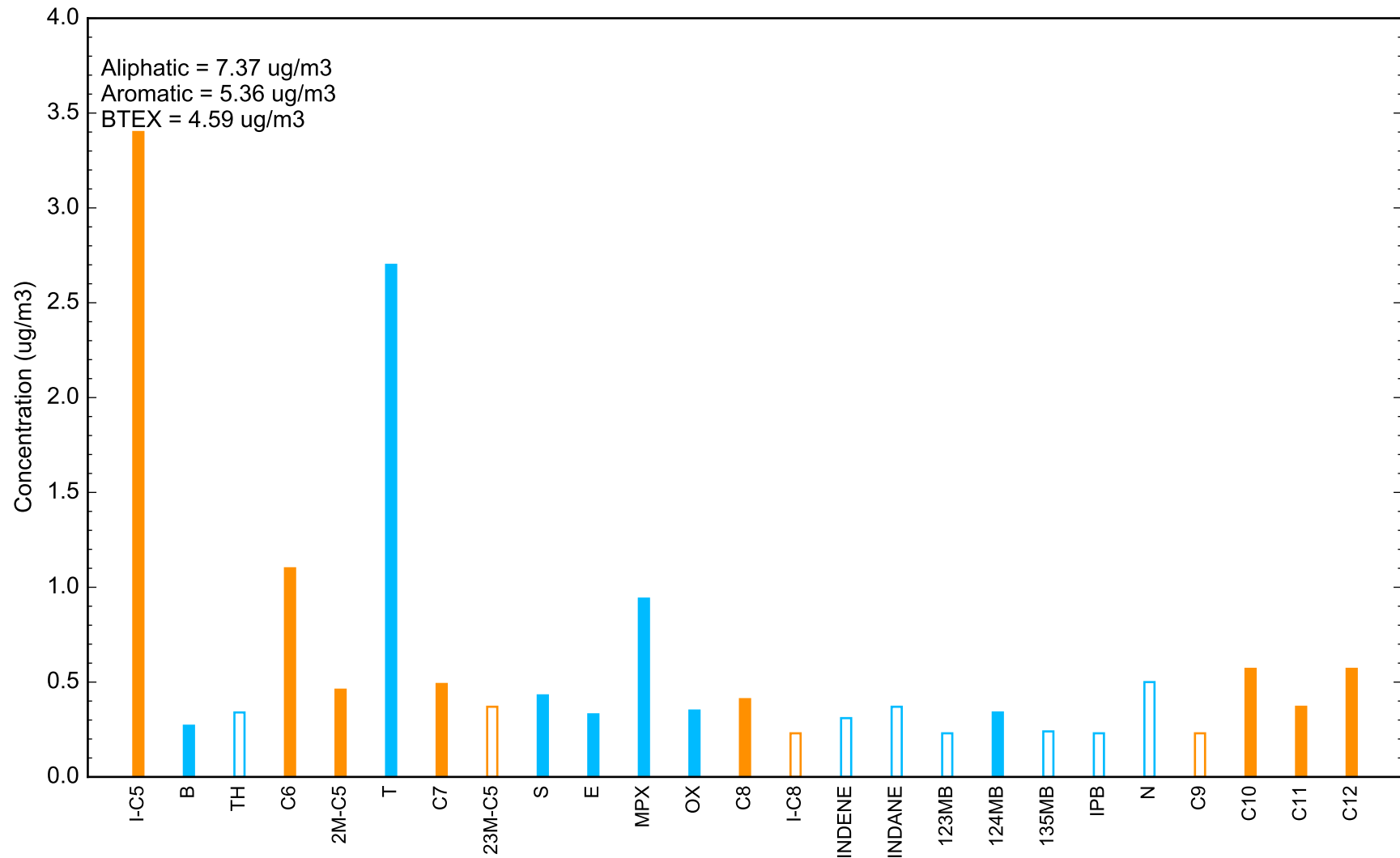
Peter Cooper Village, Figure 64

Concentration of Volatile Organic Compounds: IA-601-04-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-6-02
Subfacility: 6
Date: 2017-10-12 17:10:00



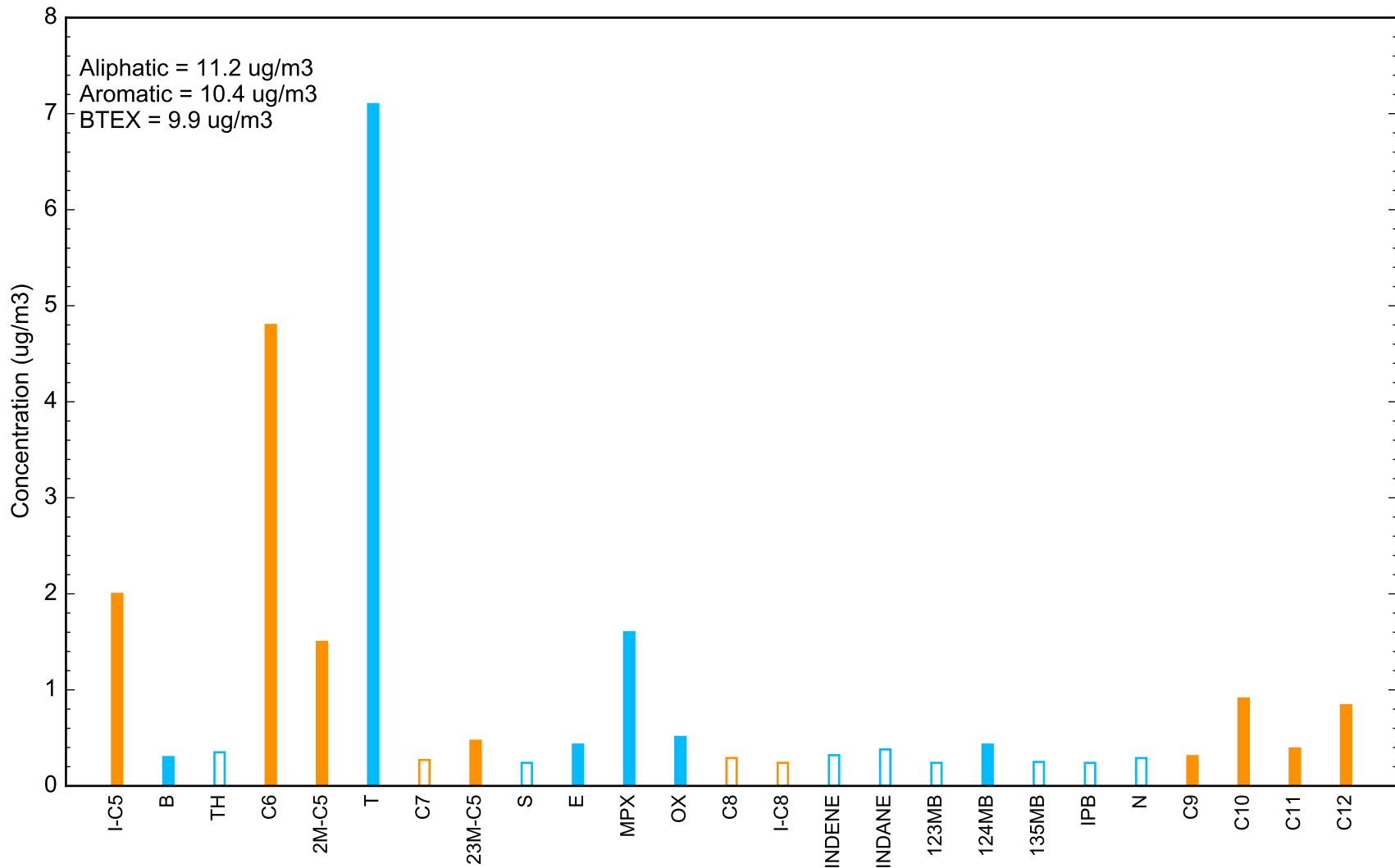
Peter Cooper Village, Figure 65

Concentration of Volatile Organic Compounds: IA-6-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-6-03
Subfacility: 6
Date: 2017-10-12 16:44:00



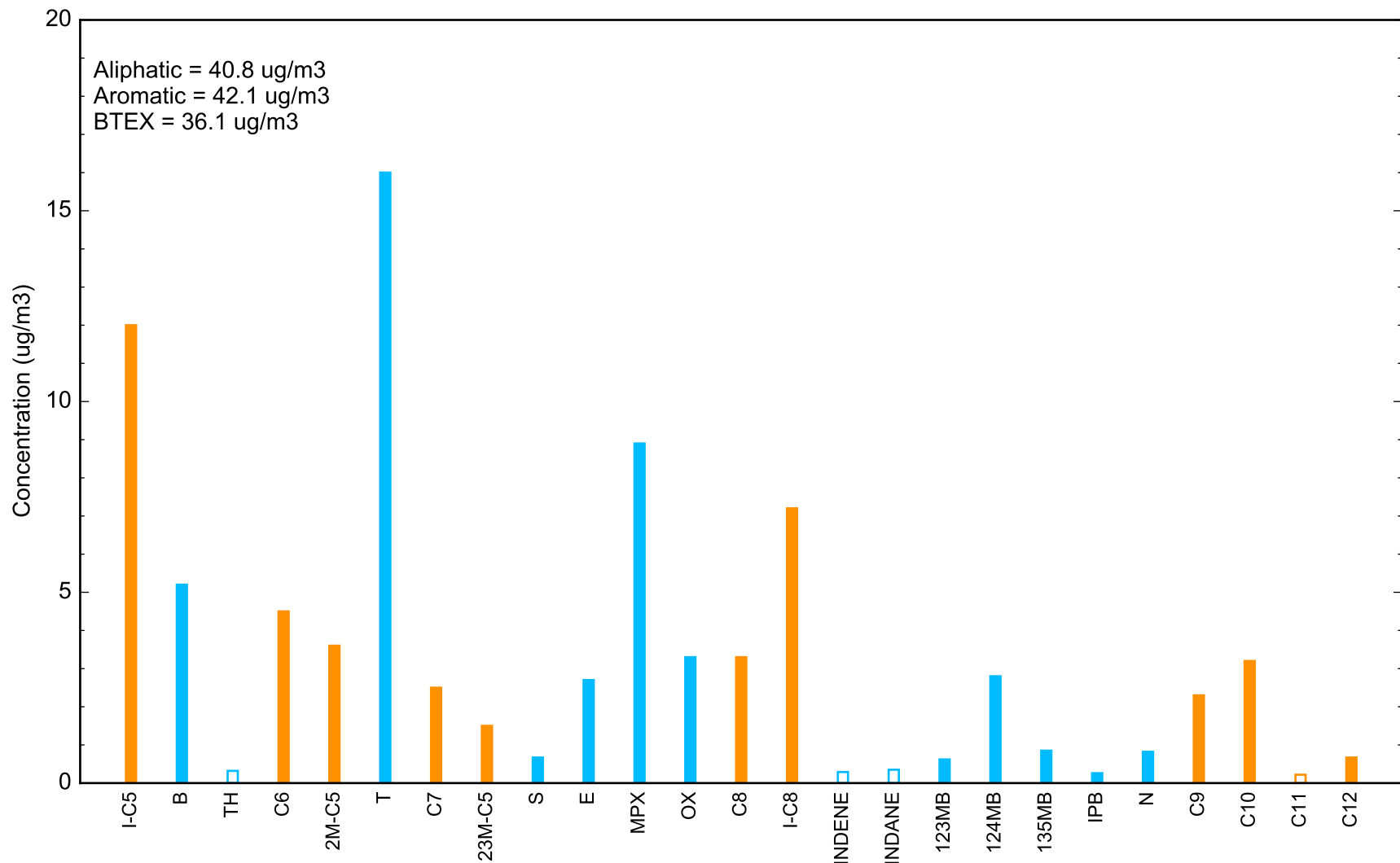
Peter Cooper Village, Figure 66

Concentration of Volatile Organic Compounds: IA-6-03-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-615ST-01
 Subfacility: 615
 Date: 2017-10-16 17:48:00



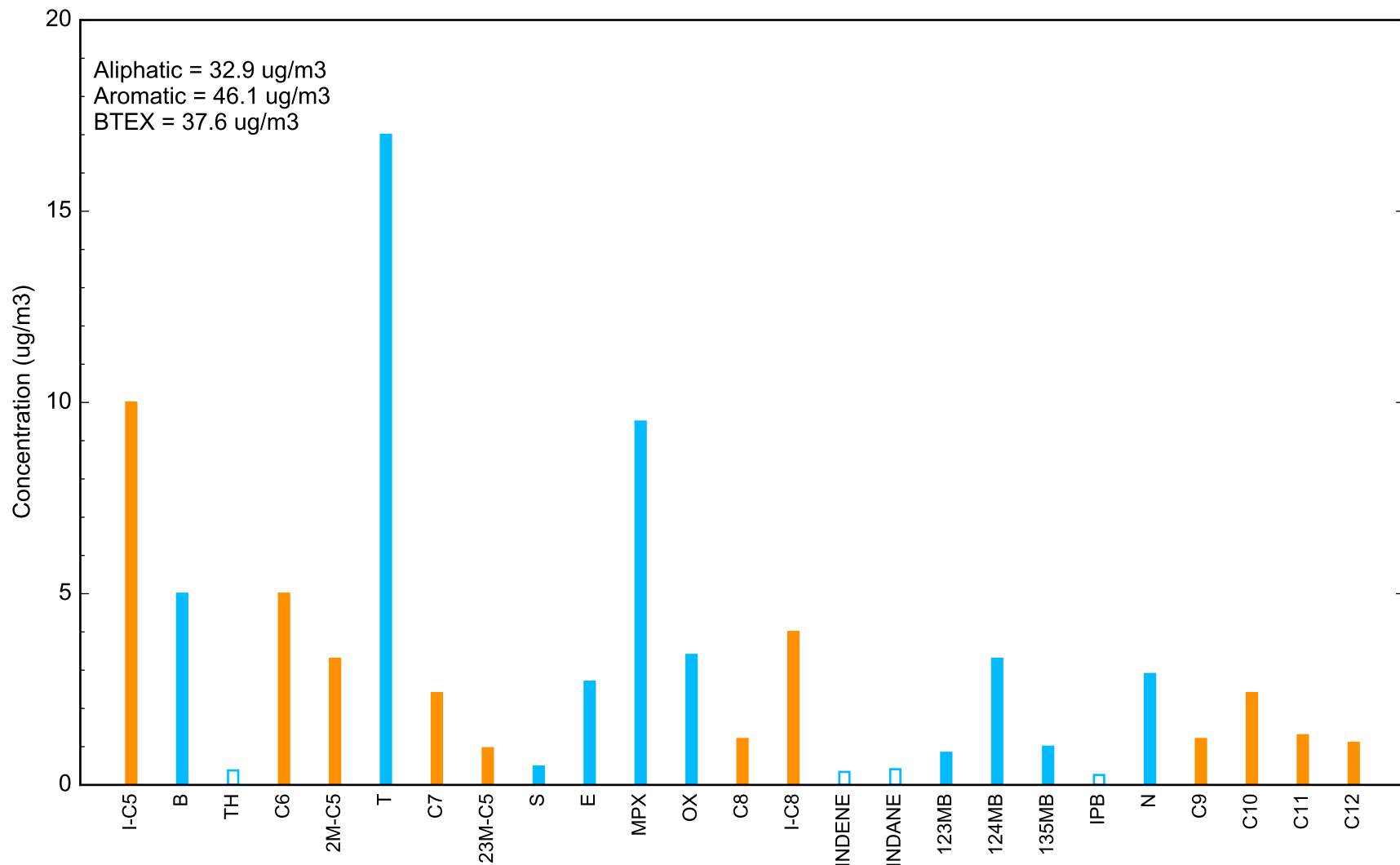
Peter Cooper Village, Figure 67

Concentration of Volatile Organic Compounds: IA-615ST-01-20171016

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-625ST-01
Subfacility: 625
Date: 2017-10-16 17:52:00



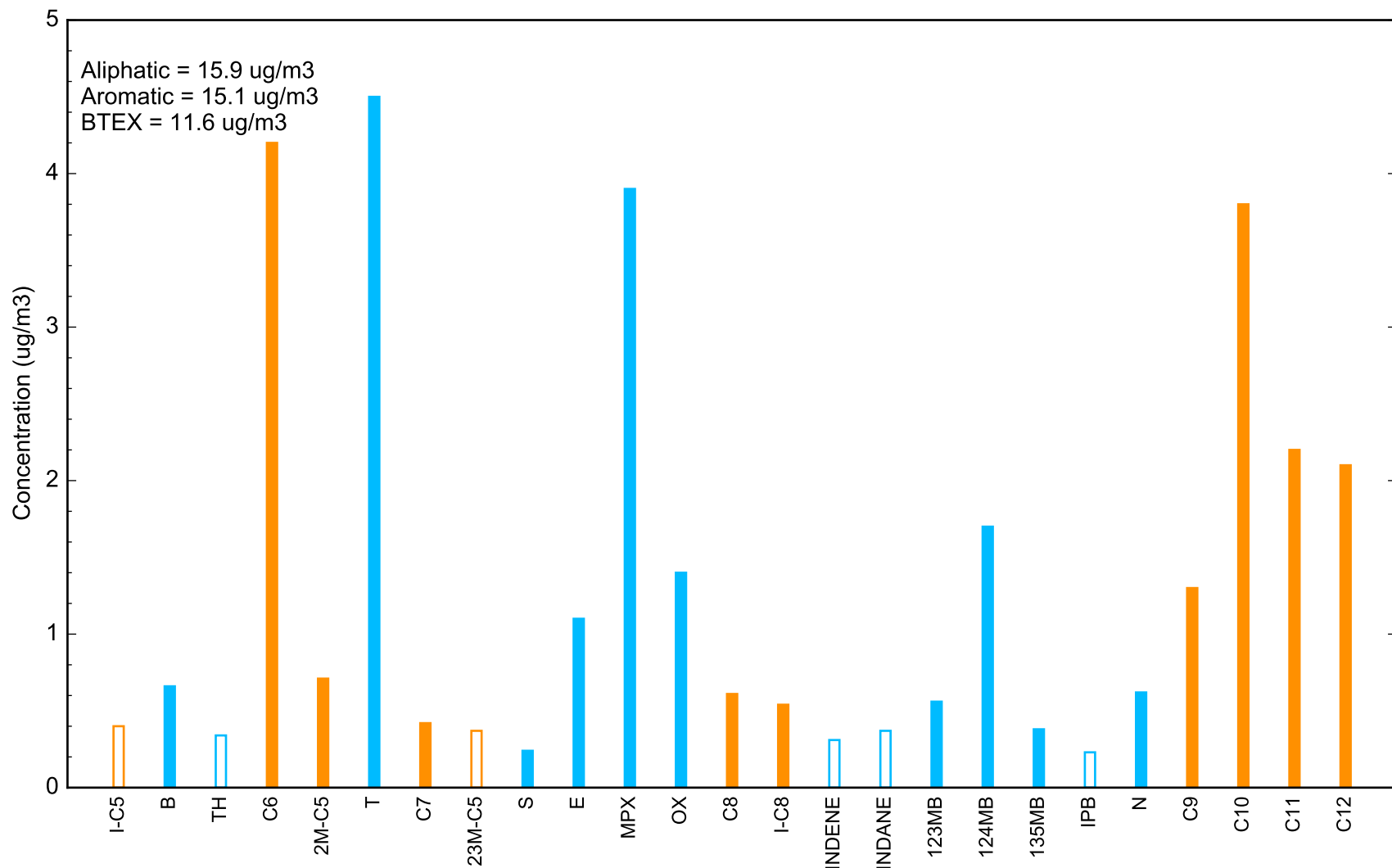
Peter Cooper Village, Figure 68

Concentration of Volatile Organic Compounds: IA-625ST-01-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-625ST-02
Subfacility: 625
Date: 2017-10-16 16:30:00



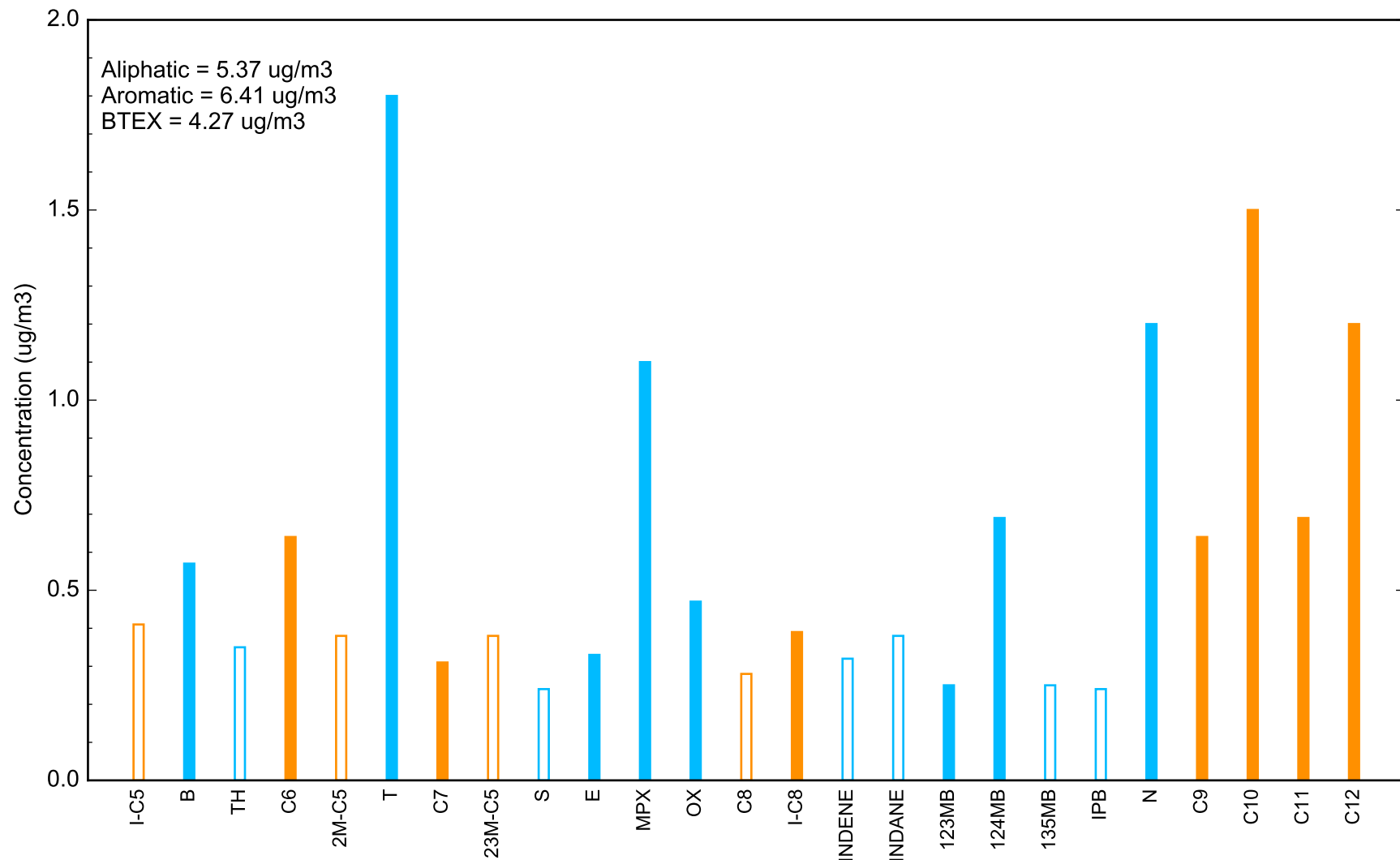
Peter Cooper Village, Figure 69

Concentration of Volatile Organic Compounds: IA-625ST-02-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-629ST-01
Subfacility: 629
Date: 2017-10-16 16:34:00



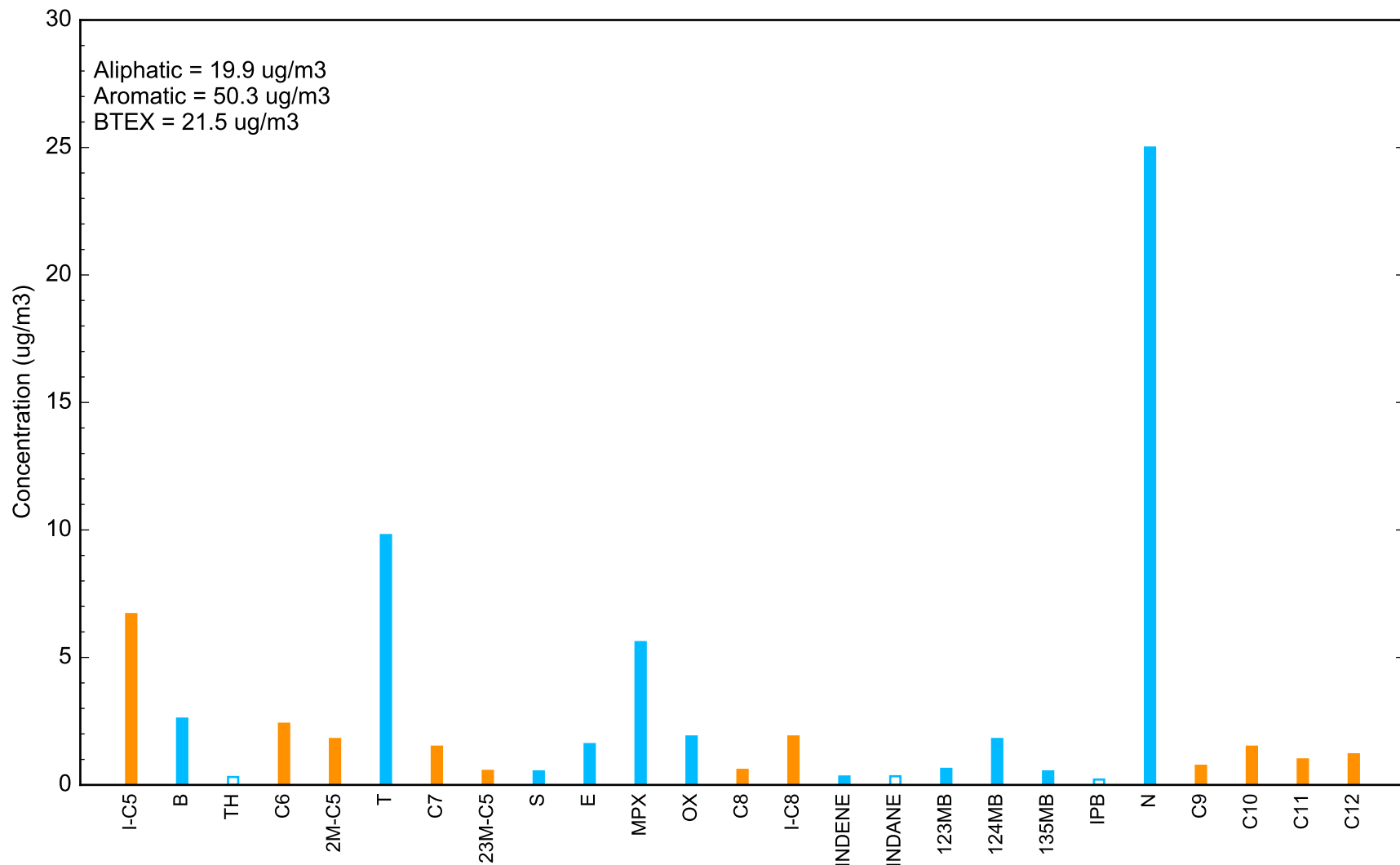
Peter Cooper Village, Figure 70

Concentration of Volatile Organic Compounds: IA-629ST-01-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-635ST-01
 Subfacility: 635ST
 Date: 2017-10-16 14:40:00



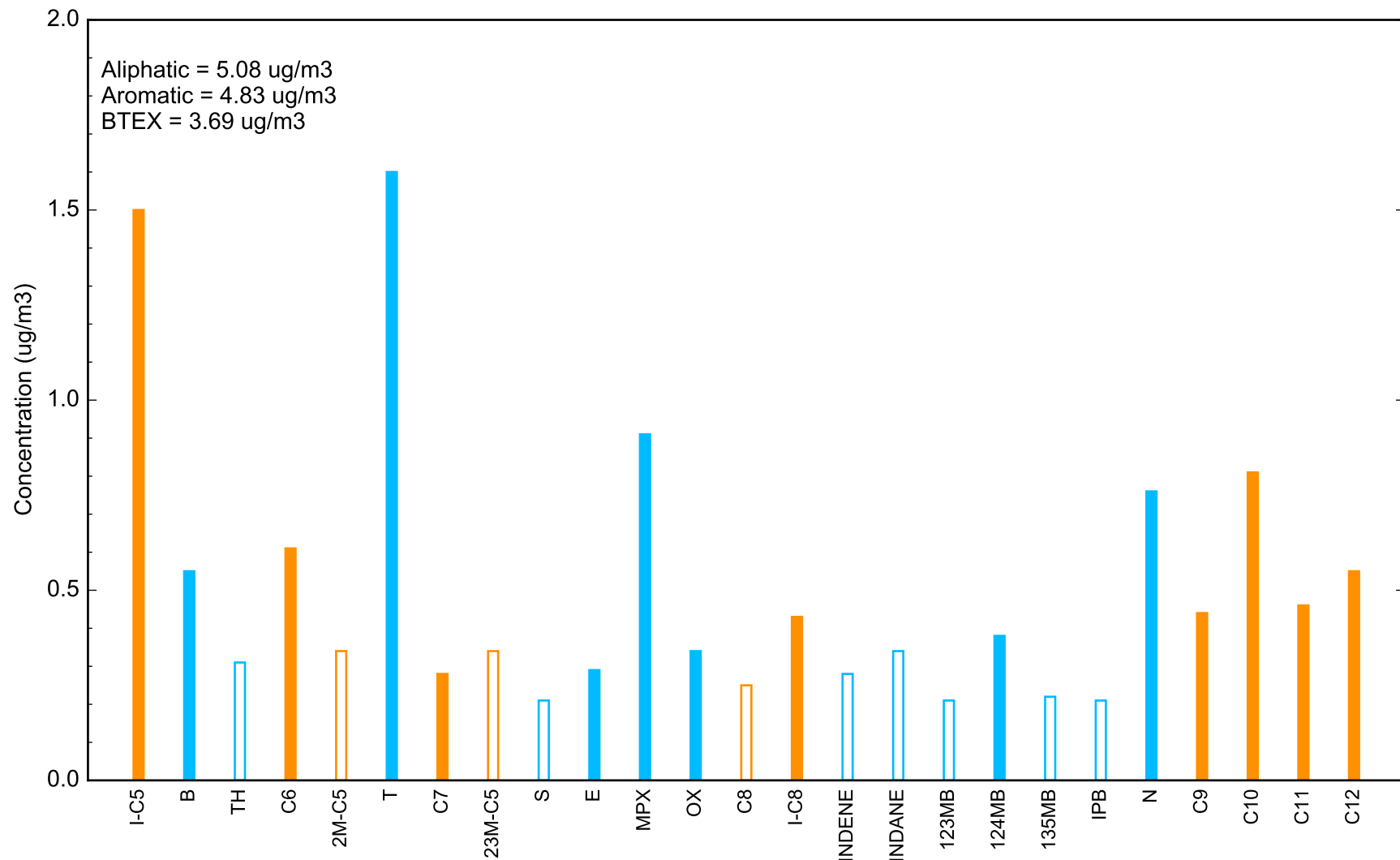
Peter Cooper Village, Figure 71

Concentration of Volatile Organic Compounds: IA-635ST-01-20171016

*Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.*



Location: IA-645ST-01
Subfacility: 645ST
Date: 2017-10-16 16:32:00



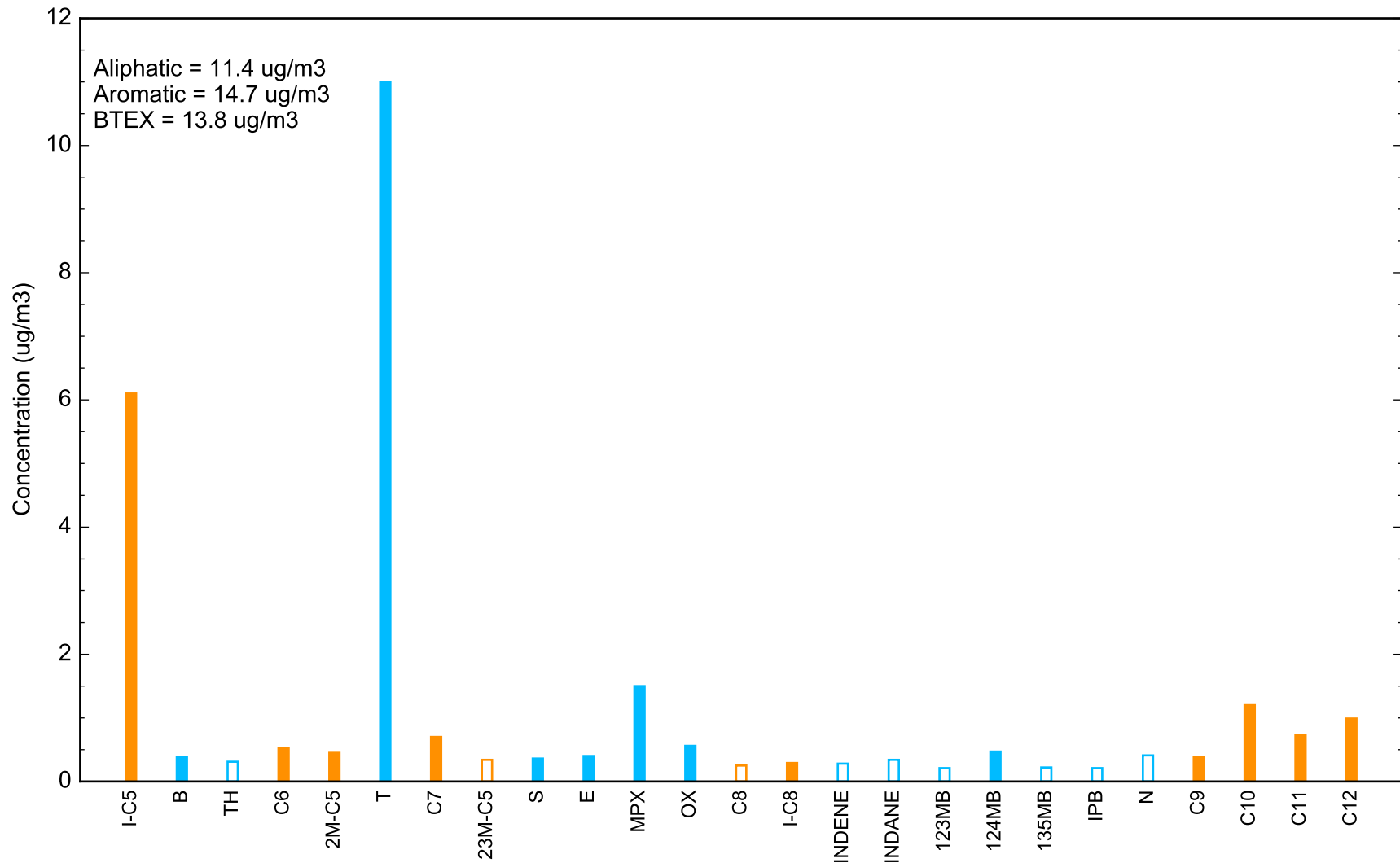
Peter Cooper Village, Figure 72

Concentration of Volatile Organic Compounds: IA-645ST-01-20171016

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-7-01
Subfacility: 7
Date: 2017-10-12 16:31:00



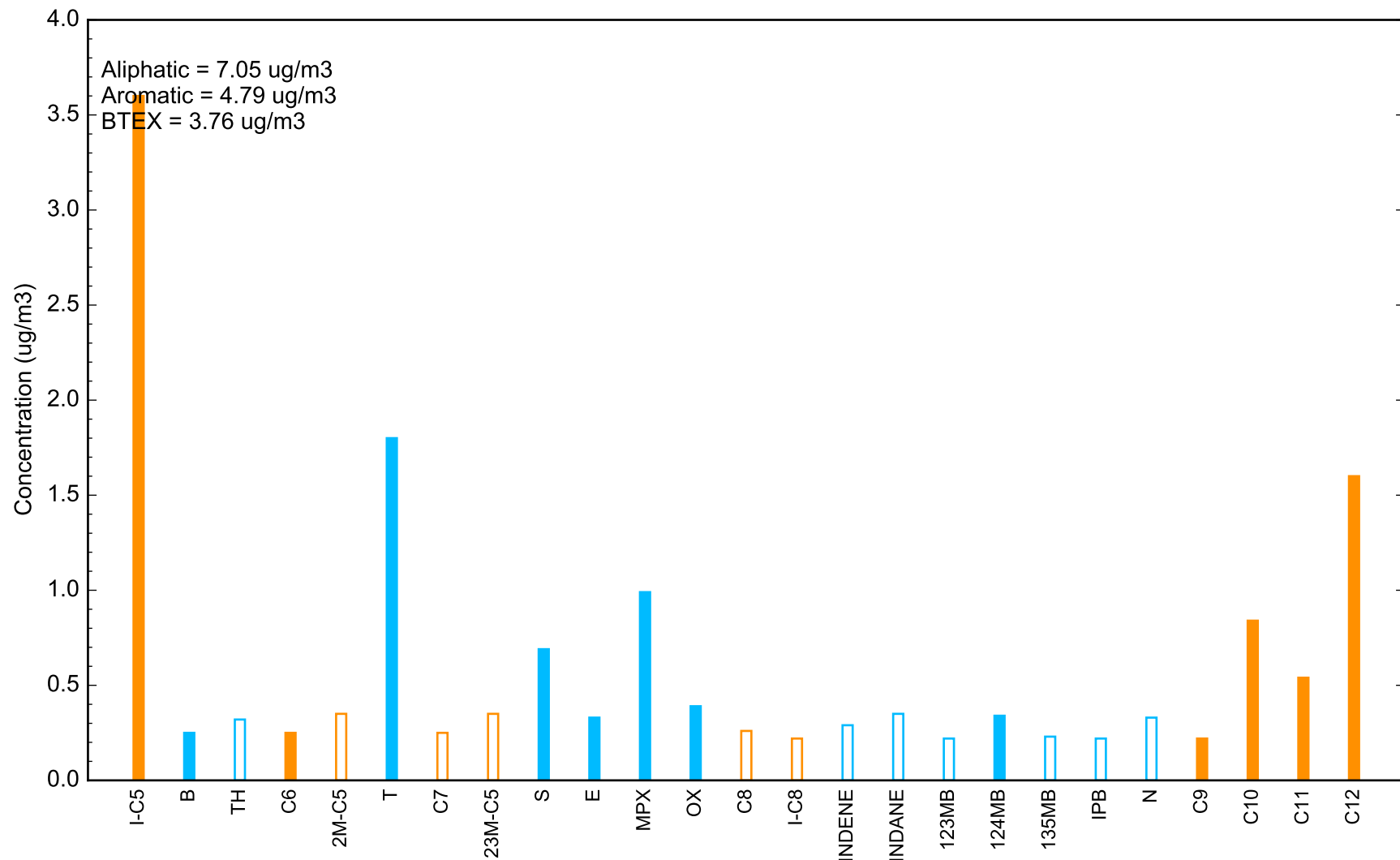
Peter Cooper Village, Figure 73

Concentration of Volatile Organic Compounds: IA-7-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-7-02
Subfacility: 7
Date: 2017-10-12 15:45:00



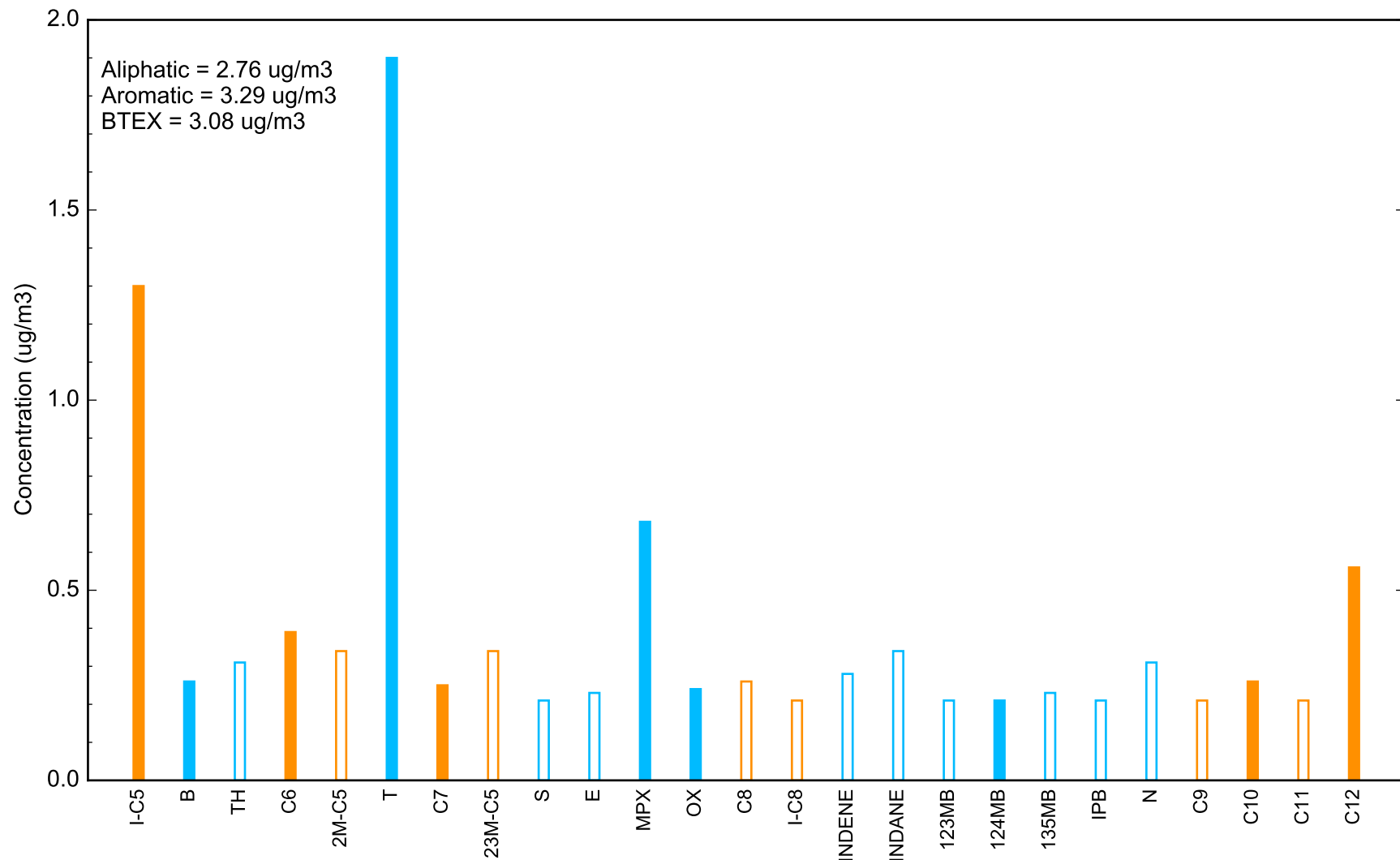
Peter Cooper Village, Figure 74

Concentration of Volatile Organic Compounds: IA-7-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-7-03
Subfacility: 7
Date: 2017-10-12 14:15:00



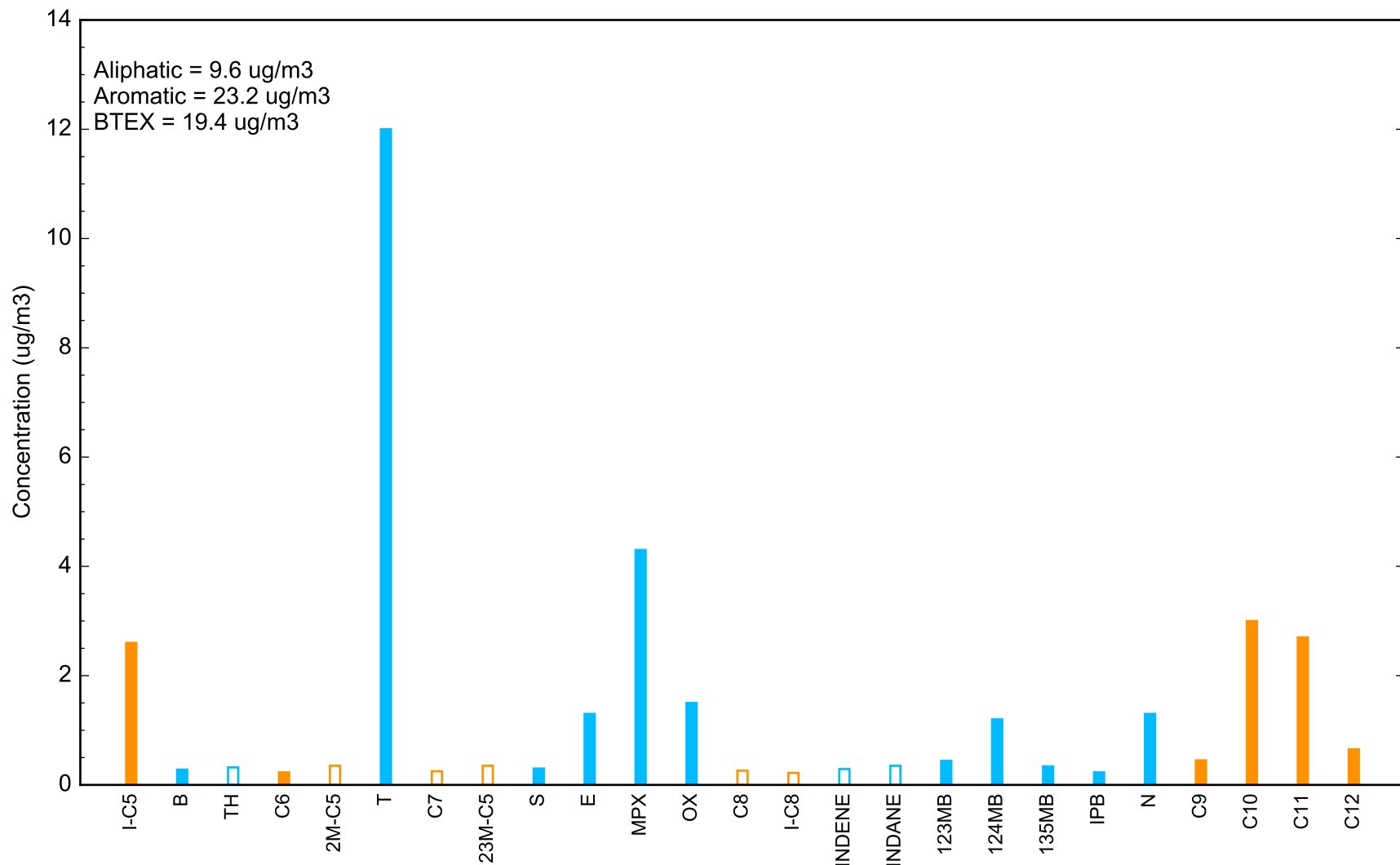
Peter Cooper Village, Figure 75

Concentration of Volatile Organic Compounds: IA-7-03-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-01
Subfacility: 8
Date: 2017-10-12 14:15:00



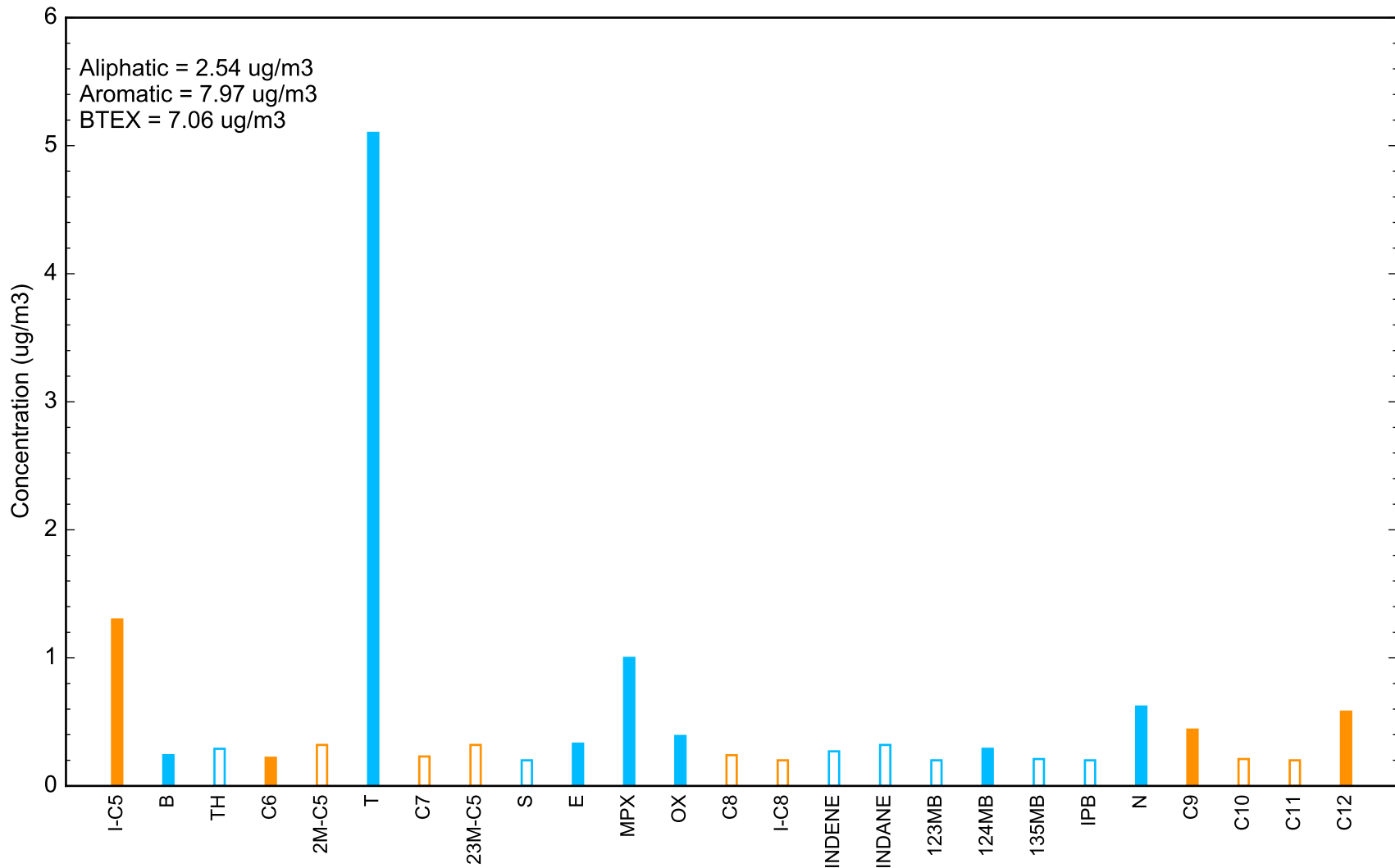
Peter Cooper Village, Figure 76

Concentration of Volatile Organic Compounds: IA-8-01-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-02
Subfacility: 8
Date: 2017-10-12 16:50:00



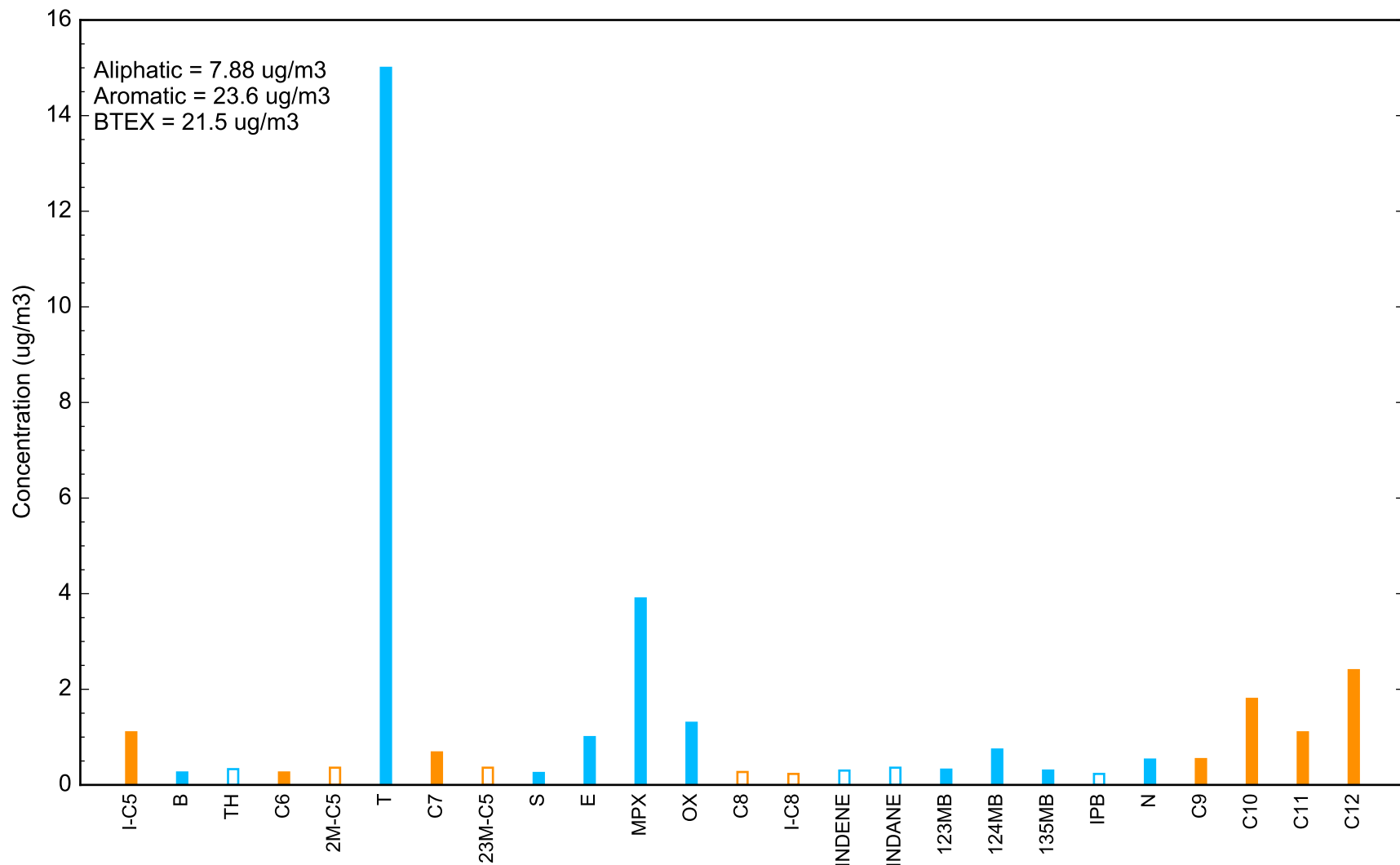
Peter Cooper Village, Figure 77

Concentration of Volatile Organic Compounds: IA-8-02-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-03
Subfacility: 8
Date: 2017-10-12 15:30:00



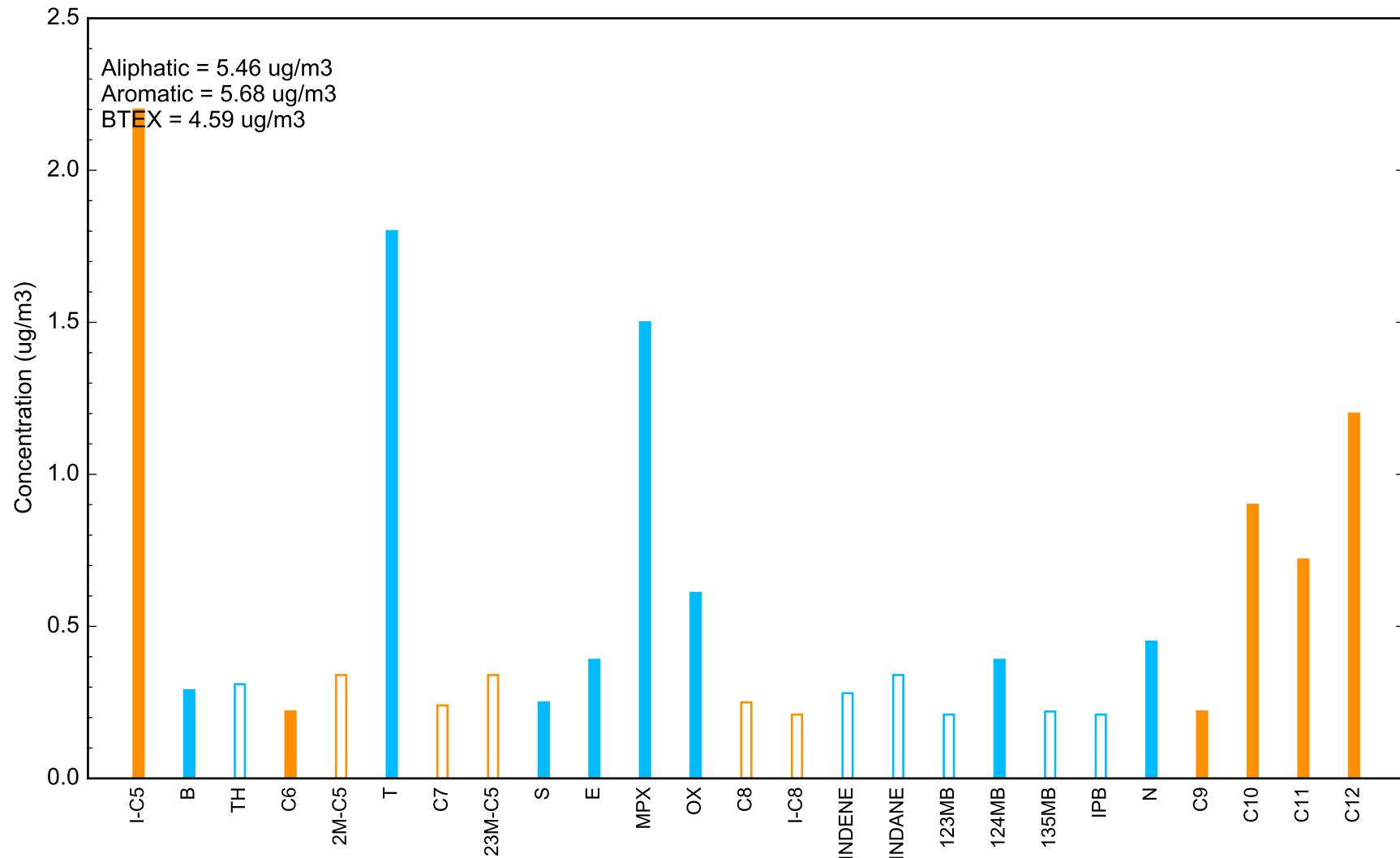
Peter Cooper Village, Figure 78

Concentration of Volatile Organic Compounds: IA-8-03-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-04
 Subfacility: 8
 Date: 2017-10-12 16:45:00



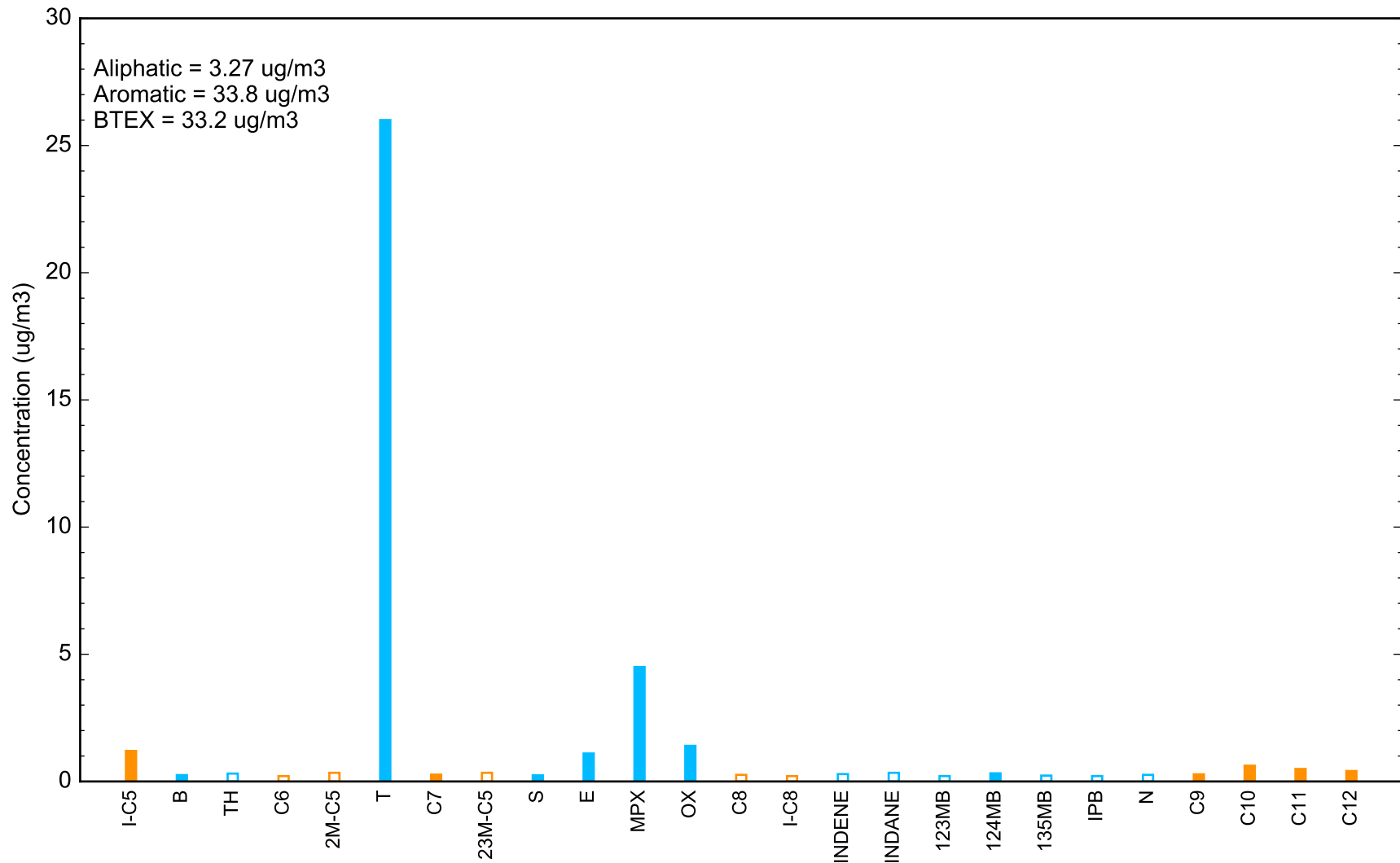
Peter Cooper Village, Figure 79

Concentration of Volatile Organic Compounds: IA-8-04-20171012

Results less than detection limit set to detection limit and plotted unfilled.
 Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-05
Subfacility: 8
Date: 2017-10-12 16:47:00



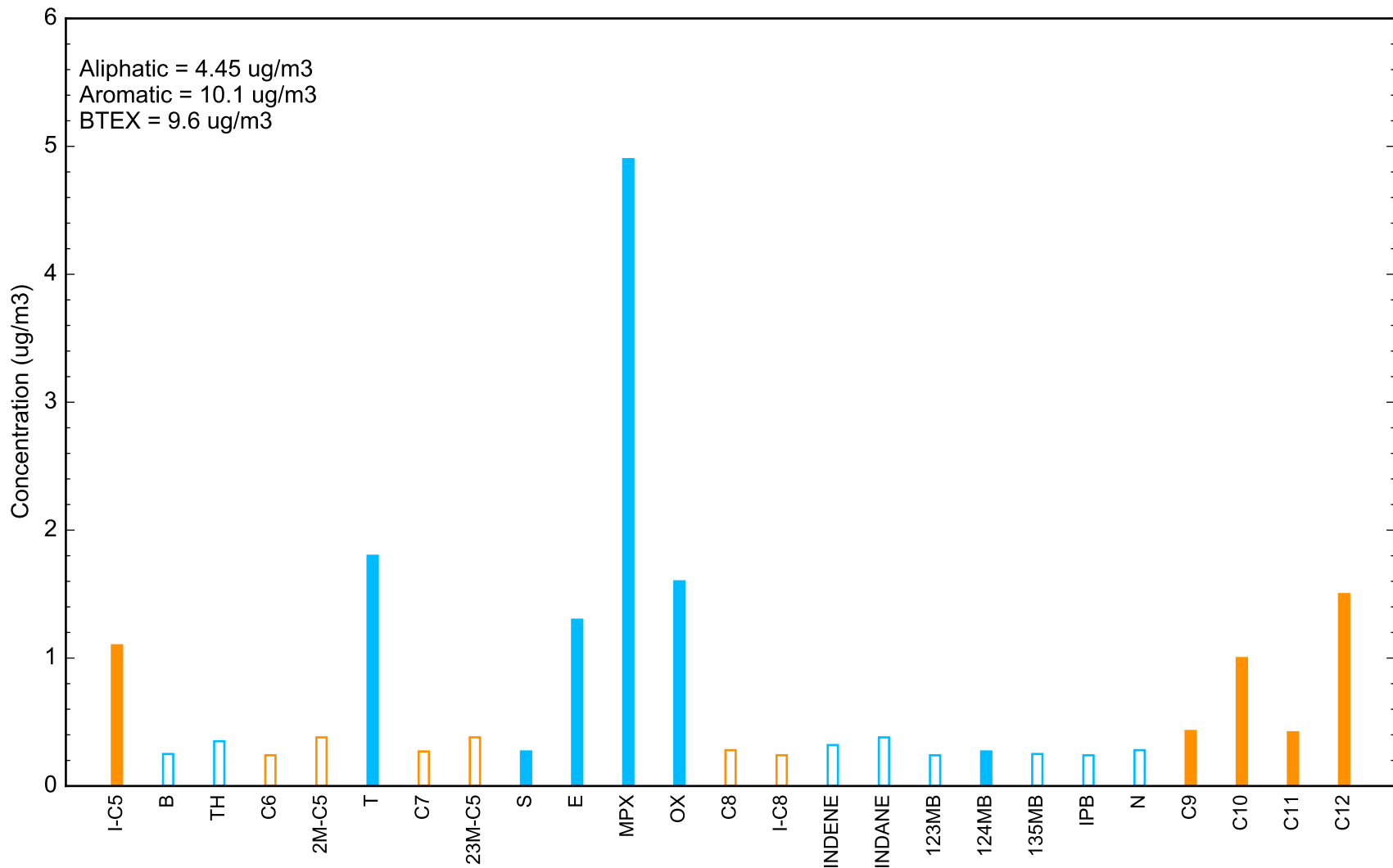
Peter Cooper Village, Figure 80

Concentration of Volatile Organic Compounds: IA-8-05-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Location: IA-8-06
Subfacility: 8
Date: 2017-10-12 15:01:00



Peter Cooper Village, Figure 81

Concentration of Volatile Organic Compounds: IA-8-06-20171012

Results less than detection limit set to detection limit and plotted unfilled.
Nondetected results set to zero in sums for aliphatics, aromatics and BTEX.



Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	16ST	16ST	16ST	2	2	2	245ST	245ST	3	3
				IA-16ST-01 10/16/2017 N	IA-16ST-01 10/16/2017 FD	IA-16ST-02 10/16/2017 N	IA-2-01 10/15/2017 N	IA-2-02 10/15/2017 N	IA-2-03 10/15/2017 N	IA-245ST-01 10/17/2017 N	IA-245ST-02 10/17/2017 N	IA-3-01 10/14/2017 N	IA-3-02 10/14/2017 N
Volatile Organic Compounds (µg/m³)													
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.23 U	0.36 U	0.24 U	0.25 U	0.26 U	0.26 U	0.27 U	0.22 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.20 U	0.32 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U	0.20 U	0.22 U	0.22 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.54 J	0.54 J	0.51 J	0.44 J	0.44 J	0.45 J	0.45 J	0.46 J	0.44 J	0.44 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.23 U	0.36 U	0.24 U	0.25 U	0.26 U	0.26 U	0.27 U	0.22 U	0.25 U	0.25 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.54 J	0.54 J	0.22 U	0.41 J	2.1	0.43 J	0.28 J	0.89	0.53 J	2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.25 U	0.40 U	0.27 U	0.28 U	0.29 U	0.29 U	0.31 U	0.25 U	0.28 U	0.28 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.20 U	0.32 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U	0.20 U	0.22 U	0.22 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.26 J	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	1.2	0.24 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.21 U	0.34 U	0.23 U	0.24 U	0.70 J	0.24 U	0.26 U	0.26 J	0.23 U	0.48 J
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.20 U	0.32 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U	0.20 U	0.22 U	0.22 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	1.1	0.96 J	0.20 U	0.35 J	1.7	0.21 U	0.35 J	1.3	3.8	0.52 J
Benzene	71-43-2	13	9.4	0.41 J	0.43 J	0.39 J	0.52 J	0.57 J	0.56 J	0.47 J	0.89	0.52 J	0.93
Bromomethane	74-83-9	0.48	1.7	0.25 U	0.40 U	0.27 U	0.28 UJ	0.29 UJ	0.29 UJ	0.31 UJ	0.25 UJ	0.28 UJ	0.28 UJ
Carbon Tetrachloride	56-23-5	1.3	1.3	0.49 J	0.45 J	0.48 J	0.37 J	0.38 J	0.37 J	0.39 J	0.37 J	0.35 J	0.63 J
Chlorobenzene	108-90-7	0.41	0.9	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
Chloroethane	75-00-3	0.39	1.1	0.23 U	0.36 U	0.24 U	0.25 U	0.26 U	0.26 U	0.27 U	0.22 U	0.25 U	0.25 U
Chloroform	67-66-3	1.2	1.1	1.9	1.8	0.24 U	1.5	1.6	0.48 J	0.61 J	0.47 J	0.35 J	3.7
Chloromethane	74-87-3	4.2	3.7	0.51 J	0.52 J	0.53 J	0.51 J	0.50 J	0.51 J	0.54 J	0.53 J	0.51 J	0.43 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.19 U	0.30 U	0.20 U	0.21 U	0.22 U	0.21 U	0.23 U	0.18 U	0.20 U	0.21 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.6	2.6	2.6	2.4	2.3	2.4	2.3	2.4	2.3	2.1
Ethylbenzene	100-41-4	6.4	5.7	0.29 J	0.34 U	0.23 U	0.40 J	0.70 J	0.30 J	0.26 U	0.51 J	0.39 J	3.2
Hexachlorobutadiene	87-68-3	0.49	6.8	0.19 U	0.30 U	0.20 U	0.21 U	0.22 U	0.21 U	0.23 U	0.18 U	0.20 U	0.21 U
Methylene Chloride	75-09-2	16	10	0.59 J	0.62 J	0.54 J	1.1	0.53 J	0.50 J	2	6	0.58 J	3.4
m-Xylene & p-Xylene	179601-23-1	11	22.2	0.98 J	0.86 J	0.51 J	1.2 J	3.3	1.2 J	0.57 J	1.9	1.0 J	15
Naphthalene	91-20-3		5.1	0.95	0.45 J	0.26 U	0.66 J	1.1	0.35 J	0.38 J	1.5	0.65 J	1.8
o-Xylene	95-47-6	7.1	7.9	0.39 J	0.35 J	0.22 U	0.43 J	1.7	0.57 J	0.24 U	0.72	0.43 J	4.6
Styrene	100-42-5	1.4	1.9	0.56 J	0.53 J	0.32 J	0.36 J	0.34 J	0.39 J	0.24 U	0.20 U	0.53 J	4.6
Tetrachloroethene	127-18-4	2.5	15.9	0.57 J	0.54 J	0.21 J	0.22 J	0.25 J	0.22 J	0.68 J	0.48 J	0.91	0.52 J
Toluene	108-88-3	57	43	3.3	3.2	12	5.8	2.1	2.7	1.2	2.9	2.3	450
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.21 U	0.34 U	0.23 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.23 U	0.24 U
Trichloroethene	79-01-6	0.46	4.2	0.19 U	0.30 U	0.20 U	0.21 U	0.22 U	0.21 U	0.23 U	0.18 U	0.20 U	0.21 U
Trichlorofluoromethane	75-69-4	12	18.1	1.4 J	1.4 J	1.4 J	1.3	1.2	1.2	1.2	1.2	1.2	1.1
Vinyl Chloride	75-01-4	0.37	1.9	0.23 U	0.36 U	0.24 U	0.25 U	0.26 U	0.26 U	0.27 U	0.22 U	0.25 U	0.25 U
n-Alkanes (µg/m³)													
n-Butane	106-97-8			5.3 NJ	4.9 NJ	UN	14 NJ	27 NJ	12 NJ	3.0 NJ	5.9 NJ	5.4 NJ	110 NJ
n-Decane	124-18-5	15	17.5	3.1	3.3	0.49 J	1.9	1.4	0.67 J	0.52 J	0.77	0.23 U	33
n-Dodecane	112-40-3	9.2		0.94 J	1.9 J	0.36 J	1.4	1	0.66 J	0.42 J	0.58 J	0.99	240
n-Heptane	142-82-5	18		0.24 J	0.36 U	0.24 U	1.5	0.68 J	0.70 J	0.27 U	0.55 J	1.2	53

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	16ST IA-16ST-01 10/16/2017 N	16ST IA-16ST-01 10/16/2017 FD	16ST IA-16ST-02 10/16/2017 N	2 IA-2-01 10/15/2017 N	2 IA-2-02 10/15/2017 N	2 IA-2-03 10/15/2017 N	245ST IA-245ST-01 10/17/2017 N	245ST IA-245ST-02 10/17/2017 N	3 IA-3-01 10/14/2017 N	3 IA-3-02 10/14/2017 N
			EPA BASE 90th Percentile										
n-Hexane	110-54-3	14	10.2	0.29 J	0.32 U	0.24 J	0.67 J	0.81	0.71 J	0.31 J	0.87	0.70 J	8.2
n-Octane	111-65-9	5.2		0.41 J	0.40 J	0.26 U	0.37 J	0.28 U	0.27 U	0.29 U	0.29 J	0.26 U	2.1
Nonane	111-84-2	7.9	7.8	3	2.8	0.30 J	0.92	0.55 J	0.26 J	0.26 J	0.44 J	0.41 J	6.4
n-Undecane	1120-21-4	12	22.6	1.3	1.3	0.28 J	1.7	1	0.43 J	0.35 J	0.46 J	0.22 U	60
Pentane	109-66-0			UN	UN	UN	3.2 NJ	5.6 NJ	4.6 NJ	UN	UN	UN	350 NJ
Branched Alkanes (µg/m³)													
2,3-Dimethylpentane	565-59-3	5.2		0.32 U	0.51 U	0.35 U	0.63 J	0.37 U	0.39 J	0.39 U	0.32 U	0.35 U	2.4
Isopentane	78-78-4			1.4	1.4	0.62 J	0.38 U	5.8	4.1	1.2	2.3	3.8	110
2-methylpentane	107-83-5			0.32 U	0.51 U	0.35 U	0.61 J	0.76 J	0.58 J	0.39 U	0.69	0.55 J	1.7
Other (µg/m³)													
1,2,3-Trimethylbenzene	526-73-8			0.23 J	0.32 U	0.22 U	0.22 U	0.89	0.23 U	0.24 U	0.23 J	0.24 J	0.43 J
Indane	496-11-7			0.32 U	0.51 U	0.35 U	0.35 U	0.37 U	0.36 U	0.39 U	0.32 U	0.35 U	0.35 U
Indene	95-13-6			0.27 U	0.42 U	0.29 U	0.29 U	0.31 U	0.30 U	0.32 U	0.26 U	0.29 U	0.29 U
Isoctane	540-84-1			0.20 U	0.32 U	0.22 U	0.52 J	0.59 J	0.44 J	0.31 J	0.95	0.47 J	0.86
Isopropylbenzene	98-82-8	0.82		0.20 U	0.32 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U	0.20 U	0.22 U	0.30 J
Thiopene	110-02-1			0.29 U	0.46 U	0.32 U	0.32 U	0.34 U	0.33 U	0.35 U	0.29 U	0.32 U	0.32 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, NYSDOH 2006)

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. Final. October 2006.

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	315ST IA-315ST-DAYCARE 10/17/2017 N	315ST IA-315ST-DAYCARE 10/17/2017 FD	350 IA-350-01 10/15/2017 N	350 IA-350-02 10/15/2017 N	350 IA-350-03 10/15/2017 N	360 IA-360-01 10/15/2017 N	360 IA-360-02 10/15/2017 N	360 IA-360-03 10/15/2017 N	370 IA-370-01 10/13/2017 FD	370 IA-370-01 10/13/2017 N
Volatile Organic Compounds (µg/m³)													
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.24 U	0.22 U	0.25 U	0.25 U	0.25 U	0.26 U	0.23 U	0.24 U	0.24 U	0.22 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.21 U	0.20 U	0.22 U	0.22 U	0.22 U	0.23 U	0.20 U	0.21 U	0.21 U	0.20 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.44 J	0.44 J	0.46 J	0.47 J	0.47 J	0.47 J	0.47 J	0.49 J	0.42 J	0.44 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.24 U	0.22 U	0.25 U	0.25 U	0.25 U	0.26 U	0.23 U	0.24 U	0.24 U	0.22 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	1.2	1.4	0.51 J	0.46 J	0.29 J	0.96	0.42 J	0.31 J	0.33 J	0.31 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.27 U	0.25 U	0.28 U	0.28 U	0.28 U	0.29 U	0.26 U	0.26 U	0.27 U	0.25 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.21 U	0.20 U	0.22 U	0.22 U	0.22 U	0.23 U	0.20 U	0.21 U	0.21 U	0.20 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.29 J	0.22 U	0.60 J	0.61 J
1,2-Dichloropropane	78-87-5	0.39	1.6	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.33 J	0.34 J	0.24 U	0.24 U	0.23 U	0.28 J	0.22 U	0.22 U	0.22 U	0.21 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.21 U	0.20 U	0.22 U	0.22 U	0.22 U	0.23 U	0.20 U	0.21 U	0.21 U	0.20 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.98	1.1	0.28 J	0.76	0.40 J	0.24 J	0.26 J	0.19 U	0.20 J	0.19 J
Benzene	71-43-2	13	9.4	2.5	2.5	0.65 J	0.59 J	0.48 J	0.46 J	0.52 J	0.46 J	0.45 J	0.49 J
Bromomethane	74-83-9	0.48	1.7	0.27 UJ	0.25 UJ	0.28 U	0.28 U	0.28 U	0.29 U	0.26 U	0.26 U	0.27 UJ	0.25 UJ
Carbon Tetrachloride	56-23-5	1.3	1.3	0.37 J	0.37 J	0.42 J	0.45 J	0.44 J	0.53 J	0.41 J	0.43 J	0.35 J	0.35 J
Chlorobenzene	108-90-7	0.41	0.9	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
Chloroethane	75-00-3	0.39	1.1	0.24 U	0.22 U	0.25 U	0.25 U	0.25 U	0.26 U	0.23 U	0.24 U	0.24 U	0.22 U
Chloroform	67-66-3	1.2	1.1	0.81	0.81	0.50 J	0.56 J	0.39 J	11	0.34 J	0.87	0.33 J	0.37 J
Chloromethane	74-87-3	4.2	3.7	0.56 J	0.54 J	0.50 J	0.54 J	0.54 J	0.56 J	0.50 J	0.53 J	0.39 J	0.40 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.20 U	0.18 U	0.21 U	0.21 U	0.20 U	0.22 U	0.19 U	0.19 U	0.20 U	0.18 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Ethylbenzene	100-41-4	6.4	5.7	1.2	1.2	0.36 J	0.30 J	0.23 U	0.30 J	0.26 J	0.22 U	0.79	0.78
Hexachlorobutadiene	87-68-3	0.49	6.8	0.20 U	0.18 U	0.21 U	0.21 U	0.20 U	0.22 U	0.19 U	0.19 U	0.20 U	0.18 U
Methylene Chloride	75-09-2	16	10	0.65 J	0.65 J	0.51 J	0.68 J	0.53 J	0.54 J	0.54 J	0.51 J	1.3	1.3
m-Xylene & p-Xylene	179601-23-1	11	22.2	3.6	3.6	1.1 J	0.93 J	0.64 J	1.1 J	0.71 J	0.59 J	2.6	2.6
Naphthalene	91-20-3		5.1	0.98	1.4	0.54 J	3	0.64 J	1.5	4.9	0.25 U	0.25 U	0.58 J
o-Xylene	95-47-6	7.1	7.9	1.4	1.4	0.44 J	0.37 J	0.25 J	0.47 J	0.29 J	0.24 J	0.76	0.76
Styrene	100-42-5	1.4	1.9	0.25 J	0.23 J	0.31 J	0.25 J	0.22 U	0.29 J	0.22 J	0.21 U	0.33 J	0.37 J
Tetrachloroethene	127-18-4	2.5	15.9	0.28 J	0.28 J	0.21 U	0.32 J	0.20 U	0.22 U	0.23 J	0.19 U	0.32 J	0.32 J
Toluene	108-88-3	57	43	6.8	6.5	2.2	3.7	1.9	1.9	1.4	1.3	2	2.4
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.23 U	0.21 U	0.24 U	0.24 U	0.23 U	0.25 U	0.22 U	0.22 U	0.22 U	0.21 U
Trichloroethene	79-01-6	0.46	4.2	0.20 U	0.18 U	0.21 U	0.21 U	0.20 U	0.22 U	0.19 U	0.19 U	0.20 U	0.18 U
Trichlorofluoromethane	75-69-4	12	18.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2
Vinyl Chloride	75-01-4	0.37	1.9	0.24 U	0.22 U	0.25 U	0.25 U	0.25 U	0.26 U	0.23 U	0.24 U	0.24 U	0.22 U
n-Alkanes (µg/m³)													
n-Butane	106-97-8			25 NJ	26 NJ	4.6 NJ	4.5 NJ	3.8 NJ	4.6 NJ	5.8 NJ	3.6 NJ	49 NJ	51 NJ
n-Decane	124-18-5	15	17.5	0.72	0.66	0.88	1.2	0.81	1.1	0.22 U	0.69 J	0.61 J	0.61 J
n-Dodecane	112-40-3	9.2		0.68 J	0.60 J	0.49 J	0.82	0.68 J	0.87	0.69	0.39 J	0.37 J	0.37 J
n-Heptane	142-82-5	18		2.6	2.6	0.39 J	0.28 J	0.26 J	0.26 U	0.33 J	0.31 J	0.24 U	0.22 U

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	315ST IA-315ST-DAYCARE 10/17/2017 N	315ST IA-315ST-DAYCARE 10/17/2017 FD	350 IA-350-01 10/15/2017 N	350 IA-350-02 10/15/2017 N	350 IA-350-03 10/15/2017 N	360 IA-360-01 10/15/2017 N	360 IA-360-02 10/15/2017 N	360 IA-360-03 10/15/2017 N	370 IA-370-01 10/13/2017 FD	370 IA-370-01 10/13/2017 N
n-Hexane	110-54-3	14	10.2	7.2	7.1	1.1	0.57 J	0.59 J	0.49 J	0.76	0.66 J	0.33 J	0.37 J
n-Octane	111-65-9	5.2		0.71 J	0.67	0.29 J	0.26 U	0.47 J	0.28 U	0.30 J	0.25 U	0.25 U	0.24 U
Nonane	111-84-2	7.9	7.8	0.56 J	0.57 J	0.62 J	0.53 J	0.74	0.40 J	0.28 J	0.28 J	0.24 J	0.26 J
n-Undecane	1120-21-4	12	22.6	0.45 J	0.47 J	0.61 J	0.71 J	0.35 J	0.75 J	0.34 J	0.35 J	0.42 J	0.43 J
Pentane	109-66-0			8.2 NJ	8.1 NJ	3.2 NJ	3.4 NJ	UN	UN	3.1 NJ	UN	UN	UN
Branched Alkanes (µg/m³)													
2,3-Dimethylpentane	565-59-3	5.2		1	1	0.35 U	0.35 U	0.35 U	0.37 U	0.32 U	0.33 U	0.34 U	0.32 U
Isopentane	78-78-4			11	11	5	5	3.9	5.3	5	4.8	0.36 U	0.34 U
2-methylpentane	107-83-5			3.2	3.1	0.95	0.69 J	0.61 J	0.62 J	0.73	0.61 J	0.34 U	0.32 U
Other (µg/m³)													
1,2,3-Trimethylbenzene	526-73-8			0.32 J	0.35 J	0.22 U	0.22 U	0.22 U	0.23 U	0.20 U	0.21 U	0.21 U	0.20 U
Indane	496-11-7			0.34 U	0.32 U	0.35 U	0.35 U	0.35 U	0.37 U	0.32 U	0.33 U	0.34 U	0.32 U
Indene	95-13-6			0.28 U	0.26 U	0.29 U	0.29 U	0.29 U	0.31 U	0.27 U	0.28 U	0.28 U	0.26 U
Isooctane	540-84-1			3	3	0.70 J	0.69 J	0.53 J	0.72 J	0.58 J	0.49 J	0.32 J	0.32 J
Isopropylbenzene	98-82-8	0.82		0.21 U	0.20 U	0.22 U	0.22 U	0.22 U	0.23 U	0.20 U	0.21 U	0.21 U	0.20 U
Thiopene	110-02-1			0.31 U	0.29 U	0.32 U	0.32 U	0.32 U	0.34 U	0.30 U	0.31 U	0.31 U	0.29 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	370	370	390	390	390	4	4	420	420	420	420
				IA-370-02 10/13/2017 N	IA-370-03 10/14/2017 N	IA-390-01 10/15/2017 N	IA-390-01 10/15/2017 FD	IA-390-02 10/15/2017 N	IA-4-01 10/14/2017 N	IA-4-02 10/14/2017 N	IA-420-01 10/13/2017 N	IA-420-02 10/13/2017 N	IA-420-03 10/13/2017 N	IA-420-04 10/13/2017 N
			EPA BASE 90th Percentile	Volatile Organic Compounds (µg/m ³)										
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.24 U	0.36 U	0.24 U	0.23 U	0.27 U	0.24 U	0.25 U	0.23 U	0.24 U	0.23 U	0.26 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.21 U	0.31 U	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.21 U	0.22 U	0.20 U	0.23 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.46 J	0.41 J	0.45 J	0.46 J	0.44 J	0.54 J	0.51 J	0.44 J	0.45 J	0.46 J	0.45 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.24 U	0.36 U	0.24 U	0.23 U	0.27 U	0.24 U	0.25 U	0.23 U	0.24 U	0.23 U	0.26 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.24 J	0.31 U	0.43 J	0.43 J	0.37 J	0.64 J	0.57 J	0.27 J	0.35 J	0.35 J	0.23 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.27 U	0.40 U	0.26 U	0.26 U	0.30 U	0.27 U	0.28 U	0.26 U	0.27 U	0.26 U	0.29 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.21 U	0.31 U	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.21 U	0.22 U	0.20 U	0.23 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.26 J	0.22 U	0.23 U	0.22 U	0.24 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.21 U	0.31 U	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.21 U	0.22 U	0.20 U	0.23 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.76	2	0.59 J	0.65 J	0.41 J	0.21 J	0.34 J	0.29 J	1.5	0.19 U	0.21 U
Benzene	71-43-2	13	9.4	0.40 J	0.43 J	0.50 J	0.53 J	0.56 J	0.56 J	0.75	0.47 J	0.50 J	0.43 J	0.45 J
Bromomethane	74-83-9	0.48	1.7	0.27 UJ	0.40 UJ	0.26 UJ	0.26 UJ	0.30 UJ	0.27 U	0.28 U	0.26 UJ	0.27 UJ	0.26 UJ	0.29 UJ
Carbon Tetrachloride	56-23-5	1.3	1.3	0.36 J	0.35 J	0.41 J	0.43 J	0.36 J	0.52 J	0.50 J	0.36 J	0.37 J	0.37 J	0.28 J
Chlorobenzene	108-90-7	0.41	0.9	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
Chloroethane	75-00-3	0.39	1.1	0.24 U	0.36 U	0.24 U	0.23 U	0.27 U	0.24 U	0.25 U	0.23 U	0.24 U	0.23 U	0.26 U
Chloroform	67-66-3	1.2	1.1	0.44 J	0.36 U	12	12	1.3	0.31 J	0.53 J	0.38 J	0.34 J	0.30 J	0.26 U
Chloromethane	74-87-3	4.2	3.7	0.43 J	0.54 J	0.51 J	0.45 J	0.57 J	0.43 J	0.50 J	0.49 J	0.50 J	0.46 J	0.56 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.20 U	0.29 U	0.19 U	0.19 U	0.22 U	0.20 U	0.21 U	0.19 U	0.20 U	0.19 U	0.21 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.3	2.3	2.4	2.4	2.3	2.8	2.7	2.4	2.4	2.4	2.3
Ethylbenzene	100-41-4	6.4	5.7	0.28 J	0.33 U	0.27 J	0.28 J	0.31 J	0.29 J	0.41 J	0.37 J	0.52 J	0.28 J	0.38 J
Hexachlorobutadiene	87-68-3	0.49	6.8	0.20 U	0.29 U	0.19 U	0.19 U	0.22 U	0.20 U	0.21 U	0.19 U	0.20 U	0.19 U	0.21 U
Methylene Chloride	75-09-2	16	10	0.85	0.61 J	0.58 J	0.62 J	0.53 J	1.1	0.58 J	0.61 J	0.74	0.72	0.72 J
m-Xylene & p-Xylene	179601-23-1	11	22.2	0.92 J	0.69 J	0.97 J	0.99 J	0.91 J	1.1 J	1.4 J	1.4	1.7	0.98 J	1.5 J
Naphthalene	91-20-3		5.1	0.26 U	0.38 U	0.67 J	1.1	0.82	0.36 J	2.1	0.25 U	0.62 J	0.24 U	0.28 U
o-Xylene	95-47-6	7.1	7.9	0.32 J	0.31 U	0.41 J	0.40 J	0.40 J	0.43 J	0.59 J	0.55 J	0.66 J	0.39 J	0.62 J
Styrene	100-42-5	1.4	1.9	0.29 J	0.31 U	0.21 U	0.20 U	0.27 J	0.21 U	0.25 J	0.21 U	0.51 J	0.22 J	0.23 U
Tetrachloroethene	127-18-4	2.5	15.9	0.41 J	0.29 U	0.77	0.8	0.25 J	0.58 J	0.57 J	0.57 J	0.50 J	0.43 J	0.35 J
Toluene	108-88-3	57	43	1.6	1.9	1.7	1.8	2.4	1.8	2	1.3	2.6	1.5	1.4
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.23 U	0.33 U	0.22 U	0.22 U	0.25 U	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.24 U
Trichloroethene	79-01-6	0.46	4.2	0.20 U	0.29 U	0.19 U	0.19 U	0.22 U	0.20 U	0.21 U	0.19 U	0.20 U	0.19 U	0.21 U
Trichlorofluoromethane	75-69-4	12	18.1	1.2	1.1	1.2	1.2	1.2	1.5 J	1.4 J	1.2	1.2	1.2	1.1
Vinyl Chloride	75-01-4	0.37	1.9	0.24 U	0.36 U	0.24 U	0.23 U	0.27 U	0.24 U	0.25 U	0.23 U	0.24 U	0.23 U	0.26 U
n-Alkanes (µg/m ³)														
n-Butane	106-97-8			8.9 NJ	4.8 NJ	15 NJ	15 NJ	25 NJ	3.0 NJ	3.5 NJ	4.1 NJ	5.2 NJ	5.6 NJ	3.7 NJ
n-Decane	124-18-5	15	17.5	0.51 J	0.70 J	0.89	0.81	1.9	1	1.5	0.81	0.72	0.53 J	0.64 J
n-Dodecane	112-40-3	9.2		0.44 J	0.44 J	0.45 J	0.49 J	1.6	2.6	1.7	1.1	0.76	0.44 J	0.32 J
n-Heptane	142-82-5	18		0.24 U	0.36 U	1.3	1.3	1.3	0.26 J	0.65 J	0.25 J	0.94	0.30 J	0.29 J

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	370	370	390	390	390	4	4	420	420	420	420
				IA-370-02	IA-370-03	IA-390-01	IA-390-01	IA-390-02	IA-4-01	IA-4-02	IA-420-01	IA-420-02	IA-420-03	IA-420-04
				10/13/2017	10/14/2017	10/15/2017	10/15/2017	10/15/2017	10/14/2017	10/14/2017	10/13/2017	10/13/2017	10/13/2017	10/13/2017
n-Hexane	110-54-3	14		0.34 J	0.34 J	0.82	0.82	0.68 J	0.56 J	0.64 J	0.41 J	0.41 J	0.37 J	0.42 J
n-Octane	111-65-9	5.2		0.26 U	0.38 U	0.25 U	0.24 U	0.43 J	0.26 U	0.27 U	0.25 U	0.26 U	0.24 U	0.28 U
Nonane	111-84-2	7.9	7.8	0.25 J	0.61 J	0.31 J	0.28 J	0.46 J	0.48 J	0.57 J	0.27 J	0.34 J	0.23 J	0.27 J
n-Undecane	1120-21-4	12	22.6	0.31 J	0.31 U	0.37 J	0.38 J	0.54 J	1.2	1.1	0.30 J	0.51 J	0.26 J	0.27 J
Pentane	109-66-0			UN	UN	5.8 NJ	6.0 NJ	3.1 NJ	1.8 NJ	UN	UN	UN	UN	UN
Branched Alkanes (µg/m ³)														
2,3-Dimethylpentane	565-59-3	5.2		0.34 U	0.50 U	0.33 U	0.32 U	0.38 U	0.34 U	0.36 U	0.33 U	0.35 U	0.33 U	0.37 U
Isopentane	78-78-4			1.7	1.5	5	5	4.3	1.9	6.8	1.9	6	1.8	1.5
2-methylpentane	107-83-5			0.34 U	0.50 U	0.75	0.77	0.60 J	0.38 J	0.40 J	0.34 J	0.37 J	0.33 J	0.37 U
Other (µg/m ³)														
1,2,3-Trimethylbenzene	526-73-8			0.21 U	0.31 U	0.21 U	0.20 U	0.24 U	0.25 J	0.22 U	0.21 U	0.22 U	0.20 U	0.23 U
Indane	496-11-7			0.34 U	0.50 U	0.33 U	0.32 U	0.38 U	0.34 U	0.36 U	0.33 U	0.35 U	0.33 U	0.37 U
Indene	95-13-6			0.28 U	0.42 U	0.28 U	0.27 U	0.32 U	0.28 U	0.30 U	0.27 U	0.29 U	0.27 U	0.31 U
Isoctane	540-84-1			0.35 J	0.31 U	0.21 U	0.60 J	0.51 J	0.47 J	0.46 J	0.36 J	0.38 J	0.40 J	0.37 J
Isopropylbenzene	98-82-8	0.82		0.28 J	0.31 U	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.21 U	0.22 U	0.20 U	0.23 U
Thiopene	110-02-1			0.31 U	0.46 U	0.31 U	0.30 U	0.35 U	0.31 U	0.33 U	0.30 U	0.32 U	0.30 U	0.34 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	431	431	431	440	440	441	441	5	5	5	5
				IA-431-01 10/14/2017 N	IA-431-02 10/14/2017 N	IA-431-03 10/14/2017 N	IA-440-01 10/14/2017 N	IA-440-02 10/14/2017 N	IA-441-01PR 10/13/2017 N	IA-441-02 10/13/2017 N	IA-5-01 10/14/2017 N	IA-5-02 10/14/2017 N	IA-5-03 10/14/2017 N	IA-5-04 10/14/2017 N
Volatile Organic Compounds (µg/m ³)														
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.26 U	0.25 U	0.26 U	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.25 U	0.27 U	0.24 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.23 U	0.22 U	0.23 U	0.21 U	0.22 U	0.20 U	0.19 U	0.20 U	0.22 U	0.24 U	0.22 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.51 J	0.51 J	0.52 J	0.54 J	0.51 J	0.47 J	0.48 J	0.47 J	0.44 J	0.46 J	0.46 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.26 U	0.25 U	0.26 U	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.25 U	0.27 U	0.24 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.60 J	5.9	0.31 J	0.45 J	0.79	17	0.55 J	0.61 J	0.38 J	0.36 J	0.32 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.29 U	0.28 U	0.29 U	0.26 U	0.27 U	0.25 U	0.24 U	0.26 U	0.28 U	0.31 U	0.27 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.23 U	0.22 U	0.23 U	0.21 U	0.22 U	0.20 U	0.19 U	0.20 U	0.22 U	0.24 U	0.22 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.24 U	0.77	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.24 U	1.2	0.24 U	0.22 U	0.23 J	4.2	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.23 U	0.22 U	0.23 U	0.21 U	0.22 U	0.20 U	0.19 U	0.20 U	0.22 U	0.24 U	0.22 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.21 U	3.3	0.21 U	1	4	0.30 J	0.41 J	18	2.4	0.28 J	0.20 U
Benzene	71-43-2	13	9.4	0.67 J	1.1	0.53 J	0.57 J	0.55 J	0.56 J	0.48 J	0.42 J	0.46 J	0.56 J	0.62 J
Bromomethane	74-83-9	0.48	1.7	0.29 U	0.28 U	0.29 U	0.26 U	0.27 U	0.25 U	0.24 U	0.26 U	0.28 U	0.31 U	0.27 U
Carbon Tetrachloride	56-23-5	1.3	1.3	0.45 J	0.47 J	0.47 J	0.50 J	0.49 J	0.44 J	0.36 J	0.37 J	0.37 J	0.36 J	0.36 J
Chlorobenzene	108-90-7	0.41	0.9	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
Chloroethane	75-00-3	0.39	1.1	0.26 U	0.25 U	0.26 U	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.25 U	0.27 U	0.24 U
Chloroform	67-66-3	1.2	1.1	0.46 J	0.52 J	0.31 J	0.86	1.8	0.98	0.29 J	1	0.38 J	0.37 J	0.27 J
Chloromethane	74-87-3	4.2	3.7	0.47 J	0.44 J	0.49 J	0.49 J	0.52 J	0.29 J	0.27 J	0.42 J	0.46 J	0.50 J	0.50 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.21 U	0.20 U	0.21 U	0.19 U	0.20 U	0.18 U	0.18 U	0.19 U	0.21 U	0.23 U	0.20 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.6	2.6	2.6	2.7	2.6	2	2	2.2	2.3	2.5	2.3
Ethylbenzene	100-41-4	6.4	5.7	0.53 J	3	0.30 J	0.50 J	0.72 J	2.2	0.72	0.49 J	0.68 J	0.26 J	0.38 J
Hexachlorobutadiene	87-68-3	0.49	6.8	0.21 U	0.20 U	0.21 U	0.19 U	0.20 U	0.18 U	0.18 U	0.19 U	0.21 U	0.23 U	0.20 U
Methylene Chloride	75-09-2	16	10	0.81	0.94	0.62 J	0.54 J	0.57 J	180	3.2	0.48 J	0.50 J	0.76 J	0.64 J
m-Xylene & p-Xylene	179601-23-1	11	22.2	1.7	9.6	0.90 J	2	1.8	7	2.4	1.8	2.5	0.84 J	1.2 J
Naphthalene	91-20-3		5.1	0.35 J	1.1	0.34 J	0.35 J	0.76	1.1	0.72	5.6	0.9	0.29 U	1.9
o-Xylene	95-47-6	7.1	7.9	0.56 J	4	0.35 J	0.85	0.78	2.7	0.79	0.74	1	0.34 J	0.44 J
Styrene	100-42-5	1.4	1.9	0.44 J	1	0.23 U	0.21 U	0.44 J	3.9	0.33 J	0.27 J	0.29 J	0.24 U	0.38 J
Tetrachloroethene	127-18-4	2.5	15.9	0.72 J	1.1	0.70 J	0.68 J	0.54 J	0.53 J	0.54 J	2	0.49 J	0.51 J	0.47 J
Toluene	108-88-3	57	43	3.6	10	1.7	1.7	3.5	1300	23	1.8	1.8	1.9	1.7
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.24 U	0.23 U	0.24 U	0.22 U	0.23 U	0.21 U	0.20 U	0.22 U	0.24 U	0.26 U	0.23 U
Trichloroethene	79-01-6	0.46	4.2	0.21 U	0.20 U	0.21 U	0.19 U	0.32 J	0.18 U	0.18 U	0.19 U	0.21 U	0.23 U	0.20 U
Trichlorofluoromethane	75-69-4	12	18.1	1.4 J	1.4 J	1.4 J	1.5 J	1.4 J	1.1	1.1	1.2	1.2	1.3	1.2
Vinyl Chloride	75-01-4	0.37	1.9	0.26 U	0.25 U	0.26 U	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	0.25 U	0.27 U	0.24 U
n-Alkanes (µg/m ³)														
n-Butane	106-97-8			8.3 NJ	4.2 NJ	3.4 NJ	22 NJ	22 NJ	10 NJ	4.1 NJ	3.9 NJ	4.5 NJ	5.6 NJ	5.8 NJ
n-Decane	124-18-5	15	17.5	3.6	2.7	0.76	0.9	2.4	39	1.4	2.2	1.1	0.77 J	0.94
n-Dodecane	112-40-3	9.2		1.1	2.9	0.54 J	0.73	0.8	7.8	1	1.2	0.34 J	0.82	1.4
n-Heptane	142-82-5	18		0.34 J	2.1	0.29 J	0.30 J	0.32 J	94	1.6	0.8	0.30 J	0.29 J	0.29 J

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building	431	431	431	440	440	441	441	5	5	5	5
			Location ID	IA-431-01	IA-431-02	IA-431-03	IA-440-01	IA-440-02	IA-441-01PR	IA-441-02	IA-5-01	IA-5-02	IA-5-03	IA-5-04
			Sample Date	10/14/2017	10/14/2017	10/14/2017	10/14/2017	10/14/2017	10/13/2017	10/13/2017	10/14/2017	10/14/2017	10/14/2017	10/14/2017
			Sample Type	N	N	N	N	N	N	N	N	N	N	N
			EPA BASE 90th Percentile											
n-Hexane	110-54-3	14	10.2	2.2	2	0.47 J	0.54 J	0.51 J	4.4	0.41 J	0.43 J	0.47 J	0.47 J	0.55 J
n-Octane	111-65-9	5.2		0.28 U	1.1	0.27 U	0.25 U	0.35 J	4.4	0.32 J	0.24 U	0.27 U	0.29 U	0.26 U
Nonane	111-84-2	7.9	7.8	1.1	1.2	0.40 J	0.44 J	0.91	7.4	0.49 J	0.46 J	0.29 J	0.29 J	0.48 J
n-Undecane	1120-21-4	12	22.6	1.4	4.6	0.36 J	0.43 J	1.1	23	0.71	2.1	0.53 J	0.62 J	2
Pentane	109-66-0			UN	5.2 NJ	UN	UN	UN	16 NJ	UN	UN	UN	UN	UN
Branched Alkanes (µg/m³)														
2,3-Dimethylpentane	565-59-3	5.2		0.37 U	0.77	0.36 U	0.33 U	0.35 U	5.4	0.31 U	0.32 U	0.36 U	0.39 U	0.35 U
Isopentane	78-78-4			2	6.1	2	2.2	2.6	19 J	3.5	5.6	5.4	2.1	4.2
2-methylpentane	107-83-5			0.59 J	2.9	0.38 J	0.43 J	0.42 J	1.3	0.43 J	0.42 J	0.49 J	0.43 J	0.48 J
Other (µg/m³)														
1,2,3-Trimethylbenzene	526-73-8			0.23 U	0.9	0.23 U	0.21 U	0.35 J	5.1	0.22 J	0.26 J	0.22 U	0.24 U	0.22 U
Indane	496-11-7			0.37 U	0.35 U	0.36 U	0.33 U	0.35 U	0.94	0.31 U	0.32 U	0.36 U	0.39 U	0.35 U
Indene	95-13-6			0.31 U	0.29 U	0.30 U	0.28 U	0.29 U	0.26 U	0.26 U	0.27 U	0.30 U	0.32 U	0.29 U
Isoctane	540-84-1			0.53 J	4.5	0.52 J	0.52 J	0.45 J	1.5	0.36 J	0.33 J	0.37 J	0.50 J	0.52 J
Isopropylbenzene	98-82-8	0.82		0.23 U	0.24 J	0.23 U	0.21 U	0.22 U	0.54 J	0.19 U	0.20 U	0.22 U	0.24 U	0.22 U
Thiopene	110-02-1			0.34 U	0.32 U	0.33 U	0.30 U	0.32 U	0.29 U	0.28 U	0.30 U	0.33 U	0.35 U	0.32 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

		NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	510 IA-510-01 10/13/2017 N	510 IA-510-02 10/13/2017 N	511 IA-511-01 10/13/2017 N	511 IA-511-02 10/13/2017 N	511 IA-511-03 10/13/2017 N	524ST IA-524ST-01 10/16/2017 N	524ST IA-524ST-02 10/16/2017 N	530 IA-530-01 10/12/2017 N	530 IA-530-02 10/12/2017 N	531 IA-531-01 10/13/2017 N	531 IA-531-02 10/13/2017 N
Chemical Name	CAS RN		EPA BASE 90th Percentile											
Volatile Organic Compounds (µg/m ³)														
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U	0.22 U	0.23 U	0.25 U	0.23 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.22 U	0.19 U	0.21 U	0.22 U	0.20 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.53 J	0.51 J	0.48 J	0.48 J	0.49 J	0.52 J	0.52 J	0.48 J	0.46 J	0.49 J	0.53 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U	0.22 U	0.23 U	0.25 U	0.23 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.36 J	0.50 J	0.45 J	0.33 J	0.31 J	0.43 J	0.62 J	0.20 J	0.21 U	0.44 J	0.49 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.28 U	0.28 U	0.28 U	0.26 U	0.27 U	0.28 U	0.28 U	0.24 U	0.26 U	0.28 U	0.25 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.22 U	0.19 U	0.21 U	0.22 U	0.20 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.49 J	0.20 U	0.22 U	0.24 U	0.21 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.22 U	0.19 U	0.21 U	0.22 U	0.20 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	3	7.7	0.21 U	0.28 J	0.20 U	0.84	1.9	0.41 J	0.35 J	3.2	0.82
Benzene	71-43-2	13	9.4	0.61 J	0.63 J	0.41 J	0.35 J	0.37 J	0.50 J	0.68 J	0.25 J	0.26 J	0.55 J	0.52 J
Bromomethane	74-83-9	0.48	1.7	0.28 U	0.28 U	0.28 U	0.26 U	0.27 U	0.28 U	0.28 U	0.24 U	0.26 U	0.28 U	0.25 U
Carbon Tetrachloride	56-23-5	1.3	1.3	0.47 J	0.53 J	0.35 J	0.33 J	0.35 J	0.50 J	0.49 J	0.37 J	0.35 J	0.55 J	0.49 J
Chlorobenzene	108-90-7	0.41	0.9	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
Chloroethane	75-00-3	0.39	1.1	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U	0.22 U	0.23 U	0.25 U	0.23 U
Chloroform	67-66-3	1.2	1.1	0.25 U	0.27 J	0.25 U	0.24 U	0.24 U	1.8	0.57 J	0.35 J	0.72	11	0.98
Chloromethane	74-87-3	4.2	3.7	0.50 J	0.52 J	0.27 J	0.27 J	0.26 J	0.54 J	0.48 J	0.24 J	0.25 J	0.61 J	0.50 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.21 U	0.21 U	0.21 U	0.19 U	0.20 U	0.20 U	0.20 U	0.18 U	0.19 U	0.21 U	0.19 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.7	2.8	2.1	2.1	2.1	2.6	2.7	2	2	2.6	2.8
Ethylbenzene	100-41-4	6.4	5.7	0.40 J	0.36 J	0.28 J	0.31 J	0.27 J	0.28 J	0.56 J	0.21 J	0.22 U	0.38 J	0.47 J
Hexachlorobutadiene	87-68-3	0.49	6.8	0.21 U	0.21 U	0.21 U	0.19 U	0.20 U	0.20 U	0.20 U	0.18 U	0.19 U	0.21 U	0.19 U
Methylene Chloride	75-09-2	16	10	0.83	0.77	0.78	0.83	0.85	0.63 J	0.76	1.2	0.88	1	0.92
m-Xylene & p-Xylene	179601-23-1	11	22.2	1.4 J	1.1 J	0.92 J	1.1 J	0.92 J	0.88 J	1.7	0.78 J	0.60 J	1.2 J	1.7
Naphthalene	91-20-3		5.1	0.28 J	0.27 U	0.27 U	0.32 J	0.26 U	1.2	0.79	0.28 U	0.25 U	0.27 J	0.24 U
o-Xylene	95-47-6	7.1	7.9	0.51 J	0.43 J	0.34 J	0.40 J	0.34 J	0.35 J	0.62 J	0.31 J	0.22 J	0.50 J	0.7
Styrene	100-42-5	1.4	1.9	0.22 U	0.22 U	0.25 J	0.21 J	0.21 U	0.45 J	0.39 J	0.9	0.21 U	0.45 J	0.20 U
Tetrachloroethene	127-18-4	2.5	15.9	0.44 J	0.57 J	0.54 J	0.62 J	0.53 J	0.29 J	0.47 J	0.66	0.49 J	0.53 J	0.47 J
Toluene	108-88-3	57	43	2.3	3.6	2.1	2.2	2.8	4.6	3.2	1.5	2	5.9	3.4
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.24 U	0.24 U	0.24 U	0.22 U	0.23 U	0.23 U	0.23 U	0.20 U	0.22 U	0.24 U	0.21 U
Trichloroethene	79-01-6	0.46	4.2	0.21 U	0.21 U	0.21 U	0.19 U	0.20 U	0.20 U	0.20 U	0.18 U	0.19 U	0.21 U	0.19 U
Trichlorofluoromethane	75-69-4	12	18.1	1.4 J	1.5 J	1.1	1.1	1.1	1.4 J	1.5 J	1.1	1	1.3 J	1.4 J
Vinyl Chloride	75-01-4	0.37	1.9	0.25 U	0.25 U	0.25 U	0.24 U	0.24 U	0.25 U	0.25 U	0.22 U	0.23 U	0.25 U	0.23 U
n-Alkanes (µg/m ³)														
n-Butane	106-97-8			3.3 NJ	3.6 NJ	3.1 NJ	3.1 NJ	UN	3.3 NJ	27 NJ	UN	UN	4.3 NJ	3.5 NJ
n-Decane	124-18-5	15	17.5	0.75	1.8	0.69 J	1.7	0.59 J	1.1	2	0.52 J	0.55 J	1.6	2.5
n-Dodecane	112-40-3	9.2		0.51 J	0.73 J	0.41 J	1.1	0.51 J	0.89	0.91	0.40 J	0.46 J	1.0 J	0.70 J
n-Heptane	142-82-5	18		0.32 J	0.30 J	0.29 J	0.25 J	0.24 U	0.36 J	0.40 J	0.22 U	0.23 U	0.69 J	0.36 J

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	510	510	511	511	511	524ST	524ST	530	530	531	531
				IA-510-01 10/13/2017 N	IA-510-02 10/13/2017 N	IA-511-01 10/13/2017 N	IA-511-02 10/13/2017 N	IA-511-03 10/13/2017 N	IA-524ST-01 10/16/2017 N	IA-524ST-02 10/16/2017 N	IA-530-01 10/12/2017 N	IA-530-02 10/12/2017 N	IA-531-01 10/13/2017 N	IA-531-02 10/13/2017 N
n-Hexane	110-54-3	14	10.2	0.59 J	0.55 J	0.35 J	0.34 J	0.34 J	0.34 J	0.48 J	0.27 J	0.21 J	0.53 J	0.52 J
n-Octane	111-65-9	5.2		0.26 U	0.27 U	0.27 U	0.25 U	0.26 U	0.26 U	0.42 J	0.23 U	0.25 U	0.34 J	0.28 J
Nonane	111-84-2	7.9	7.8	0.47 J	1.1	0.29 J	0.28 J	0.28 J	0.34 J	0.60 J	0.22 J	0.21 U	0.43 J	0.68
n-Undecane	1120-21-4	12	22.6	0.32 J	0.40 J	0.28 J	0.65 J	0.27 J	0.52 J	0.89	0.21 J	0.22 J	0.73 J	1.2
Pentane	109-66-0			2.5 NJ	3.7 NJ	UN	UN	3.1 NJ	UN	UN	UN	UN	3.2 NJ	UN
Branched Alkanes (µg/m³)														
2,3-Dimethylpentane	565-59-3	5.2		0.35 U	0.36 U	0.36 U	0.33 U	0.34 U	0.35 U	0.35 U	0.31 U	0.33 U	0.35 U	0.32 U
Isopentane	78-78-4			2.7	3.2	2.7 J	3.0 J	2.8	1.4	2.4	1.5	1.7	0.38 U	3.4
2-methylpentane	107-83-5			0.45 J	0.45 J	0.41 J	0.41 J	0.42 J	0.35 U	0.35 U	0.31 U	0.33 U	0.38 J	0.32 U
Other (µg/m³)														
1,2,3-Trimethylbenzene	526-73-8			0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.22 U	0.19 U	0.21 U	0.22 U	0.20 U
Indane	496-11-7			0.35 U	0.36 U	0.36 U	0.33 U	0.34 U	0.35 U	0.35 U	0.31 U	0.33 U	0.35 U	0.32 U
Indene	95-13-6			0.29 U	0.30 U	0.30 U	0.28 U	0.29 U	0.29 U	0.29 U	0.26 U	0.27 U	0.29 U	0.27 U
Isoctane	540-84-1			0.47 J	0.49 J	0.38 J	0.31 J	0.31 J	0.28 J	0.44 J	0.19 U	0.21 U	0.47 J	0.43 J
Isopropylbenzene	98-82-8	0.82		0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.22 U	0.19 U	0.21 U	0.22 U	0.20 U
Thiopene	110-02-1			0.32 U	0.33 U	0.33 U	0.31 U	0.31 U	0.32 U	0.32 U	0.28 U	0.30 U	0.32 U	0.29 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	531 IA-531-03 10/13/2017 N	541 IA-541-01 10/12/2017 N	541 IA-541-02 10/12/2017 N	541 IA-541-03 10/12/2017 N	541 IA-541-03 10/12/2017 FD	6 IA-6-01 10/12/2017 N	6 IA-6-02 10/12/2017 N	6 IA-6-03 10/12/2017 N	601 IA-601-01 10/12/2017 N	601 IA-601-02 10/12/2017 N	601 IA-601-03 10/12/2017 N
Volatile Organic Compounds (µg/m³)														
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.25 U	0.24 U	0.26 U	0.21 U	0.20 U	0.25 U	0.26 U	0.27 U	0.23 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.22 U	0.21 U	0.23 U	0.19 U	0.18 U	0.22 U	0.23 U	0.24 U	0.21 U	0.22 U	0.22 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.54 J	0.48 J	0.48 J	0.50 J	0.47 J	0.49 J	0.49 J	0.48 J	0.48 J	0.48 J	0.49 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.25 U	0.24 U	0.26 U	0.21 U	0.20 U	0.25 U	0.26 U	0.27 U	0.23 U	0.25 U	0.25 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.74	0.35 J	0.25 J	0.48 J	0.46 J	0.31 J	0.34 J	0.43 J	0.22 J	0.73 J	0.24 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.28 U	0.27 U	0.29 U	0.24 U	0.23 U	0.28 U	0.29 U	0.30 U	0.26 U	0.28 U	0.28 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.22 U	0.21 U	0.23 U	0.19 U	0.18 U	0.22 U	0.23 U	0.24 U	0.21 U	0.22 U	0.22 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.23 U	0.23 U	0.24 U	0.50 J	0.47 J	0.23 U	0.24 U	0.25 U	0.22 U	0.63 J	0.24 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.24 J	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.60 J	0.24 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.22 U	0.21 U	0.23 U	0.19 U	0.18 U	0.22 U	0.23 U	0.24 U	0.21 U	0.22 U	0.22 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.95	2.9	0.45 J	27	25	0.55 J	1.7	0.22 J	3.3	91	0.91
Benzene	71-43-2	13	9.4	0.51 J	0.31 J	0.34 J	0.51 J	0.49 J	0.25 J	0.27 J	0.30 J	0.26 J	0.29 J	0.29 J
Bromomethane	74-83-9	0.48	1.7	0.28 U	0.27 U	0.29 U	0.24 U	0.23 U	0.28 U	0.29 U	0.30 U	0.26 U	0.28 U	0.28 U
Carbon Tetrachloride	56-23-5	1.3	1.3	0.46 J	0.36 J	0.36 J	0.38 J	0.38 J	0.38 J	0.36 J	0.37 J	0.37 J	0.38 J	0.35 J
Chlorobenzene	108-90-7	0.41	0.9	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
Chloroethane	75-00-3	0.39	1.1	0.25 U	0.24 U	0.26 U	0.21 U	0.20 U	0.25 U	0.26 U	0.27 U	0.23 U	0.25 U	0.25 U
Chloroform	67-66-3	1.2	1.1	0.63 J	0.25 J	0.26 U	0.29 J	0.28 J	0.30 J	0.26 U	0.27 U	0.65 J	0.75	0.25 U
Chloromethane	74-87-3	4.2	3.7	0.59 J	0.25 J	0.26 J	0.32 J	0.30 J	0.26 J	0.26 J	0.26 J	0.27 J	0.28 J	0.26 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.20 U	0.20 U	0.21 U	0.18 U	0.17 U	0.20 U	0.21 U	0.22 U	0.19 U	0.21 U	0.21 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.7	2	2	2.2	2.1	2	2	2	2	2	2
Ethylbenzene	100-41-4	6.4	5.7	0.44 J	0.26 J	0.24 U	0.46 J	0.44 J	0.24 J	0.33 J	0.43 J	0.22 U	0.27 J	0.24 U
Hexachlorobutadiene	87-68-3	0.49	6.8	0.20 U	0.20 U	0.21 U	0.18 U	0.17 U	0.20 U	0.21 U	0.22 U	0.19 U	0.21 U	0.21 U
Methylene Chloride	75-09-2	16	10	0.97	1	1.2	1.3	1.3	0.94	1	0.93	0.87	2	0.88
m-Xylene & p-Xylene	179601-23-1	11	22.2	1.5	0.86 J	0.69 J	1.5	1.5	0.88 J	0.94 J	1.6 J	0.57 J	0.83 J	0.63 J
Naphthalene	91-20-3		5.1	0.46 J	0.68 U	0.28 U	1.4 J	0.72 UJ	1.0 U	0.50 U	0.29 U	0.35 U	2.7	0.27 U
o-Xylene	95-47-6	7.1	7.9	0.71 J	0.32 J	0.27 J	0.57 J	0.55 J	0.31 J	0.35 J	0.51 J	0.21 J	0.40 J	0.24 J
Styrene	100-42-5	1.4	1.9	0.30 J	0.27 J	0.23 U	0.72	0.67	0.22 U	0.43 J	0.24 U	0.21 U	0.34 J	0.22 U
Tetrachloroethene	127-18-4	2.5	15.9	0.46 J	0.49 J	0.51 J	0.8	0.78	0.45 J	0.48 J	0.46 J	0.44 J	1	0.42 J
Toluene	108-88-3	57	43	4.5	2.7	3.3	2.9	2.7	1.5	2.7	7.1	1.5	2.3	1.7
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.23 U	0.23 U	0.24 U	0.20 U	0.19 U	0.23 U	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U
Trichloroethene	79-01-6	0.46	4.2	0.20 U	0.20 U	0.21 U	0.18 U	0.17 U	0.20 U	0.31 J	0.22 U	0.19 U	0.21 U	0.21 U
Trichlorofluoromethane	75-69-4	12	18.1	1.4 J	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Vinyl Chloride	75-01-4	0.37	1.9	0.25 U	0.24 U	0.26 U	0.21 U	0.20 U	0.25 U	0.26 U	0.27 U	0.23 U	0.25 U	0.25 U
n-Alkanes (µg/m³)														
n-Butane	106-97-8			11 NJ	2.8 NJ	UN	4.9 NJ	4.7 NJ	UN	UN	UN	UN	UN	UN
n-Decane	124-18-5	15	17.5	1.8	1.3	0.44 J	1.6 J	0.19 UJ	0.58 J	0.57 J	0.91	0.54 J	0.88	0.50 J
n-Dodecane	112-40-3	9.2		0.93 J	0.69 J	0.39 J	0.98	0.97	0.41 J	0.57 J	0.84	0.79	0.92	0.19 U
n-Heptane	142-82-5	18		1.3	0.24 U	0.26 U	0.44 J	0.41 J	0.25 U	0.49 J	0.27 U	0.23 U	0.63 J	0.25 U

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	531 IA-531-03 10/13/2017 N	541 IA-541-01 10/12/2017 N	541 IA-541-02 10/12/2017 N	541 IA-541-03 10/12/2017 N	541 IA-541-03 10/12/2017 FD	6 IA-6-01 10/12/2017 N	6 IA-6-02 10/12/2017 N	6 IA-6-03 10/12/2017 N	601 IA-601-01 10/12/2017 N	601 IA-601-02 10/12/2017 N	601 IA-601-03 10/12/2017 N
			EPA BASE 90th Percentile											
n-Hexane	110-54-3	14	10.2	0.50 J	0.27 J	0.29 J	0.77	0.73	0.35 J	1.1	4.8	0.21 J	0.43 J	0.22 U
n-Octane	111-65-9	5.2		0.91	0.26 U	0.28 U	0.30 J	0.30 J	0.26 U	0.41 J	0.29 U	0.25 U	0.27 U	0.27 U
Nonane	111-84-2	7.9	7.8	0.63 J	0.48 J	0.23 U	0.57 J	0.57 J	0.22 U	0.23 U	0.31 J	0.21 U	0.33 J	0.22 U
n-Undecane	1120-21-4	12	22.6	1	0.55 J	0.26 J	0.83	0.83	0.28 J	0.37 J	0.39 J	0.21 J	0.46 J	0.22 U
Pentane	109-66-0			4.7 NJ	UN	UN	2.7 NJ	2.4 NJ	UN	8.0 NJ	5.5 NJ	UN	UN	UN
Branched Alkanes (µg/m³)														
2,3-Dimethylpentane	565-59-3	5.2		0.35 U	0.34 U	0.37 U	0.30 U	0.29 U	0.35 U	0.37 U	0.47 J	0.33 U	0.36 U	0.36 U
Isopentane	78-78-4			4.8	3.1	4.8	6.7	6	1.2	3.4	2	1.5	2.1	1.9
2-methylpentane	107-83-5			0.37 J	0.34 U	0.37 U	0.95	0.89	0.35 U	0.46 J	1.5	0.33 U	0.36 U	0.36 U
Other (µg/m³)														
1,2,3-Trimethylbenzene	526-73-8			0.33 J	0.21 U	0.23 U	0.19 U	0.18 U	0.22 U	0.23 U	0.24 U	0.21 U	0.26 J	0.22 U
Indane	496-11-7			0.35 U	0.34 U	0.37 U	0.30 U	0.29 U	0.35 U	0.37 U	0.38 U	0.33 U	0.36 U	0.36 U
Indene	95-13-6			0.29 U	0.29 U	0.31 U	0.25 U	0.24 U	0.29 U	0.31 U	0.32 U	0.28 U	0.30 U	0.30 U
Isoctane	540-84-1			0.41 J	0.21 U	0.23 U	0.26 J	0.25 J	0.22 U	0.23 U	0.24 U	0.21 U	0.22 U	0.22 U
Isopropylbenzene	98-82-8	0.82		0.22 U	0.21 U	0.23 U	0.19 U	0.18 U	0.22 U	0.23 U	0.24 U	0.21 U	0.22 U	0.22 U
Thiophene	110-02-1			0.32 U	0.31 U	0.34 U	0.28 U	0.26 U	0.32 U	0.34 U	0.35 U	0.30 U	0.33 U	0.33 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

		NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	601 IA-601-04 10/12/2017 N	615 IA-615ST-01 10/16/2017 N	625 IA-625ST-01 10/16/2017 N	625 IA-625ST-02 10/16/2017 N	629 IA-629ST-01 10/16/2017 N	635ST IA-635ST-01 10/16/2017 N	645ST IA-645ST-01 10/16/2017 N	7 IA-7-01 10/12/2017 N	7 IA-7-02 10/16/2017 N	7 IA-7-03 10/12/2017 N	8 IA-8-01 10/12/2017 N
Chemical Name	CAS RN													
Volatile Organic Compounds (µg/m ³)														
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.26 U	0.25 U	0.29 U	0.26 U	0.27 U	1.8	0.24 U	0.24 U	0.25 U	0.24 U	0.25 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.23 U	0.22 U	0.26 U	0.23 U	0.24 U	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.22 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.50 J	0.49 J	0.50 J	0.48 J	0.53 J	0.60 J	0.46 J	0.47 J	0.48 J	0.49 J	0.47 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.26 U	0.25 U	0.29 U	0.26 U	0.27 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.25 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.52 J	2.8	3.3	1.7	0.69 J	1.8	0.38 J	0.47 J	0.34 J	0.21 J	1.2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.29 U	0.28 U	0.33 U	0.29 U	0.30 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.28 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.23 U	0.22 U	0.26 U	0.23 U	0.24 U	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.22 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.45 J	0.22 U	0.22 U	0.47 J	0.23 U	0.24 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.24 U	0.85	1	0.38 J	0.25 U	0.53 J	0.22 U	0.22 U	0.23 U	0.23 U	0.34 J
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.23 U	0.22 U	0.26 U	0.23 U	0.24 U	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.22 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	29	0.45 J	1.2	0.32 J	0.23 J	9	0.81	0.63 J	0.73	0.45 J	0.67 J
Benzene	71-43-2	13	9.4	0.43 J	5.2	5	0.66 J	0.57 J	2.6	0.55 J	0.38 J	0.25 J	0.26 J	0.28 J
Bromomethane	74-83-9	0.48	1.7	0.29 U	0.28 U	0.33 U	0.29 U	0.30 U	0.27 UJ	0.27 UJ	0.27 U	0.28 U	0.27 U	0.28 U
Carbon Tetrachloride	56-23-5	1.3	1.3	0.37 J	0.46 J	0.45 J	0.46 J	0.47 J	0.38 J	0.38 J	0.36 J	0.36 J	0.38 J	0.39 J
Chlorobenzene	108-90-7	0.41	0.9	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
Chloroethane	75-00-3	0.39	1.1	0.26 U	0.25 U	0.29 U	0.26 U	0.27 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.25 U
Chloroform	67-66-3	1.2	1.1	0.47 J	1.2	0.35 J	0.52 J	0.30 J	0.62 J	0.56 J	0.55 J	0.70 J	0.67 J	0.76
Chloromethane	74-87-3	4.2	3.7	0.28 J	0.49 J	0.49 J	0.52 J	0.52 J	0.50 J	0.54 J	0.26 J	0.27 J	0.27 J	0.27 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.1	2.5	3.7	2.8	6.8	2.5	2.3	2	2	2	2
Ethylbenzene	100-41-4	6.4	5.7	0.29 J	2.7	2.7	1.1	0.33 J	1.6	0.29 J	0.40 J	0.33 J	0.23 U	1.3
Hexachlorobutadiene	87-68-3	0.49	6.8	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U
Methylene Chloride	75-09-2	16	10	1	0.53 J	0.58 J	0.56 J	0.53 J	1.4	0.59 J	0.99	0.95	1.1	1.8
m-Xylene & p-Xylene	179601-23-1	11	22.2	1.1 J	8.9	9.5	3.9	1.1 J	5.6	0.91 J	1.5	0.99 J	0.68 J	4.3
Naphthalene	91-20-3		5.1	0.84 U	0.82	2.9	0.62 J	1.2	25	0.76	0.41 U	0.33 U	0.31 U	1.3
o-Xylene	95-47-6	7.1	7.9	0.44 J	3.3	3.4	1.4	0.47 J	1.9	0.34 J	0.56 J	0.39 J	0.24 J	1.5
Styrene	100-42-5	1.4	1.9	0.24 J	0.67 J	0.48 J	0.24 J	0.24 U	0.53 J	0.21 U	0.36 J	0.69 J	0.21 U	0.30 J
Tetrachloroethene	127-18-4	2.5	15.9	0.53 J	4.5	2	9.7	3.7	0.74	1.3	0.57 J	0.48 J	0.51 J	0.53 J
Toluene	108-88-3	57	43	2.8	16	17	4.5	1.8	9.8	1.6	11	1.8	1.9	12
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.24 U	0.23 U	0.28 U	0.24 U	0.25 U	0.23 U	0.22 U	0.22 U	0.23 U	0.23 U	0.24 U
Trichloroethene	79-01-6	0.46	4.2	0.21 U	0.20 U	0.24 U	0.21 U	0.22 U	0.20 U	0.20 U	2.2	0.20 U	0.20 U	0.21 U
Trichlorofluoromethane	75-69-4	12	18.1	1.1	1.3 J	1.4 J	1.4 J	1.4 J	1.5	1.2	1	1.1	1.1	1
Vinyl Chloride	75-01-4	0.37	1.9	0.26 U	0.25 U	0.29 U	0.26 U	0.27 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.25 U
n-Alkanes (µg/m ³)														
n-Butane	106-97-8			UN	14 NJ	15 NJ	2.6 NJ	2.9 NJ	20 NJ	5.8 NJ	2.5 NJ	UN	3.1 NJ	UN
n-Decane	124-18-5	15	17.5	0.88	3.2	2.4	3.8	1.5	1.5	0.81	1.2	0.84	0.26 J	3
n-Dodecane	112-40-3	9.2		0.79	0.67 J	1.1	2.1	1.2	1.2	0.55 J	0.99	1.6	0.56 J	0.65 J
n-Heptane	142-82-5	18		0.30 J	2.5	2.4	0.42 J	0.31 J	1.5	0.28 J	0.7	0.25 U	0.25 J	0.25 U

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	601 IA-601-04 10/12/2017 N	615 IA-615ST-01 10/16/2017 N	625 IA-625ST-01 10/16/2017 N	625 IA-625ST-02 10/16/2017 N	629 IA-629ST-01 10/16/2017 N	635ST IA-635ST-01 10/16/2017 N	645ST IA-645ST-01 10/16/2017 N	7 IA-7-01 10/12/2017 N	7 IA-7-02 10/12/2017 N	7 IA-7-03 10/12/2017 N	8 IA-8-01 10/12/2017 N
			EPA BASE 90th Percentile											
n-Hexane	110-54-3	14	10.2	0.38 J	4.5	5	4.2	0.64 J	2.4	0.61 J	0.53 J	0.25 J	0.39 J	0.23 J
n-Octane	111-65-9	5.2		0.28 U	3.3	1.2	0.61 J	0.28 U	0.59 J	0.25 U	0.25 U	0.26 U	0.26 U	0.26 U
Nonane	111-84-2	7.9	7.8	0.36 J	2.3	1.2	1.3	0.64 J	0.75	0.44 J	0.38 J	0.22 J	0.21 U	0.45 J
n-Undecane	1120-21-4	12	22.6	0.54 J	0.22 U	1.3	2.2	0.69 J	1	0.46 J	0.73	0.54 J	0.21 U	2.7
Pentane	109-66-0			UN	13 NJ	12 NJ	UN	UN	5.6 NJ	UN	14 NJ	UN	UN	UN
Branched Alkanes (µg/m³)														
2,3-Dimethylpentane	565-59-3	5.2		0.37 U	1.5	0.96	0.37 U	0.38 U	0.55 J	0.34 U	0.34 U	0.35 U	0.34 U	0.35 U
Isopentane	78-78-4			4	12	10	0.40 U	0.41 U	6.7	1.5	6.1	3.6	1.3	2.6
2-methylpentane	107-83-5			0.38 J	3.6	3.3	0.71 J	0.38 U	1.8	0.34 U	0.45 J	0.35 U	0.34 U	0.35 U
Other (µg/m³)														
1,2,3-Trimethylbenzene	526-73-8			0.23 U	0.62 J	0.84 J	0.56 J	0.25 J	0.63 J	0.21 U	0.21 U	0.22 U	0.21 U	0.44 J
Indane	496-11-7			0.37 U	0.35 U	0.41 U	0.37 U	0.38 U	0.34 U	0.34 U	0.34 U	0.35 U	0.34 U	0.35 U
Indene	95-13-6			0.31 U	0.29 U	0.34 U	0.31 U	0.32 U	0.33 J	0.28 U	0.28 U	0.29 U	0.28 U	0.29 U
Isoctane	540-84-1			0.25 J	7.2	4	0.54 J	0.39 J	1.9	0.43 J	0.29 J	0.22 U	0.21 U	0.22 U
Isopropylbenzene	98-82-8	0.82		0.23 U	0.26 J	0.26 U	0.23 U	0.24 U	0.21 U	0.21 U	0.21 U	0.22 U	0.21 U	0.23 J
Thiopene	110-02-1			0.34 U	0.32 U	0.38 U	0.34 U	0.35 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.32 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	8 IA-8-02 10/12/2017 N	8 IA-8-03 10/12/2017 N	8 IA-8-04 10/12/2017 N	8 IA-8-05 10/12/2017 N	8 IA-8-06 10/12/2017 N	AMBIENT AIR AMB-01 10/12/2017 AB	AMBIENT AIR AMB-02 10/13/2017 AB	AMBIENT AIR AMB-03 10/14/2017 AB	AMBIENT AIR AMB-04 10/15/2017 AB	AMBIENT AIR AMB-05 10/16/2017 AB
Volatile Organic Compounds (µg/m³)													
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.23 U	0.26 U	0.24 U	0.24 U	0.27 U	0.20 U	0.24 U	0.27 U	0.24 U	0.27 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.20 U	0.23 U	0.21 U	0.21 U	0.24 U	0.18 U	0.21 U	0.24 U	0.21 U	0.24 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.50 J	0.48 J	0.48 J	0.48 J	0.50 J	0.48 J	0.56 J	0.45 J	0.47 J	0.43 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.23 U	0.26 U	0.24 U	0.24 U	0.27 U	0.20 U	0.24 U	0.27 U	0.24 U	0.27 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.29 J	0.74 J	0.39 J	0.32 J	0.27 J	0.18 J	0.35 J	0.24 U	0.26 J	0.24 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.25 U	0.29 U	0.27 U	0.27 U	0.30 U	0.23 U	0.27 U	0.30 U	0.27 U	0.30 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.20 U	0.23 U	0.21 U	0.21 U	0.24 U	0.18 U	0.21 U	0.24 U	0.21 U	0.24 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.21 U	0.24 U	0.25 J	0.23 U	0.25 U	0.19 U	3.5	0.25 U	0.23 U	0.25 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.21 U	0.30 J	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.20 U	0.23 U	0.21 U	0.21 U	0.24 U	0.18 U	0.21 U	0.24 U	0.21 U	0.24 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.7	0.93	0.63 J	0.20 U	0.22 U	0.17 U	0.20 U	0.22 U	0.20 U	0.22 U
Benzene	71-43-2	13	9.4	0.24 J	0.26 J	0.29 J	0.25 J	0.25 U	0.33 J	0.70 J	0.61 J	0.85	0.27 J
Bromomethane	74-83-9	0.48	1.7	0.25 U	0.29 U	0.27 U	0.27 U	0.30 U	0.23 U	0.27 U	0.30 UJ	0.27 U	0.30 UJ
Carbon Tetrachloride	56-23-5	1.3	1.3	0.38 J	0.39 J	0.45 J	0.37 J	0.38 J	0.37 J	0.48 J	0.36 J	0.41 J	0.36 J
Chlorobenzene	108-90-7	0.41	0.9	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
Chloroethane	75-00-3	0.39	1.1	0.23 U	0.26 U	0.24 U	0.24 U	0.27 U	0.20 U	0.24 U	0.27 U	0.24 U	0.27 U
Chloroform	67-66-3	1.2	1.1	0.23 U	0.44 J	4.7	0.39 J	0.59 J	0.20 U	0.24 U	0.27 U	0.24 U	0.27 U
Chloromethane	74-87-3	4.2	3.7	0.28 J	0.26 J	0.29 J	0.28 J	0.28 J	0.26 J	0.51 J	0.48 J	0.49 J	0.51 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.19 U	0.21 U	0.20 U	0.20 U	0.22 U	0.17 U	0.20 U	0.22 U	0.20 U	0.22 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.1	2	2	2	2.1	2	2.7	2.3	2.2	2.4
Ethylbenzene	100-41-4	6.4	5.7	0.33 J	1	0.39 J	1.1	1.3	0.19 U	0.38 J	0.25 U	0.23 U	0.25 U
Hexachlorobutadiene	87-68-3	0.49	6.8	0.19 U	0.21 U	0.20 U	0.20 U	0.22 U	0.17 U	0.20 U	0.22 U	0.20 U	0.22 U
Methylene Chloride	75-09-2	16	10	40	1.1	0.91	1	1.3	1	1	0.55 J	0.41 J	0.48 J
m-Xylene & p-Xylene	179601-23-1	11	22.2	1.0 J	3.9	1.5	4.5	4.9	0.59 J	1.1 J	0.64 J	0.49 J	0.47 U
Naphthalene	91-20-3		5.1	0.62 J	0.53 J	0.45 J	0.26 U	0.28 U	0.21 U	0.54 J	0.28 U	0.35 J	0.28 U
o-Xylene	95-47-6	7.1	7.9	0.39 J	1.3	0.61 J	1.4	1.6	0.21 J	0.42 J	0.26 J	0.23 J	0.24 U
Styrene	100-42-5	1.4	1.9	0.20 U	0.25 J	0.25 J	0.24 J	0.27 J	0.18 U	0.39 J	0.24 U	0.21 U	0.24 U
Tetrachloroethene	127-18-4	2.5	15.9	0.49 J	0.56 J	0.49 J	0.45 J	0.55 J	0.72	0.60 J	0.53 J	0.20 U	0.24 J
Toluene	108-88-3	57	43	5.1	15	1.8	26	1.8	1.8	5.4	1.3	1.1	0.58 J
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.21 U	0.24 U	0.22 U	0.23 U	0.25 U	0.19 U	0.23 U	0.25 U	0.23 U	0.25 U
Trichloroethene	79-01-6	0.46	4.2	0.19 U	0.21 U	0.20 U	0.20 U	0.22 U	0.17 U	0.20 U	0.22 U	0.20 U	0.22 U
Trichlorofluoromethane	75-69-4	12	18.1	1.1	1.1	1.1	1.1	1.1	1.1	1.4 J	1.2	1.2	1.1
Vinyl Chloride	75-01-4	0.37	1.9	0.23 U	0.26 U	0.24 U	0.24 U	0.27 U	0.20 U	0.24 U	0.27 U	0.24 U	0.27 U
n-Alkanes (µg/m³)													
n-Butane	106-97-8			UN	3.2 NJ	UN	UN	UN	UN	3.4 NJ	4.9 NJ	3.1 NJ	UN
n-Decane	124-18-5	15	17.5	0.21 U	1.8	0.9	0.62 J	1	0.37 J	0.66 J	0.40 J	1.2	0.31 J
n-Dodecane	112-40-3	9.2		0.58 J	2.4	1.2	0.41 J	1.5	0.24 J	0.25 J	0.53 J	2.8	0.41 J
n-Heptane	142-82-5	18		0.23 U	0.68 J	0.24 U	0.27 J	0.27 U	0.20 U	0.37 J	0.27 J	0.24 U	0.27 U

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations

See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building	8	8	8	8	8	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR
			Location ID	IA-8-02	IA-8-03	IA-8-04	IA-8-05	IA-8-06	AMB-01	AMB-02	AMB-03	AMB-04	AMB-05
			Sample Date	10/12/2017	10/12/2017	10/12/2017	10/12/2017	10/12/2017	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017
			Sample Type	N	N	N	N	N	AB	AB	AB	AB	AB
			EPA BASE 90th Percentile										
n-Hexane	110-54-3	14	10.2	0.22 J	0.26 J	0.22 J	0.21 U	0.24 U	0.26 J	0.62 J	0.52 J	0.52 J	0.24 U
n-Octane	111-65-9	5.2		0.24 U	0.27 U	0.25 U	0.26 U	0.28 U	0.21 U	0.26 U	0.28 U	0.26 U	0.28 U
Nonane	111-84-2	7.9	7.8	0.44 J	0.54 J	0.22 J	0.28 J	0.43 J	0.18 U	0.41 J	0.24 U	0.23 J	0.24 U
n-Undecane	1120-21-4	12	22.6	0.20 U	1.1	0.72	0.49 J	0.42 J	0.18 U	0.22 J	0.24 U	0.23 J	0.24 U
Pentane	109-66-0			2.8 NJ	UN	UN	UN	UN	UN	6.9 NJ	UN	UN	UN
Branched Alkanes (µg/m³)													
2,3-Dimethylpentane	565-59-3	5.2		0.32 U	0.36 U	0.34 U	0.34 U	0.38 U	0.29 U	0.34 U	0.38 U	0.34 U	0.38 U
Isopentane	78-78-4			1.3	1.1	2.2	1.2	1.1	1	3.2	1.9	3	0.41 U
2-methylpentane	107-83-5			0.32 U	0.36 U	0.34 U	0.34 U	0.38 U	0.29 U	0.49 J	0.45 J	0.51 J	0.38 U
Other (µg/m³)													
1,2,3-Trimethylbenzene	526-73-8			0.20 U	0.32 J	0.21 U	0.21 U	0.24 U	0.18 U	0.21 U	0.24 U	0.21 U	0.24 U
Indane	496-11-7			0.32 U	0.36 U	0.34 U	0.34 U	0.38 U	0.29 U	0.34 U	0.38 U	0.34 U	0.38 U
Indene	95-13-6			0.27 U	0.30 U	0.28 U	0.29 U	0.32 U	0.24 U	0.29 U	0.32 U	0.28 U	0.31 U
Isoctane	540-84-1			0.20 U	0.23 U	0.21 U	0.21 U	0.24 U	0.27 J	0.51 J	0.56 J	0.44 J	0.24 U
Isopropylbenzene	98-82-8	0.82		0.20 U	0.23 U	0.21 U	0.21 U	0.24 U	0.18 U	0.21 U	0.24 U	0.21 U	0.24 U
Thiopene	110-02-1			0.29 U	0.33 U	0.31 U	0.31 U	0.35 U	0.26 U	0.31 U	0.35 U	0.31 U	0.35 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, N

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

CAS RN = Chemical Abstracts Service Registry Number

EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

		NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type EPA BASE 90th Percentile	AMBIENT-06 10/17/2017 AB
Chemical Name	CAS RN			
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	71-55-6	2.5	20.6	0.24 U
1,1,2,2-Tetrachloroethane	79-34-5	0.38		0.21 U
1,1,2-Trichloroethane	79-00-5	0.38	1.5	0.22 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1			0.46 J
1,1-Dichloroethane	75-34-3	0.38	0.7	0.22 U
1,1-Dichloroethene	75-35-4	0.4	1.4	0.24 U
1,2,4-Trichlorobenzene	120-82-1	0.47	6.8	0.22 U
1,2,4-Trimethylbenzene	95-63-6	9.8	9.5	0.23 J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.42		0.27 U
1,2-Dichlorobenzene	95-50-1	0.48	1.2	0.21 U
1,2-Dichloroethane	107-06-2	0.37	0.9	0.22 U
1,2-Dichloropropane	78-87-5	0.39	1.6	0.22 U
1,3,5-Trimethylbenzene	108-67-8	3.9	3.7	0.22 U
1,3-Dichlorobenzene	541-73-1	0.46	2.4	0.21 U
1,4-Dichlorobenzene	106-46-7	1.2	5.5	0.20 U
Benzene	71-43-2	13	9.4	0.74
Bromomethane	74-83-9	0.48	1.7	0.27 UJ
Carbon Tetrachloride	56-23-5	1.3	1.3	0.36 J
Chlorobenzene	108-90-7	0.41	0.9	0.22 U
Chloroethane	75-00-3	0.39	1.1	0.24 U
Chloroform	67-66-3	1.2	1.1	0.24 U
Chloromethane	74-87-3	4.2	3.7	0.53 J
cis-1,2-Dichloroethene	156-59-2	0.41	1.9	0.22 U
cis-1,3-Dichloropropene	10061-01-5	0.38	2.3	0.20 U
Ethylene dibromide (1,2-Dibromoethane)	106-93-4			0.22 U
Dichlorodifluoromethane	75-71-8	10	16.5	2.3
Ethylbenzene	100-41-4	6.4	5.7	0.24 J
Hexachlorobutadiene	87-68-3	0.49	6.8	0.20 U
Methylene Chloride	75-09-2	16	10	0.65 J
m-Xylene & p-Xylene	179601-23-1	11	22.2	0.72 J
Naphthalene	91-20-3		5.1	0.25 U
o-Xylene	95-47-6	7.1	7.9	0.27 J
Styrene	100-42-5	1.4	1.9	0.21 U
Tetrachloroethene	127-18-4	2.5	15.9	0.29 J
Toluene	108-88-3	57	43	1.5
trans-1,3-Dichloropropene	10061-02-6	0.4	1.3	0.22 U
Trichloroethene	79-01-6	0.46	4.2	0.20 U
Trichlorofluoromethane	75-69-4	12	18.1	1.2
Vinyl Chloride	75-01-4	0.37	1.9	0.24 U
n-Alkanes (µg/m³)				
n-Butane	106-97-8			3.7 NJ
n-Decane	124-18-5	15	17.5	0.35 J
n-Dodecane	112-40-3	9.2		0.19 J
n-Heptane	142-82-5	18		0.30 J

Indoor Air Survey for Former East 21st Street Works Site and Former East 14th Street, East 17th Street, and East 19th Street Stations
See notes, next page

Indoor Air Sample Results for Stuyvesant Town and Peter Cooper Village, Manhattan, New York

Chemical Name	CAS RN	NYSDOH Fuel Oil Indoor Air Upper Fence	Building Location ID Sample Date Sample Type	AMBIENT AIR AMB-06 10/17/2017 AB
			EPA BASE 90th Percentile	
n-Hexane	110-54-3	14	10.2	0.52 J
n-Octane	111-65-9	5.2		0.25 U
Nonane	111-84-2	7.9	7.8	0.21 U
n-Undecane	1120-21-4	12	22.6	0.21 U
Pentane	109-66-0			UN
Branched Alkanes (µg/m³)				
2,3-Dimethylpentane	565-59-3	5.2		0.34 U
Isopentane	78-78-4			1.8
2-methylpentane	107-83-5			0.44 J
Other (µg/m³)				
1,2,3-Trimethylbenzene	526-73-8			0.21 U
Indane	496-11-7			0.34 U
Indene	95-13-6			0.28 U
Isoctane	540-84-1			0.48 J
Isopropylbenzene	98-82-8	0.82		0.21 U
Thiopene	110-02-1			0.31 U

Notes:

Detected concentration is greater than NYSDOH Fuel Oil Indoor Air Upper Fence Screening Level (Table C1, NYSDOH 2006)

Detected concentration is greater than EPA BASE 90th Percentile Screening Level (Table C2, NYSDOH 2006)

Reference: NYSDOH (New York State Department of Health), 2006. *Guidance for Evaluating Soil Vapor Intrusion*

Indoor air samples collected by Anchor QEA between 10/12/2017 and 10/17/2017

Data underwent Stage 2A Data Validation

bold = detected result

J = estimated value

NJ = tentatively identified compound (estimated)

U = compound analyzed, but not detected above detection limit

UJ = compound analyzed, but not detected above estimated detection limit

UN = tentatively identified compound not found

µg/m³ = micrograms per cubic meter

AB = ambient air

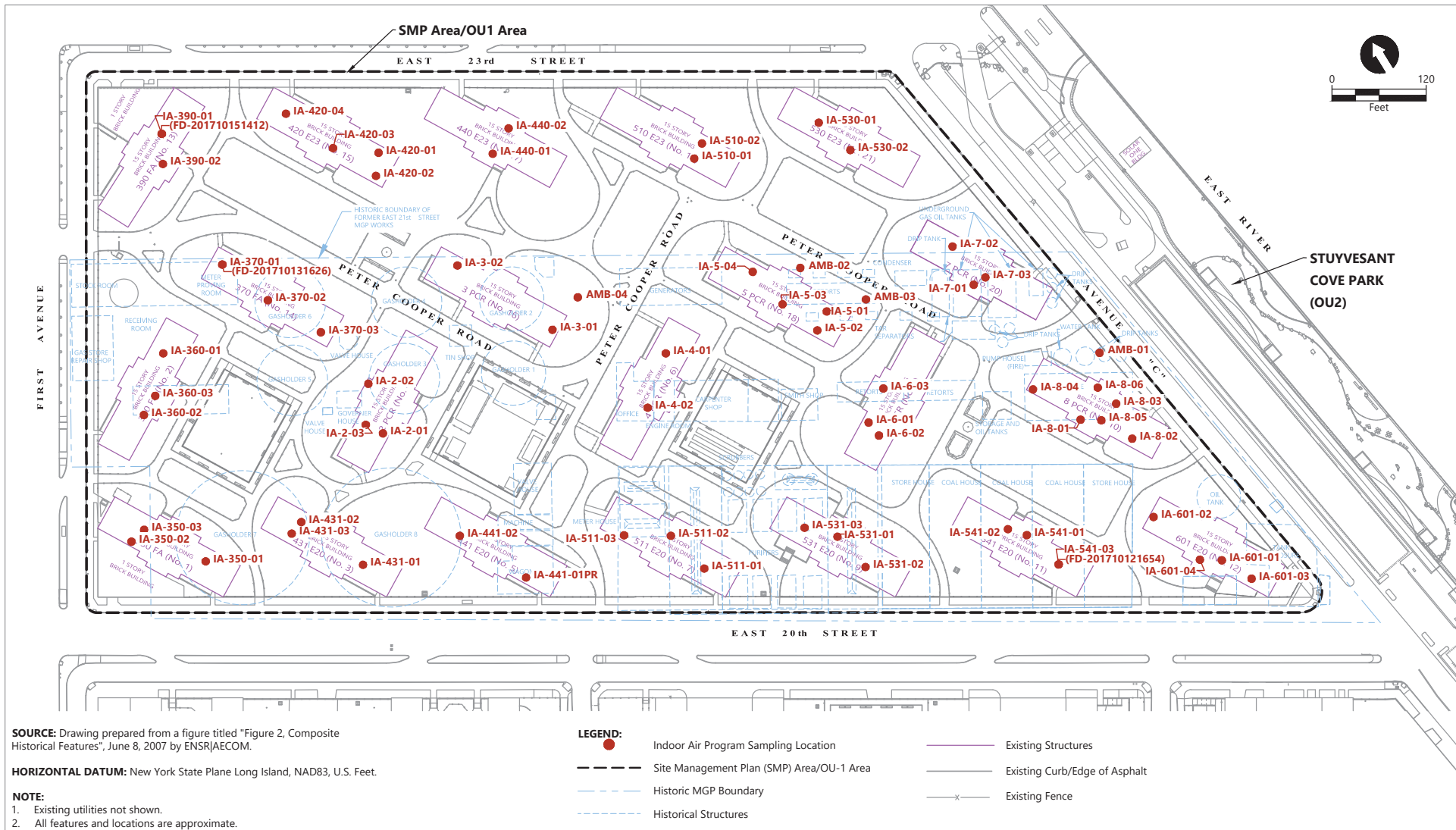
CAS RN = Chemical Abstracts Service Registry Number

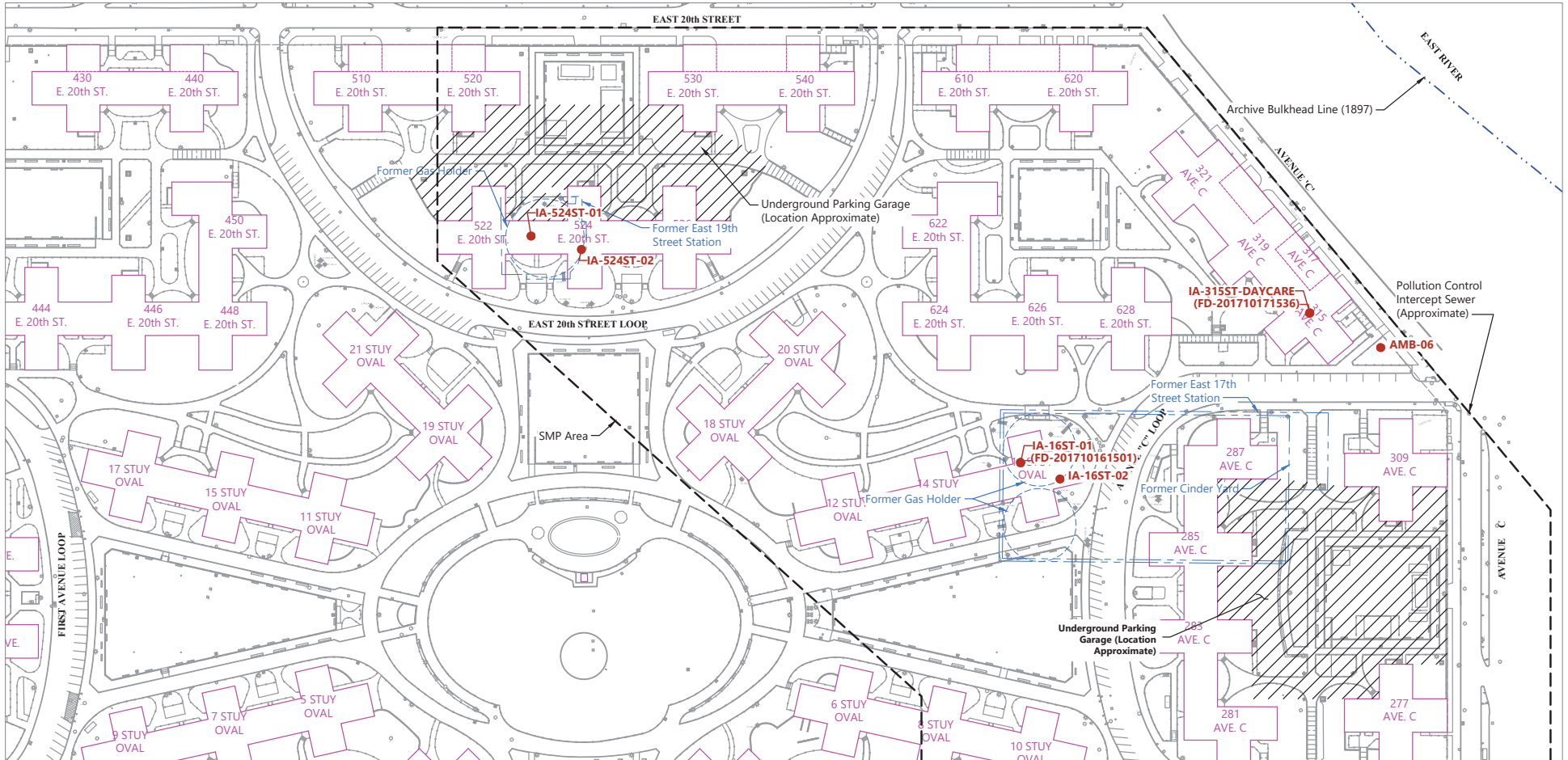
EPA = U.S. Environmental Protection Agency

FD = field duplicate

N = normal sample

NYSDOH = New York State Department of Health





SOURCES: Plan prepared from a figure titled "Figure 2-2, Current Site Layout and Former MGP Structures", 01/01/09 by AECOM.

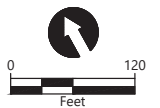
HORIZONTAL DATUM: New York State Plane Long Island, NAD83, U.S. Feet.

- NOTE:**
- Existing utilities not shown.
 - All features and locations are approximate.

LEGEND:

- Indoor Air Program Sampling Location
- Site Management Plan (SMP) Boundary
- Historic MGP Boundary
- Historical Structures

- Existing Structures
- Existing Curb/Edge of Asphalt
- Existing Fence
- Existing Underground Parking Garage Location (Approximate)



Publish Date: 2017/10/27 1:37 PM | User: rpetrie
 Filepath: K:\Projects\0921-Con_Edison\Project Sites\East 14th 17th and 19th Street\Air Monitoring\0921-RP-002 (E14-17-19th IA - Site).dwg Figure 2a



Figure 2a
Former East 17th and East 19th Street Site Boundaries and Former MGP Structures

Indoor Air Sampling Event
 NYSDEC Site No.V00535, V00541 and V00542, Manhattan, New York
 Consolidated Edison Company Of New York, Inc.



Table X
Building 441 E20th Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
A	USG All Purpose Joint Compound	Sheetrock	5	5 Gallon	U, UO	120	Y	Limestone, Attapulgit, Mica, Starch, Crystalline silica	SDS
B	Sherwin Williams Pre-Catalyzed Waterbased Epoxy	Paint	2	5 Gallon	U	120	Y	Titanium dioxide, 2-(2-Methoxyethoxy)-ethanol, Kaolin	SDS
B	Sherwin Williams Property Solution Interior Latex	Paint	1	5 Gallon	U	140	Y	Kaolin, Titanium dioxide, Crystalline silica, Cristobalite, Calcium Carbonate	SDS
B	Sherwin Williams Property Solution Interior Latex	Paint	2	Gallon	U	140	Y	Kaolin, Titanium dioxide, Crystalline silica, Cristobalite, Calcium Carbonate	SDS
B	Titebond Wood Glue	Adhesive	2	Gallon	U	162	Y	"No hazardous ingredients"	SDS
B	3M Bondo All-Purpose Putty	Adhesive	3	Can	UO	162	Y	Polyester resin, Talc, Styrene monomer, Magnesium carbonate, Limestone, Chlorite, Titanium dioxide, Quartz silica	SDS
B	Woodwise Wood Patch	Adhesive	1	Bucket	U	162	Y	Calcium carbonate, Quartz	SDS
B	3M Fire Barrier Sealant	Sealant	16	Tube	U	162	Y	Sodium silicate, Zinc Borate, Ethylhexyldiphenyl phosphate, Iron oxide, Oxide glass chemicals, Polyethylene glycol, Di-2-ethylhexylphenyl phosphate, Polyoxyethylene monooctylphenyl ether, triphenyl phosphate	SDS
B	LATICRETE NXT Primer	Primer	1	Bottle	U	162	Y	Styrene acrylate polymer, Formaldehyde	SDS
B	Penetrol Paint Conditioner	Paint	5	Gallon	U	160	N	Petroleum distillates	notes
B	Goof Off	Remover	1	Can	U	160	N	20%VOC, Acetone and Xylene	notes
B	Klean Strip Denatured Alcohol	Thinner	4	Can	U	160	Y	Ethyl Alcohol, Methanol	SDS
B	Absco Wood Floor Finish	Finish	1	Gallon	U	160	Y	Urethane polymer, 1-methyl-2-pyrrolidone, 2-dimethylaminoethanol, Dipropylene glycol monomethyl ether	SDS
B	Titebond Subfloor Adhesive	Adhesive	1	Tube	U	160	Y	n-hexane, toluene, 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	SDS
B	Boss FireStop	Adhesive	1	Tube	U	160	Y	Zinc borate, Aluminium oxide	SDS
B	Sheetrock Acoustical Sealant	Sealant	15	Tube	U	160	Y	Limestone, Ethylene glycol	SDS
B	Powers AC100 Plus Gold	Adhesive	1	Can	U	160	Y	Ethylene dimethacrylate, Methacrylic acid, Quartz, Dibenzoyl peroxide	SDS
B	GE Silicone	Sealant	1	Bottle	U	160	Y	Silamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, Octamethylcyclotetrasiloxane, Tin, dibutylbis(2,4-pentanedionato- κ O ₂ , κ O ₄)-, (OC-6-11)-	SDS
B	USG All Purpose Joint Compound	Sheetrock	3	5-Gallon	U	160	Y	Limestone, Attapulgit, Mica, Starch, Crystalline silica	SDS
B	Minwax Wood Putty	Adhesive	1	Tub	U	160	Y	Calcium carbonate, Talc	SDS
B	Loctite Subfloor Construction Adhesive PL 400	Adhesive	8	Tube	U	160	Y	Acetone, Limestone, Ethanol	SDS
B	Henry 1171N SureLock Wood Adhesive	Adhesive	1	5-Gallon	U	160	Y	Limestone, Naphthenic petroleum distillate, Kaolin clay, Solvent naphtha, Crystalline silica	SDS
B	Swell Grill, Oven, & Fat Fry Cleaner	Cleaner	1	Gallon	U	160	N	nonylphenoxy poly ethylene oxyethanol	notes
B	Red Devil Foam & Fill	Sealant	1	Can	U	160	Y	Liquefied Petroleum Gas Blend (mixture), 4,4 - Diphenylmethane Diisocyanate, Calculated VOC: < 20%/wt	SDS
C	BETCO Speedex	Cleaner	1	Bottle	U	250 to 1,800	Y	2-(2-butoxyethoxy)ethanol	SDS
C	BETCO Ax-It	Baseboard Stripper	2	Can	U	250 to 1,800	Y	2-butoxyethanol, ethanediol, 2-aminoethanol, propane	SDS
C	BETCO Best Bet	Liquid Crème Cleanser	2	Quart	U	250 to 1,800	Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
C	NOXON Metal Polish	Metal Polish	1	12 Fl Oz	U	250 to 1,800	Y	ammonia, Oxalic acid, dihydrate, Isopropyl alcohol	SDS
C	AERO Maria's Choice	Multi-Purpose Cleaner	1	Gallon	U	250 to 1,800	Y	Dipropylene Glycol Butyl Ether, Propylene Glycol Butyl Ether	SDS

Table X
Building 441 E20th Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
C	Austin's A-1 Bleach	Bleach	1	Gallon	U	250 to 1,800	Y	Sodium hypochlorite	SDS
C	Klean Strip Denatured Alcohol	Cleaner	6+	Gallon	U, UO	250 to 1,800	Y	Ethyl Alcohol, Methanol	SDS
C	Sherwin Williams Property Solution Interior Latex	Paint	50+	5 Gallon	U, UO	250 to 1,800	Y	Kaolin, Titanium dioxide, Crystalline silica, Cristobalite, Quartz, Vinyl polymer	SDS
C	Sherwin Williams Pre-Catalyzed Waterbased Epoxy	Paint	6+	5 Gallon	UO	250 to 1,800	Y	Titanium dioxide, 2-(2-Methoxyethoxy)-ethanol, Kaolin	SDS
C	Shurtape Painters Tape	Tape	125	rolls	U, UO	250 to 1,800	Y	Proprietary adhesive	SDS
C	Phenoseal Vinyl Adhesive Caulk	Caulk	48+	Tube	UO	250 to 1,800	Y	Calcium Meta Silicate, Talc, Propylene glycol, Titanium dioxide, Texanol, Carbon black	SDS
C	WD-40	Lubricant	6+	Can	U	250 to 1,800	Y	Aliphatic hydrocarbon, Petroleum base oil, LVP Aliphatic hydrocarbon, Carbon dioxide	SDS
C	Savogran Strypeeze	Paint Remover	5+	Gallon	U, UO	250 to 1,800	Y	Dichloromethane, Methanol, Toluene, Acetone, Aliphatic hydrocarbon, Paraffin wax	SDS
C	Crown Paint Thinner	Paint Thinner	3	Gallon	UO	250 to 1,800	Y	Medium aliphatic naphtha, 1,2,4-Trimethylbenzene	SDS
C	Bonefish Grill SunGlo Wood Sealer	Sealer	58	Gallon	UO	250 to 1,800	N	Diethylene glycol ether	notes
C	Absco Wood Floor Finish	Finish	10	Gallon	U	250 to 1,800	Y	Urethane polymer, 1-methyl-2-pyrrolidone, 2-dimethylaminoethanol, Dipropylene glycol monomethyl ether	SDS
C	Comet	Cleaner	UnK	Can	U	250 to 1,800	Y	Limestone, silica, sodium carbonate, etc.	SDS
C	Woodwise Full Trowel Filler	Filler	1	Gallon	U	250 to 1,800	Y	Calcium carbonate, Quartz	SDS
D	Back Off Pepper Spray	Protectant	1	2 Oz	UO	250 to 1,800	Y	Oleoresin capsicum, Diethylene glycol monobutyl ether, Propylene glycol, Nitrogen	SDS
D	HOMAX Tough as Tile Epoxy	Paint	12	Can	UO	250 to 1,800	Y	Titanium dioxide, Acetone, Xylenes, Methyl ethyl ketone, n-Butyl acetate, n-Butyl alcohol, Dimethyl ether	SDS
D	Rust-Oleum Spray Paint	Paint	10	Can	UO	250 to 1,800	Y	Acetone, Propane, Titanium dioxide, Naphtha, n-Butane, Hydrotreated light distillate, Dimethyl carbonate, Xylenes, Barium sulfate, Talc, Ethylbenzene	SDS
D	Krylon High Heat	Paint	1	Can	UO	250 to 1,800	Y	Acetone, Toluene, Propane, Xylene, Carbon black, 1-Butanol, Ethylbenzene	SDS
D	3M Multi-purpose Adhesive	Adhesive	4	Can	U	250 to 1,800	Y	Acetone, Propane, Cyclohexane, Petroleum distillates, Hexane	SDS
D	Mineral Spirits	Thinner	1	Quart	UO	250 to 1,800	Y	Hydrotreated light distillate (petroleum)	SDS
D	USG All Purpose Joint Compound	Sheetrock	4	5 Gallon	UO	250 to 1,800		Limestone, Attapulgite, Mica, Starch, Crystalline silica	SDS
D	Fill and Seal Expanding Foam Sealant	Sealant	2	Can	UO	250 to 1,800	Y	Polymethylenepolyphenylisocyanate, Diphenylmethane diisocyanate, Tris(1-chloro-2-propyl) phosphate, Methyl ether, Isobutane, Propane, Paraffin waxes, Polymethylenepolyphenyl polyisocyanate, copolymer	SDS
D	ACE RUST STOP	Enamel	1	Can	UO	250 to 1,800	Y	Acetone, Lt. Aliphatic hydrocarbon solvent, Propane, Butane, Xylene, Ethylbenzene, Carbon Black, Methyl ethyl ketoxime	SDS
D	BETCO Best Bet	Liquid Crème Cleanser	1	Quart	U	250 to 1,800	Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
D	3M Bondo Body Filler	Filler	1	Can	U	250 to 1,800	Y	Polyester resin, Talc, Styrene monomer, Magnesium carbonate, Limestone, Chlorite, Titanium dioxide, Quartz silica	SDS
D	Klean-Strip Paint Stripper After Wash	Cleaner	1	Quart	UO	250 to 1,800	Y	Acetone, Xylene, Methanol, Ethylbenzene	SDS
D	Zoom Primer Sealer	Sealer	5	Gallon	UO	250 to 1,800	N	350 g/L VOC	notes
D	Klean-Strip Acetone	Paint	1	Can	U	250 to 1,800	Y	Acetone	SDS
D	"2 Spice Mix"	UnK	1	UnK	U	250 to 1,800	N	UnK	notes
D	Titebond Wood Glue	Adhesive	1	tube	UO	250 to 1,800	Y	"No hazardous ingredients"	SDS
D	Mrs. Meyer's Multi-Surface Everyday Cleaner	Cleaner	1	quart	U	250 to 1,800	Y	"This product does not contain hazardous chemicals..."	notes
D	Woodwise Wood Patch	Adhesive	1	Gallon	UO	250 to 1,800	Y	Calcium carbonate, Quartz	SDS

Table X
Building 441 E20th Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
D	ACE RUST STOP Enamel	Paint	1	Can	UO	250 to 1,800	Y	Acetone, Propane, Butane, Lt. aliphatic hydrocarbon solvent, Xylene, n-Butyl acetate, Titanium dioxide, Ethylbenzene, Toluene	SDS
D	Krylon High Heat	Paint	1	Can	UO	250 to 1,800	Y	Acetone, Toluene, Propane, Xylene, Carbon black, 1-Butanol, Ethylbenzene	SDS
D	Sherwin Williams Acrylic Latex Paint	Paint	7	Gallon	UO	250 to 1,800	Y	Kaolin, Titanium dioxide, Crystalline silica, Cristobalite, Calcium Carbonate	SDS
D	Sherwin Williams Acrylic Latex Paint	Paint	6	5 Gallon	UO	250 to 1,800	Y	Kaolin, Titanium dioxide, Crystalline silica, Cristobalite, Calcium Carbonate	SDS
D	GOJO	Cleanser	2	gallon	U	250 to 1,800	Y	1-Methyl 4-(1-Methylethenyl) Cyclohexene, Alcohols, C12-15, ethoxylated propoxylated	SDS
D	Super A Dishwashing Liquid	Cleaner	1	Bottle	U	250 to 1,800	Y*	LAURAMIDOPROPYLDIMETHYLAMINE OXIDE, SODIUM CHLORIDE	SDS
D	Finish Dish Detergent	Detergent	1	Bottle	U	250 to 1,800	Y	LAURAMIDOPROPYLDIMETHYLAMINE OXIDE, SODIUM CHLORIDE	SDS
D	Pressure Washer	Washer	1	Washer	U	250 to 1,800	N	Gasoline	notes
D	Bernzomatic Propane	Propane	2	Bottle	U	250 to 1,800	Y	Propane	notes
D	Dura Seal Quick Coat	Sealer	40	Quart	D	250 to 1,800	Y	Mineral Spirits, Med. Aliphatic Hydrocarbon Solvent, Aliphatic Solvent, Mineral Spirits (Odorless), Toluene, 2-(2-Methoxyethoxy)-ethanol	SDS
D	5 Star Xtreme Paint Thinner	Paint Thinner	1	gallon	U	250 to 1,800	Y	Methanol, Toluene, Acetone, Naphtha, Solvent naphtha, Distillates, Heptane	SDS
D	Sherwin Williams Paint Thinner	Paint Thinner	1	gallon	U	250 to 1,800	Y	Lt. aliphatic hydrocarbon, Toluene, Ethylbenzene, Xylene, Methanol, 2-Propanol, Acetone, 2-Butoxyethyl acetate	SDS
D	Spray Source Hydraulic Fluid	Lubricant	1	gallon	U	250 to 1,800	Y*	Hydrotreated heavy paraffinic distillate, 2,6-di-tert-butylphenol	SDS
D	Unknown Blue Rocks	UnK	1	5 Gallon	U	250 to 1,800	N	UnK use, appears to be salt, in used USG Joint Compound Container	SDS

Notes:

D: Deteriorated

ppb: parts per billion

U: Used

UnK: Unknown

UO: Unopened

Table X
Building 635 E14th Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
A	DAP Plaster of Paris Dry Mix	Sheetrock	1	4 lb	UO	200	Y	Plaster of paris, Limestone, Quartz	SDS
A	Benjamin Moore Regal Classic Acrylic Pain	Paint	1	Gallon	U	413	Y	Water, Titanium dioxide, Acrylic Polymer, Propylene Glycol, Diethylene Glycol Monomthyl ether, silica (amorphous)	Label
A	Sherwin Williams 850A Acrylic Latex Caulk	Caulk	2	10 Oz	U	350	Y	Calcium carbonate, acrylic polymer (proprietary), alkyl phthalate, Titanium dioxide, Crystalline silica	Label
B	CaviCide Surface Cleaner & Disinfectant	Cleaner	1	24 Oz	U	200-350	Y	Isopropanol, Ethylene glycol monobutyl ether, Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride	Label
B	BETCO Speedex Degreaser	Degreaser	1	Quart	U	200-350	Y	2-(2-butoxyethoxy)ethanol	SDS
B	Lysol Disinfectant Wipes	Disinfectant	1	9 Oz	U	200-350	Y	dimethyl benzyl ammonium chloride	Label
B	Carefree Metallica Metal Polish	Metal Polish	1	Can	U	200-350	N	Distillates (Petroleum), hydrotreated Light, White Mineral Oil, Triglycerol Monooleate, Polydimethylsiloxane, liquified petroeuem Gas	Label
B	Carefree Goodbye Graffiti	Vandalism Mark & Stain Remover	1	Can	U	200-350	N	Toluene, Propane, 2-Butoxyethanol, acetone, butane, diethylene glocol monobutyl ether, sodium hydroxide	Label
B	Surety Hydrogen Peroxide Cleaner	Cleaner	1	12 Oz	U	200-350	Y	Alcohol ethoxylates, Hydrogen peroxide, Sodium xylenesulfonate	SDS
B	Diversey Alpha-HP Multi-Surface Cleaner	Cleaner	1	12 Oz	U	200-350	Y	2-Hydroxybenzoic Acid, Phosphoric acid, Hydrogen peroxide	SDS
B	Witch Hazel	Cleanser	1	16 Oz	U	200-350	Y	Witch hazel distillate, Alcohol	SDS
B	Resolve Gold Laundry Stain Remover	Remover	1	22 Oz	U	200-350	Y	Alcohols, Propylene glycol, Hydrogen Peroxide	SDS
C	Maria's Choice	Cleaner	1	Gallon	U	200-300	Y	Dipropylene glycol butyl ether, Propylene glycol butyl ether	Label
C	Enviro-Chem Winterizing and Floor Condit	Conditioner	1	Gallon	U	200-300	N	Water, sodium ethylene diamine tetracetate, 2-propanol, fragrance (proprietary), sodium hydroxide	Label
D	BETCO Best Bet	Liquid Crème Cleanser	2	Quart	U	641-661	Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
D	Maria's Choice	Cleaner	2	Gallon	U	641-661	Y	Dipropylene glycol butyl ether, Propylene glycol butyl ether	Label
D	Carefree Metallica Metal Polish	Metal Polish	1	Can	U	641-661	Y	Distillates (Petroleum), hydrotreated Light, White Mineral Oil, Triglycerol Monooleate, Polydimethylsiloxane, liquified petroeuem Gas	Label
D	Klean Strip Pure Gum Spirits Turpentine	Stripper	1	Quart	U	641-661	Y	Turpentine, (1S)-(-)-.alpha.-Pinene (Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-, (1S)-)	SDS
D	Green Works Glass & Surface Cleaner	Cleaner	1	Quart	U	641-661	Y	plant- and mineral-based cleaning ingredients	SDS and Label
D	Joy Non-Ultra Dishwashing Liquid	Cleaner	1	Bottle	U	641-661	Y	Sulfuric acid, Amine oxides, Poly(oxy-1,2-ethanediyl), Limonene	SDS
D	3M TroubleShooter Baseboard Stripper	Stripper	1	15 Oz	U	600-821	Y	2-Butoxyethanol, Petroleum gases, 2-Aminoethanol, Ethanolamine, Ethoxylated C12-C15 alcohols	SDS and Label
F	BETCO Speedex Degreaser	Degreaser	1	Quart	U	600-821	Y	2-(2-butoxyethoxy)ethanol	SDS
D	Austin's A-1 Bleach	Bleach	1	Gallon	U	600-821	Y	Sodium hypochlorite	SDS
D	SNAP! Fresh-Aire Deodorizer	Freshener	1	1/2 Gallon	U	600-821	Y	"No hazardous substances"	SDS
D	Clorox Pine-Sol All Purpose Cleaner	Cleaner	1	24 Oz	U	600-821	Y	Alcohols, C10-14, ethoxylated	SDS
D	BETCO Green Earth Glass Cleaner	Cleaner	1	Bottle	U	600-821	Y	Sodium lauryl ether sulfate, Ethyl Alcohol	SDS
D	Burke Quick Seal Polyurethane Sealer	Floor Sealer	1	Gallon	U	600-821	Y	Diethylene Glycol Momothyle Ether	SDS
D	Duro All Purpose Spray Adhesive	Adhesive	1	11 Oz	U	600-821	Y	Acetone, Propane, Hexane, Butane	SDS

Notes:

D: Deteriorated

ppb: parts per billion

U: Used

UnK: Unknown

UO: Unopened

Table X
Building 3 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
A	Carefree Goodbye Graffiti	Vandalism Mark & Stain Remover	1	15 Oz	U	200	Y	Benzyl Alcohol, D-Limonene, Non ionic surfactant, Ethanol, Potassium Hydroxide	SDS
A	NOXON Metal Polish	Metal Polish	1	12 Oz	U		Y	ammonia, Oxalic acid, dihydrate, Isopropyl alcohol	SDS
A	BETCO Best Bet	Metal Polish	2	32 Oz	UO		Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
A	GOJO Pink & Klean	Cleanser	2	800 ml	U		Y	1-Methyl 4-(1-Methylethenyl) Cyclohexene, Alcohols, C12-15, ethoxylated propoxylated	SDS
A	Surety Hydrogen Peroxide Cleaner	Glass Cleaner	2	32 Oz	U		Y	Alcohol ethoxylates, Hydrogen peroxide, Sodium xylenesulfonate	SDS
A	AERO Maria's Choice	Multi-Purpose Cleaner	1	Gallon	U	163	Y	Dipropylene glycol butyl ether, Propylene glycol butyl ether	Label
A	Austin's A-1 Bleach	Bleach	4	Gallon	U and UO	160	Y	Sodium hypochlorite	SDS and Label
A	Taski TR-103	Carpet Detergent	1	Gallon	U	180	Y	Water, 2-propanol, Nonylphenol Ethoxylate, Fragrance (Proprietary)	Label
B	Mapei Granirapid Acrylic Latex Admixture	Adhesive	1	2 Gallons	U	130	Y	Styrene/utadiene Rubber Latex, Bacteriacide	SDS
C	Sherwin Williams Pro-Indust Waterbased Semi Gloss	Paint	1	5 Gallons	U	130	Y	Titanium Dioxide, 2-(2-Methoxyethoxy)-ethanol, Cristobalite	SDS
C, D	Sherwin Williams Property Solution Interior Latex Flat	Paint	54	5 Gallons	U and UO	400-5,000 (up to 43,000 from top of unclosed paint buckets)	Y	Titanium Dioxide, Crystalline Silica (respirable powder), Cristobalite	SDS
C, D	Benjamin Moore Super Hide Latex Enamel	Paint	14	5 Gallons	U and UO		Y	Kaolin, Propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentenediol, Titanium dioxide	SDS
C, D	Sherwin Williams Prep-Site Pro Block Primer	Primer	7	5 Gallons	U and UO		Y	Titanium Dioxide, Talc, Epichlorohydrin-mercaptoethanol Alcohol, Crystalline Silica, respirable powder	SDS
C, D	PPG Pro-Ev Speedhide Enamel Latex	Paint	23	5 Gallons	U and UO		Y	Kaolin, Titanium Dioxide, Diatomaceous Earth, Talc (not containing asbestiform fibres), Nepheline syenite	SDS
C, D	Sherwin Williams Pro Mar 200 Semi Gloss Latex	Paint	9	5 Gallons	U and UO		Y	Titanium Dioxide, Kaolin, Ethylene Glycol, 2-(2-Butoxyethoxy)-ethanol	SDS and Label
C, D	Sherwin Williams Pro-Industrial Waterbased Epoxy	Paint	15	5 Gallons	U and UO		Y	Titanium Dioxide, 2-(2-Methoxyethoxy)-ethanol, Cristobalite	SDS
D	Sherwin Williams Duration Home	Paint	4	5 Gallons	U and UO	400	Y	Titanium Dioxide, Feldspars, Crystalline Silica, respirable powder, Ethylene Glycol, Cristobalite	SDS
D	Sherwin Williams White Pigmented Shellac Primer	Primer	5	5 Gallons	U		Y	Ethanol, Kaolin, Titanium Dioxide, 2-Propanol	SDS
D	USG Plus 3 Joint Compound	Sheetrock	2	5 Gallons	U		Y	Limestone, Attapulgit, Mica, Starch, Crystalline silica	SDS
D	Crown Denatured Alcohol Thinner	Cleaner	1	128 Oz	U		Y	Methanol, Ethanol, Isopropanol, Methyl Isobutyl Ketone	SDS
D	Benjamin Moore Regal Classic Congeler Acrylic Paint	Paint	2	5 Gallons	U		Y	Water, Titanium dioxide, Acrylic Polymer, Propylene Glycol, Diethylene Glycol Monomthyl ether, silica (amorphous)	Label
D	Benjamin Moore Flat Primer	Paint	2	5 Gallons	U		Y	Titanium dioxide, Kaolin, calcined, Kaolin, Silica (amorphous), Diatomaceous earth	SDS
D	Krylon Chalkboard Paint Low Odor	Paint	1	29 Oz	U		Y	Crystalline Silica (respirable powder), 2-(2-Methoxyethoxy)-ethanol, Carbon Black	SDS
D	Sherwin Williams High Gloss Acrylic Latex	Paint	2	29 Oz	UO		Y	Water, Acrylic Polymer, Calcium Carbonate, Titanium Dioxide, ethoxylated Alcohol, Cristobalite	Label

Table X
Building 3 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
D	PPG Pit Glaz WB1 Acrylic Epoxy	Paint	4	1 Gallon	U	400	Y	Titanium Dioxide, Phenol, 4-(1,1-dimethylethyl)-, polymer with 2(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol], 1-(2-butoxy-1-methylethoxy)propan-2-ol	SDS
D	Sherwin Williams Pro-Indus Pro-Cryl Acrylic Primer	Primer	2	1 Gallon	U		Y	Calcium Carbonate, Titanium Dioxide	SDS
D	DAP Weldwood Contact Cement	Cement	1	1 Gallon	U	150,000 (top of open can)	Y	Toluene, Methyl ethyl ketone (MEK), Light aliphatic solvent naphtha, n-Heptane, Magnesium oxide fume	Label
D	Dura-Seal Quick Coat Penetrating Finish	Finish	1	32 Oz	U	400 (over cart full of these items)	Y	Med. Aliphatic Hydrocarbon Solvent, Modified Linseed oil, Hydrocarbon resin, Allphatio solvent, Tall Oil Alkyd polymer, carbon black, zirconium 2-ethylhexanoate, cobalt 2-ethylhexanoate, Toluene, 2-[2-Methoxyethoxy]-ethanol	Label
D	DAP Plaster of Paris	Sheetrock	30	25 lbs bags	U and UO		Y	Plaster of paris, Limestone, Quartz	SDS
D	USG All Purpose Sheetrock Compound	Sheetrock	8	5 Gallon Containers	U and UO		Y	Limestone, Attapulgit, Mica, Starch, Crystalline silica	SDS
D	Easy Off Oven Cleaner	Oven Cleaner	2	15 Oz	U		Y	Ethanol, 2-(2-butoxyethoxy)-, Petroleum gases, liquefied (sweetened), Sodium hydroxide, Ethanol, 2-amino-	SDS
D	LA's Totally Awesome Window Cleaner	Window Cleaner	1	32 Oz	U		Y	Ethoxylated Alcohol, Isopropyl Alcohol	SDS
D	Comet Powder Cleaner with Bleach	Bleach Cleaner	1	25 Oz	U		Y	Sulfuric Acid (monooctyl ester, sodium salt), Sulfuric Acid Monododecyl Ester Sodium Salt, Sodium Hypochlorite	SDS
D	Bagi Shumanit Cold Grease Remover	Grease Remover	3	26 Oz	U		N	Highly soluble alkali, polysaccharide, Amptteric surfactant, mineral thickener, polymeric glycols, dipropylene glycol, silicone oil (as an emulsion), heteropolysaccharide binder, sodium silicate, mixture of preservatives, manitol humectant, UV absorber, corrosion inhibitors	Label
D	Bulldozer All Purpose Cleaner Pleasantly Scented	Cleaner	1	1 Quart	U		Y	Hydrogen Chloride, Alcohols (C11-15-secondary, ethoxylated)	SDS
D	BETCO Best Bet	Liquid Crème Cleanser	3	32 Oz	U (open top)		Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
D	NOXON Metal Polish	Metal Polish	3	12 Oz	U		Y	ammonia, Oxalic acid, dihydrate, Isopropyl alcohol	SDS
D	Clorox Lemon Fresh Bleach	Bleach	1	12 Oz	U		Y	Sodium Hypochlorite, Sodium Hydroxide	SDS
D	WD-40	Lubricant	1	8 Oz	U		Y	Aliphatic hydrocarbon, Petroleum base oil, LVP Aliphatic hydrocarbon, Carbon dioxide	SDS
D	AJAX Powder Cleaner Oxygen Based	Cleaner	1	21 Oz	U		Y	Limestone, Sodium Carbonate, Sodium Dodecyl Benzene Sulfonate	SDS
D	Lysol Disinfecting Wipe	Cleaning Wipes	1	20 Oz	U		Y	dimethyl benzyl ammonium chloride	Label
D	Sparten Spar-Crème Liquid Cleanser	Cleaner	1	32 Oz	U		Y	Water, Quartz, Citric Acid, Alkyl(C10-16)benzenesulfonic Acid, Xanthan Gum, Triethanolamine	SDS
D	Guardsman AFTA Cleaner/Degreaser	Adhesive Remover	1	1 Gallon	UO	550	Y	Stoddard Solvent, Naphtha, Xylene, Ethylbenzene, proprietary additive	SDS
D	Benjamin Moore Super Spec Coating	Paint	1	1 Gallon	UO		Y	Limestone, Kaolin, Silica (mica), Titanium Dioxide, Silica (crystalline)	SDS
D	Benjamin Moore Regal Select Primer	Primer	1	1 Gallon	UnK		Y	Water, Titanium dioxide, Acrylic Polymer, Propylene Glycol, Diethylene Glycol Monomethyl ether, silica (amorphous)	SDS

Table X
Building 3 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
E	BETCO Best Bet	Liquid Crème Cleanser	21	32 Oz	U and UO	6,000	Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
E	LA's Totally Awesome Window Cleaner	Window Cleaner	8	32 Oz	U and UO		Y	Ethoxylated Alcohol, Isopropyl Alcohol	SDS
E	Weiman Stainless Steel Cleaner	Cleaner	1	17 Oz	U		Y	Flammable aerosol, Gases under pressure- Liquefied gas	SDS
E	Crew Tile Cleaner	Cleaner	8	1 Quart	U and UO		Y	Sodium Hypochlorite, Sodium Hydroxide	SDS
E	OdoBan Odor Control	Cleaner	1	4 Oz	U and UO		Y	Water, Isopropanol, Alkyl (C12-16) dimethyl benzyl ammonium chloride	SDS
E	Bagi Shumanit Cold Grease Remover	Grease Remover	1	26.4 Oz	U and UO		N	Highly soluble alkali, polysaccharide, Ampoteric surfactant, mineral thickener, polymeric glycols, dipropylene glycol, silicone oil (as an emulsion), hetropolysaccharide binder, sodium silicate, mixture of preservatives, manitol humectant, UV absorber, corrosion inhibitors	Label
E	Easy Off Oven Cleaner	Oven Cleaner	16	14.5 Oz	U and UO		Y	Ethanol, 2-(2-butoxyethoxy)-, Petroleum gases, liquefied (sweetened), Sodium hydroxide, Ethanol, 2-amino-	SDS
E	Kilz Original Primer Sealer Stainblocker	Paint	1	13 Oz	U		Y	Aliphatic Hydrocarbon, Rutile, Calcium Carbonate, Petroleum Distillates (light hydrotreated, Kerosine), Silicate, Napheline Syenite, Titanium Dioxide, Amorphous Silica	SDS
E	AJAX Powder Cleaner Oxygen Based	Cleaner	1	21 Oz	U		Y	Limestone, Sodium Carbonate, Sodium Dodecyl Benzene Sulfonate	SDS
E	Bulldozer General Purpose	Cleaner	72	1 Quart	UO		Y	Hydrogen Chloride, Alcohols (C11-15-secondary, ethoxylated)	SDS
E	NOXON Metal Polish	Metal Polish	15	12 Oz	U		Y	ammonia, Oxalic acid, dihydrate, Isopropyl alcohol	SDS
E	Pledge Floor Care	Cleaner	1	1 Gallon	U		Y	Water, Proprietary film former, Ethoxylated Alcohol, Ammonium Hydroxide, Sodium C14-16 Olefin Sulfonate, Fragrance, Disodium Ethanol diglycinate, 2-Ethyl-2,5-Dimethylhexanoic Acid, Potassium hydroxide, Dimethyl Oxazolidine, Pylaklor Liq.	SDS
E	Polyblend Sanded Grout Mix	Grout	8 Boxes	varies	U		Y	Turquoise Blue S-732	SDS
E	DAP Weldwood Contact Cement	Cement	1	1 Gallon	U		Y	Silica Crystalline Quartz, Portland Cememt, Ferric Oxide	SDS
E	Woodwise Wood Patch	Adhesive	1	1 Gallon	U		Y	Toluene, Methyl ethyl ketone (MEK), Light aliphatic solvent naphtha, n-Heptane, Magnesium oxide fume	Label
E	Klean Strip Lacquer Thinner	Lacquer Thinner	1	1 Gallon	U		Y	Calcium carbonate, Quartz total, Quartz respirable	SDS
E	Sun-Glo "Bonefish Grill"	Floor Sealant	8	1 Gallon	UO		Y	Acetone, Light aliphatic solvent naphtha (petroleum), Acetic Acid (Ethyl Ester), Toluene, Methanol, 2-Butoxy Ethanol, 4-Chlorobenzotrifluoride, Ethyl 3-ethoxypropionate, Stoddard solvent (Mineral spirits; Aliphatic Petroleum Distillates; White spirits)	SDS
E	Zip Strip	Paint Remover	1	1 Quart	U		N	Diethylene glycol ether	Label
E	Dura-Seal Wood Finisher Ebony	Wood Finish	1	1 Quart	U		Y	2-Butoxyethanol, Monoethanolamine, Potassium Hydroxide	SDS
E	Dura-Seal Wood Finisher Weather Oak	Wood Finish	1	1 Quart	U		Y	Mineral Spirits, Med. Aliphatic Hydrocarbon Solvent, Aliphatic Solvent, Carbon Black, Zirconium 2-Ethylhexanoate, Cobalt 2-Ethylhexanoate, Calcium 2-Ethylhexanoate, Toluene, 2-(2-Methoxyethoxy)-ethanol	SDS
E	3M Rubbing Compound	Rubbing Compound	3	8 Oz	U		Y	Med. Aliphatic Hydrocarbon Solvent, Titanium Dioxide, Zirconium 2-Ethylhexanoate, Cobalt 2-Ethylhexanoate, Toluene, 2-(2-Methoxyethoxy)-ethanol, 1-Methyl-2-Pyrrolidone	SDS
							Y	Water, Silica, Hydrotreated Light Petroleum Distillates, Kaolinite, Solvent-Refined Heavy Paraffinic Petroleum Distillates, Oleic Acid, Illite, Glycerin, Mineral Oil, Poly(Oxyethylene) Sorbitan Monostearate	SDS

Table X
Building 3 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
E	Rust-Oleum Primer	Spray Paint	12	12 Oz	U and UO	6,000	Y	Acetone, Propane, Titanium dioxide, Naphtha, n-Butane, Hydrotreated light distillate, Dimethyl carbonate, Xylenes, Barium sulfate, Talc, Ethylbenzene	SDS
E	Minwax Wood Stain	Wood Finish	1	32 Oz	U		Y	Mineral Spirits, heavy Naphthenic Petroleum Oil, Med. Aliphatic Hydrocarbon Solvent, Carbon Black, Aliphatic Solvent, Calcium 2-Ethylhexanoate, Toluene	SDS
E	WD-40	Lubricant	1	8 Oz	U		Y	Aliphatic hydrocarbon, Petroleum base oil, LVP Aliphatic hydrocarbon, Carbon dioxide	SDS
E	STA-PUT	Adhesive	3	14 Oz	U		Y	Calcium Carbonate, Kaolin, Mineral Wool, Petroleum based lubricating oil, Crystalline silica(quartz)	SDS
E	3M Multipurpose Spray Glue	Adhesive	1	7.3 Oz	U		Y	Acetone, non-volatile components (trade secret), Propane, Cyclohexane, Petroleum Distillates, Hexane	SDS
E	Krylon Spray Paint	Spray Paint	1	12 Oz	U		Y	Acetone, Toluene, Propane, Xylene, Carbon black, 1-Butanol, Ethylbenzene	SDS
E	DOW Great Stuff Gaps & Cracks	Crack Repair	1	16 Oz	UO		Y	Prepolymer of MDI and Polyether polyol (mixture), Polymethylene polyphenyl Isocyanate, 4,4'methylene bisphenyl isocyanate, Liquified Petroleum Mixture (containing Isobutane, propane and dimethyl ether)	SDS

Notes:

ppb: parts per billion

U: Used

UnK: Unknown

UO: Unopened

Table X
Building 5 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
A	BETCO Ax-It aerosol	Baseboard Stripper	2	19 Oz	U	204	Y	2-butoxyethanol, ethanediol, 2-aminoethanol, propane	SDS
A	Carefree Metallica Metal Polish	Metal Polish	3	16 Oz	U		N	Water, Distillates (petroleum), Hydrotreated Light, White Mineral Oil, Triglycerol Monooleate, Polydimethylsiloxane, Liquified Petroleum Gas.	Label
A	NOXON Metal Polish	Metal Polish	1	12 Oz	U		Y	ammonia, Oxalic acid, dihydrate, Isopropyl alcohol	SDS
A	BETCO Best Bet	Liquid Crème Cleanser	1	32 Oz	U		Y	crystalline silica, respirable powder, Alcohols, C9-11, ethoxylated, Benzenesulfonic acid, C10-16-alkyl derivs.	SDS
A	BETCO Speedex	Degreaser	1	32 Oz	U		Y	2-(2-butoxyethoxy)ethanol	SDS
A	John Frieda Frizz Ease	Hair Spray	1	13 Oz	U		Y	Cyclopentasiloxane	SDS
A	Surety Hydrogen Peroxide Cleaner	Cleaner	1	14 Oz	U		Y	Alcohol ethoxylates, Hydrogen peroxide, Sodium xylenesulfonate	SDS
A	Sharpie	Permanent Marker	3	Marker	U		Y	Butanol, Propanol, Diacetone Alcohol, Ethanol, Pigments, Dyes, Additives	SDS
B	Tide	Detergent	3	1 Box	UO	244	Y	Ethyl Alcohol, 2-Aminoethanol, Alcohol Ethoxysulfate, Alcohol Sulfates, Benzene Sulfonic Acid, Benzene Sulfonic Acid, Alcohol Ethoxylate	SDS
B	Chlorox	Stain Remover	1	2 Oz	UO		Y	Hydrogen Peroxide, Myristamine Oxide	SDS
B	Ares Liquid Detergent	Detergent	1	3.2 Oz	UO		Y	Linear Dodecyl Benzene Sulphonic Acid, Sodium laureth Sulfate, Alcohols (C9-11, ethoxylated)	SDS
B	WD-40	Lubricant	1	8 Oz	U		Y	Aliphatic hydrocarbon, Petroleum base oil, LVP Aliphatic hydrocarbon, Carbon dioxide	
C	Buffer Oil	Lubricant	2	1 Gallon	U	1,000	Y	Distillates (Petroleum, Hydrotreated), Heavy Paraffinic, Distillated (Petroleum, Solvent Dewaxed), Heavy Paraffinic Petroleum Distillates	SDS
C	Worthington Torch Fuel	Fuel	2	14.1 Oz	U		Y	Propane, propylene	SDS
C	Gojo Pomice Cleaner	Hand Cleaner	1	1 Gallon	U		Y	Distillates (petroleum, hydrotreated light), White mineral oil (petroleum), Ethoxylated branched C11-14, C13-rich alcohols, Propylene glycol, Petrolatum, Sodium Hydroxymethylglycinate	SDS
C	Vitalube Cleaning	Cleaner	1	1 Quart	U		Y	Solvent naphtha (petroleum)	SDS
C	Unmarked Bottles (Possibly Bleach)	UnK	2	UnK	U		N	UnK	UnK
C	Krylon Spray Paint	Spray Paint	2	12 Oz	U		Y	Acetone, Toluene, Propane, Xylene, Carbon black, 1-Butanol, Ethylbenzene	SDS
C	Worm Gear EP 350	Lubricant	20+	1 Gallon	U		Y	Base Oil Severaly Refined, Residueal Oils (Petroleum, Solvent-Dewaxed)	SDS
C	Syntheso D 460 EP Oil	Oil	1	5 kg	U		Y	Polyalkylene Glycol, Oil and Zinc Compound	SDS
C	Sherwin Williams Rust Preventing Paint	Paint	1	15 Oz	U		Y	Lt. Aliphatic Hydrocarbon Solvent, Xylene, Titanium Dioxide, Ethylbenzene, 1,2,4-Trimethylbenzene, Light Aromatic Hydrocarbons, Vinyl Toluene, Cumene, Methyl Ethyl Ketoxime, Crystalline Silica, respirable powder, Carbon Black	SDS
C	Chevron W ISO 680 Oil NOTE: Oil spilled/leaking on floor	Oil	1	1 Gallon	U		Y	Refined Mineral Oil. NOTE: Oil spilled/leaking on floor	SDS
C	David Weber Oil Co. Varsol	Lubricant	5	1 Gallon	U		N	Lubricant Base Oil (Petroleum)	Label
C	Texaco AW Hydraulic Oil ISO 32	Hydraulic Oil	4	5 Gallons	U		Y	Highly refined mineral oil (C15 - C50)	SDS
C	LPS Lubricant Spray	Lubricant	1	12 Oz	U		Y	Distillates Petroleum(Hydrotreated light), Distillates Petroleum(Hydrotreated medium), carbon dioxide, sorbitan trioleate, calcium sulfonate	SDS
C	Crystal Green Degreaser	Degreaser	3	1 Gallon	UO		Y	Ethoxylated Alcohol, Sodium Citrate, Tetrasodium N,N-bis(carboxymethyl)-L-glytamate, Sodium Carbonate, Citric Acid	SDS
C	CRC CE Precision Cleaner	Cleaner	1	12 Oz	U		Y	Decafluoropentane, 1,1,1,2-Tetrafluoroethane, Cozol 305 (proprietary)	SDS

Table X
Building 5 Chemical Inventory

Storage Location	Product Description	Product Use	Quantity	Size	Condition	Field Instrument Readings (ppb)	SDS Procured	Chemical Ingredients	Chemical Ingredients Source (Label/SDS/Notes)
C	Zoom Spout Oil Lubricant	Lubricant	1	4 Oz	U	1,000	Y	Lubricant Base Oil (Petroleum)	SDS
C	Chemtronics Max-Kleen Xtreme	Degreaser	1	10 OZ	U		Y	Naphtha (petroleum hydrotreated heavy)	SDS
C	DOW Great Stuff Gaps & Cracks	Crack Repair	1	12 Oz	UO		Y	Prepolymer of MDI and Polyether polyol (mixture), Polymethylene polyphenyl Isocyanate, 4,4'methylene bisphenyl isocyanate, Liquified Petroleum Mixture (containing Isobutane, propane and dimethyl ether)	SDS
D	Unknown Clear Liquid in Betco Glass Cleaner Bottle (clear and odorless)	UnK	1	12 Oz	U	52	N	UnK	UnK

Notes:
 ppb: parts per billion
 U: Used
 UnK: Unknown
 UO: Unopened