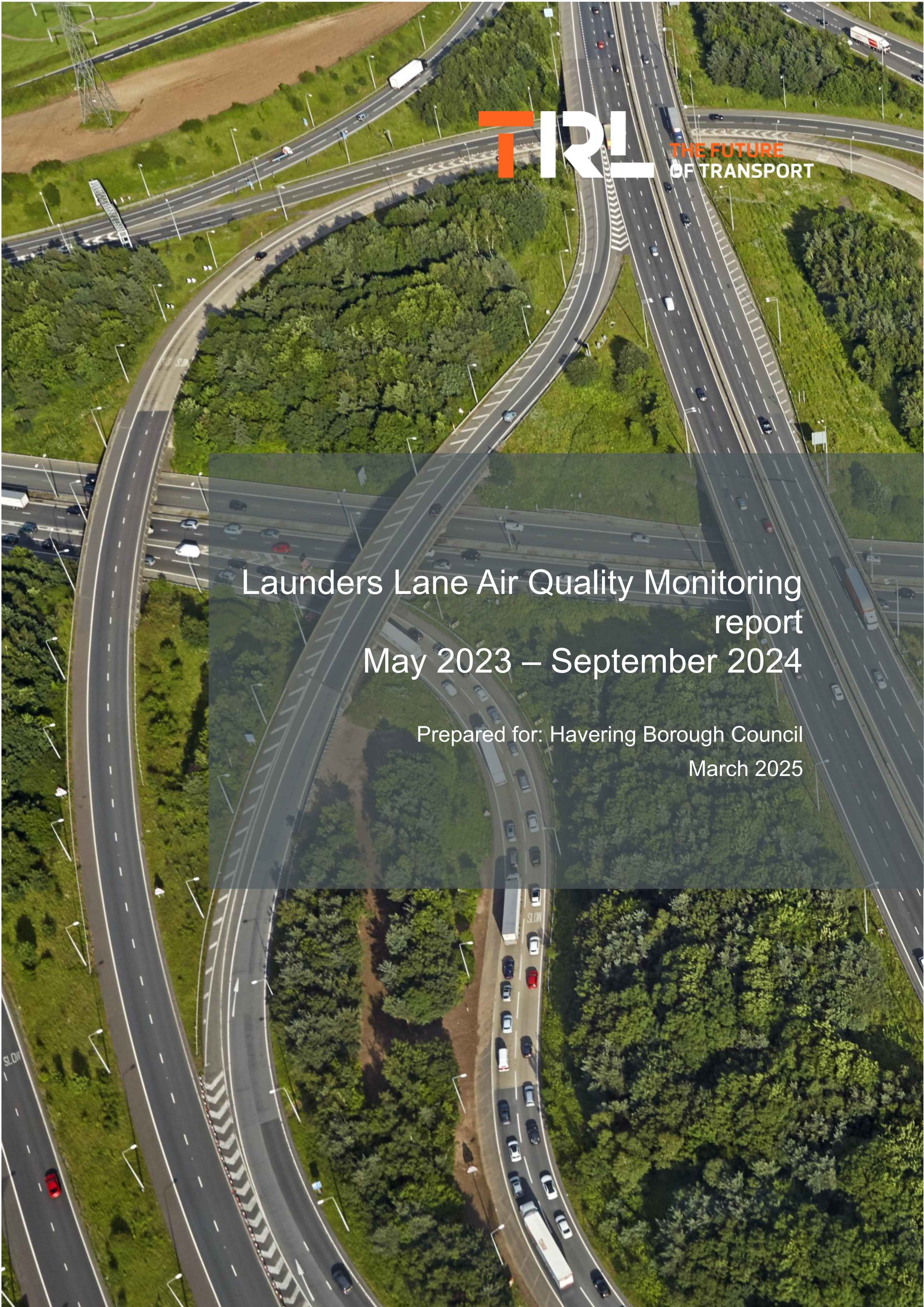

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Launders Lane Air Quality Monitoring report May 2023 – September 2024

Prepared for: Havering Borough Council

March 2025

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Client	Havering Borough Council
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Executive Summary

This report summarises the air quality monitoring undertaken by TRL Limited around the Launders Lane site in Havering, covering May 2023 to the end of September 2024. The aim of this project is to understand the potential levels of airborne pollution associated with the uncontrolled burning of materials at Launders Lane, and to get an idea of the ambient levels of airborne pollution without any fires for comparison. The pollutants being monitored have been Volatile Organic Compounds (VOCs), Poly Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs) and Heavy Metals (Mercury and Lead). Wind speed and direction have also been recorded.

The findings of this report demonstrate that, based on annual averages there are no exceedances of UK or World Health Organisation (WHO) thresholds, (where they are available). For the compounds with no thresholds, comparisons have been made with similar historical data sets, again, showing much lower levels.

Due to the consistently low measured levels through two summers, it is our recommendation that no further monitoring of these compounds is required.

Acknowledgements

This report has been developed by the TRL team with support from Havering Public Health, UKHSA Health Protection team, UKHSA Radiation Chemical and Environmental (RCE) hazards team and a local resident and Representative of Rainham Against Pollution (RAP) and has been reviewed by the Launders Lane Technical sub group (https://www.havering.gov.uk/info/20073/public_health/895/response_to_fires_at_arnolds_field_launders_lane)

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Disclaimer

Contents

Monitoring Objectives and Background

TRL has been commissioned by the London Borough of Havering to undertake air quality monitoring in and around the Launders Lane area, Rainham. The aim of this project is to understand the potential levels of airborne pollution associated with the uncontrolled burning of materials at Launders Lane, and to get an idea of the ambient/background levels without any fires. TRL is an independent research organisation, with many years of experience monitoring commercial and large residential fires. The techniques used at this site match those used by the Environment Agency and the UK Health Security Agency (UKHSA, formerly Public Health England) in similar scenarios. TRL's monitoring forms part of a wider package of works to understand the potential impact of the fires, and what is being emitted from the site and contributing to the odour.

This TRL report, covers the complete monitoring project from May 2023 through to September 2024. It is one of several being produced to summarise the monitoring and investigations that are being undertaken at the site by organisations including Imperial College London, the London Fire Brigade Service and specialist soil sampling and asbestos consultants.

Background

Waste has been deposited in Arnolds Field on Launders Lane without the appropriate authorisation; since 2000, there has been significant volumes of waste deposited at the site. No information on waste depth is available, however it is known that it can be up to 5 metres deep in places. There are no clear records of the specific type of waste that has been deposited at the site; however, it is known to include household, commercial / industrial (including wood, paper, glass, plastic, mattresses, furniture, cables, and fabric materials) and construction waste deposits.

In 2012 a limited site investigation identified elevated levels of lead and benzo[a]pyrene in the soil. Lead is a metal and a persistent contaminant, which can remain in the environment because of historical usage[1] related to old lead-based paint dust and contaminated soil for example. Benzo[a]pyrene is a type of polycyclic aromatic hydrocarbon that is formed when organic materials (such as coal, oil, tobacco, and wood) are burned. The decomposition of organic waste combined with the presence of combustible types of waste, like plastic and overgrown grass, is thought to have contributed to fires over the last 6 years. Table 1 shows the number of days on which London Fire Brigade (LFB) responded to fires at the Launders Lane site since 2018. Some of these may include multiple days for the same fire, or one day covering multiple smaller fires. It should be noted that 2022 was the UK's warmest year on record, with a spell of heatwaves resulting in the UK experiencing its fourth warmest summer on record[2], so the risk of fire was greater.

[1] https://www.niehs.nih.gov/health/topics/agents/lead

[2] https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2022/2022-provisionally-warmest-year-on-record-for-uk

Year	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2018												1	**1**
2019				1		1	3	1	2	1	1		**11**
2020				1				5	6	1			**13**
2021					3	1				4		4	**12**
2022		1		6	4	14	12	2					**39**
2023							2	12					**14**
2024					1		7	5	3	1			**17**

Table 1: Summary of the number of days with fires occurring at Arnolds Field, Launders Lane that required attendance by the London Fire Brigade (LFB) from 2018-2024

Glossary of terms used in this report

The definitions provided below are from a variety of sources including the UK Air Defra government website and the United States Environmental Protection Agency.

Ambient air – The air (or concentration of a pollutant) that occurs at a particular time and place outside of built structures. This is often used interchangeably with "outdoor air".

Annual mean - The annual mean is the average concentration of a pollutant measured over one year. This is normally for a calendar year, but some species are reported for the period April to March, which is known as a pollution year. This period avoids splitting a winter season between two years, which is useful for pollutants that have higher concentrations during the winter months.

Deposition - Deposition occurs when compounds of various types of air pollution are deposited on the earth's surface through rain, clouds, snow, fog, or as dry particles. The amount of deposition received in a given area is affected both by the concentration of pollution in the atmosphere and the way in which it is deposited. General factors such as, meteorology and topography influence how much pollution reaches the area from both local and distant sources, as well as how much of that pollution actually impacts the earth's surface via the various wet and dry forms of deposition[3]

EEA – This is the European Environment Agency (EEA)[4].

Hydrocarbons - Hydrocarbons are compounds containing various combinations of hydrogen and carbon atoms. They are emitted into the air by natural sources (e.g. trees) and as a result of fossil and vegetative fuel combustion, fuel volatilization, and solvent use. Hydrocarbons are a major contributor to smog.

Mercury – Organic mercury compounds, primarily methylmercury, are mainly found in fish. Inorganic mercury refers to compounds that are formed by combining mercury with another element such as oxygen or chlorine. Elemental mercury is liquid at room temperature and is used in barometers and thermometers for example. Each form of mercury has distinct health effects.

PAHs - Polycyclic Aromatic Hydrocarbons (PAHs) belong to a large group of organic compounds, several of which have been shown to be carcinogenic. The UK Expert Panel on Air Quality Standards (EPAQS) (now merged into the Department of Health's Committee on the Medical Effects of Air Pollutants (COMEAP)) recommended a standard for PAHs of 0.25 ng/m^3 (annual mean), using Benzo[a]pyrene (B[a]P) as a marker compound.

PCBs – Polychlorinated Biphenyls (PCBs)[5] are a group of man-made organic chemicals consisting of carbon, hydrogen and chlorine atoms; they have no known taste or smell, and range in consistency from an oil to a waxy solid. In the USA, PCBs were domestically manufactured from 1929 until manufacturing was banned in 1979. Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications.

TENAX - TENAX tubes are small metal tubes which are clipped to lampposts and absorb pollution passively (without a pump or the need for power)

[3] https://www.fs.usda.gov/air/deposition.htm

[4] https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/search-all-eu-institutions-and-bodies/european-environment-agency-eea_en

[5] https://www.epa.gov/pcbs

B-TEX – A commonly measured group of pollutants with the use of TENAX tubes, and incorporates, Benzene, Toluene, Ethylbenzene and Xylene.

Heavy Metals - Heavy metals are metallic elements that have a relatively high density and can be toxic or harmful to organisms at low concentrations due to their accumulation in biological systems. Some common heavy metals include lead, mercury, arsenic, cadmium, chromium, and nickel. These metals are naturally occurring in the Earth's crust but can become concentrated in the environment through human activities such as industrial processes, mining, and the use of certain products like batteries, paints, and pesticides[6].

VOCs - Volatile organic compounds (VOCs)[7] are compounds that have a high vapour pressure and low water solubility. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants. VOCs typically are industrial solvents, such as trichloroethylene; fuel oxygenates, such as methyl tert-butyl ether (MTBE); or by-products produced by chlorination in water treatment, such as chloroform. VOCs are often components of petroleum fuels, hydraulic fluids, paint thinners, and dry-cleaning agents. VOCs are common ground-water contaminants.

WHO – The World Health Organization (WHO) is an organization of 194 Member States. The Member States elect the Director-General, who leads the organization in achieving its global health goals. The WHO coordinates the world's response to health emergencies, promotes well-being, prevents disease, and expands access to health care[8].

Units of measurement – SI prefixes such as micro or nano form decimal multiples of SI units such a kilogram[9]. In relation to this report, a nanogram (ng) equals 10^{-9} of a gram and a microgram (µg) equals 10^{-6} of a gram.

Decimal number	Name (Symbol)	Factor
1		10^{0}
0.1	deci (d)	10^{-1}
0.01	centi (c)	10^{-2}
0.001	milli (m)	10^{-3}
0.000001	micro (µ)	10^{-6}
0.000000001	nano (n)	10^{-9}

[6] Hazard, G. C., & Maurer, B. H. (Eds.). (2006). The Handbook of Environmental Chemistry: Heavy Metals in the Environment (Vol. 2). Springer Science & Business Media.

[7] https://www.epa.gov/indoor-air-quality-iaq/what-are-volatile-organic-compounds-vocs

[8] https://www.who.int/about/who-we-are

[9] https://www.npl.co.uk/si-units

Objectives

The overarching objective of this air quality monitoring study is to '*understand the potential impact of the fires at Launders Lane on air quality in the local area.'*

1 Monitoring Details, Locations and Timeline

1.1 Details

Air quality monitoring has been undertaken to measure a range of airborne pollutants which are likely to be generated by the burning of waste material and have been detected at commercial fires previously monitored. These include:

PAHs – Polycyclic Aromatic Hydrocarbons (further details in Section 2 Monitoring Results - PAHs).

PCBs – Polychlorinated Biphenyls (further details in Section 3 Monitoring Results - PCBs).

Metals – Lead and Mercury (further details in Section 4 Monitoring Results - Metals).

VOCs – Volatile Organic Compounds (further details in Section 5 Monitoring Results - VOCs).

The monitoring programme has been designed to collect detailed information on these pollutants while adding a level of source apportionment, which may help identify where they come from, to the findings.

1.2 Locations

Due to variations in wind speed and direction, it can be challenging to monitor a single potential source of pollution. To mitigate these variations this monitoring programme has been designed to collect data from various locations around the site while balancing the need for accuracy, detail, and the suitability of the monitoring location. The instruments providing the more detailed results require mains power, a good line of sight to the potential source of pollution and hard standing. Smaller passive devices are used to surround the area.

The two Primary monitoring sites used by TRL are at Spring Farm Park (LAL1) and Ingrebourne Golf Course (LAL2) and allow for the collection of data for airborne heavy metals, PAHs, PCBs as well as wind speed and direction. (It should be noted that LAL2 is not at the exact same location as the commissioned node, although both are on the Golf Club site.)

These primary monitoring systems draw sample air in via a size selective sample head and deposit airborne pollution onto a series of specialist filters. These filters are exchanged on a monthly basis for analysis. The results, supplied as a mass in grams, are combined with the volume of air that has passed through the filter to provide a mass per meter cubed value. The result is normally expressed as micro grams (a millionth of a gram) per meter cubed (µg/m^3) or nano grams (one thousand-millionth of a gram) per cubic meter (ng/m^3). The result represents a monthly average for that location.

Figure 1:Image of Spring Farm Park monitoring equipment.

Figure 1 shows the air quality equipment installation at Spring Farm Park (LAL1).

In addition to the two primary sites, 7 secondary sites were selected to provide a geographical ring around the Launders Lane site to measure VOCs. TENAX tubes were deployed at each of these 7 locations plus the 2 primary locations. TENAX tubes are small metal tubes which are clipped to lampposts and absorb pollution passively (without a pump or the need for power); they are collected every 4 weeks and sent for analysis. As with the primary site filters, the results are expressed in a µg/m^3 value for the month. For this project, the 10 VOCs identified with the highest µg/m^3 readings are being measured and reported each month. An additional TENAX tube (LAL7) is used as a control device and is analysed in the same way but not exposed to the environment.

For some of the pollutants being measured there are instruments that can provide real time minute by minute readings, which might have provided further insight. These were considered early in the planning phase but were discounted due to their required infrastructure, disproportionate cost, and potential uncertainties over the quality of the results. In the methodology used, all sample analysis was undertaken by a UKAS accredited laboratory, a level of governance and quality not yet available in real time analysers.

When selecting locations for the monitoring, a number of criteria had to be met, including distance to residential areas and local businesses, access to power (for the primary sites), other potential sources of pollution, accessibility, and topography.

The map below, Figure 2, shows the monitoring locations.

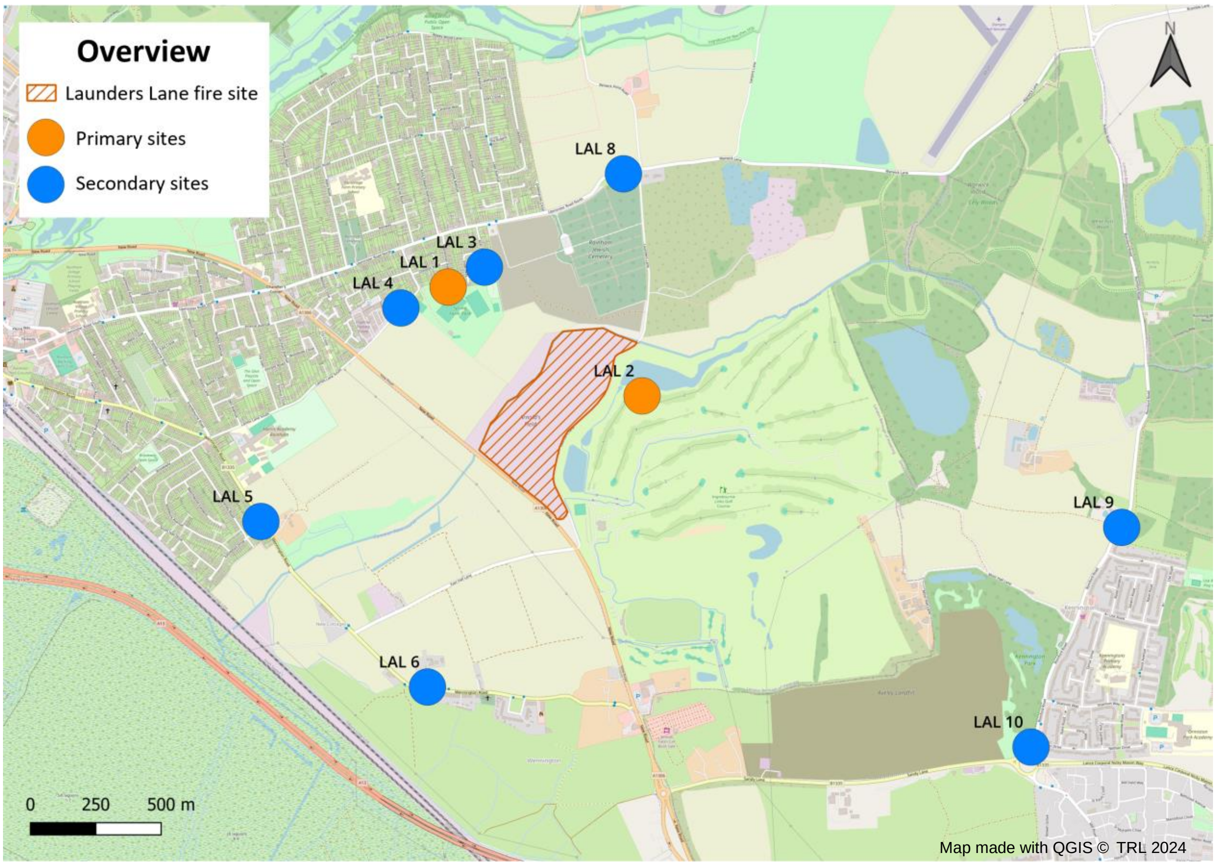

Figure 2: Location map of the 9 chosen monitoring locations around the Launders Lane (LAL) fire site

1.3 Timeline

Due to the nature of the project, availability of equipment, and required permissions, not all monitoring could be started at the same time. The timeline in Table 2 below outlines the start dates for each location and continued monitoring with each 'X' representing a month's monitoring either completed or in progress.

Due to a supply issue the TENAX tube data for November was not collected.

Table 2: Monitoring schedule and progress to August 2024

Month/ Location	May 23	June	July	Aug	Sep	Oct	Nov	Dec	Jan 24	Feb	March	Apr	May/June	June/July	July/Aug	Aug/Sept
Spring Farm Park (LAL1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Secondary sites / TENAX tubes		X	X	X	X	X	n/a*	X	X	X	X	X	X	X	X	X
Ingrebourne Golf Course (LAL2)				X	X	X	X	X	X	X	X	X	X	X	X	X

*No data collected due to supply chain issues

Table 3: Monitoring periods, reporting months and corresponding London Fire Brigade (LFB) attendance days.

Sample period	Month	LFB days of attendance
18th May - 22nd June 2023	June 23	0
22nd June – 28th July	July 23	2
28th July – 31st August	August 23	12
31st August – 5th October	September 23	0
5th October – 8th November	October 23	0
8th November – 6th December	November 23	0
6th December – 5th January 2024	December 23	0
5th January 2024 – 6th February 2024	January 24	0
6th February 2024 – 8th March 2024	February 24	0
8th March 2024 – 3rd April 2024	March 24	0

3rd April 2024 – 1st May 2024	April 24	0
1st May 2024 – 18th June 2024	May / June 24	1
18th June 2024 – 23rd July 2024	June / July 24	5
23rd July 2024 – 22nd August 2024	July / August 24	6
22nd August 2024 – 3rd October 2024	August / September 24	5

During the project, 12 out of the 140 TENAX tubes (equivalent to 9%) deployed have gone missing from site; this is common and is likely to be due to theft, high winds or wildlife.

The analysis of samples takes 4-6 weeks following the collection from site. This data is then processed in-house and collated.

2 Monitoring Results - PAHs

Background

Reasons for monitoring PAHs: Polycyclic Aromatic Hydrocarbons (PAHs) are being monitored because current scientific evidence[10] suggests that the PAHs in ambient air are associated with increased rates of cancer. It is also indicated that long-term exposure to PAHs can have an adverse effect on lung function, exacerbate asthma, and increase rates of obstructive lung diseases, skin irritation, weakened immune system and cardiovascular diseases. In addition, in children it might impact cognitive or behavioural function.

PAHs are a large group/class of organic compounds containing only carbon and hydrogen[11] and are classified as persistent organic pollutants formed during the incomplete combustion of organic materials.

The most well-known and described mixture of PAHs is Benzo[a]pyrene (B[a]P) which has been identified as a human carcinogen by the International Agency for Research on Cancer (IARC) and has been determined to be a suitable ‘marker’ for the PAH mixture in ambient air. Consequently, monitoring the levels of B[a]P in the environment serves as an effective way to assess the overall presence of PAHs.

Potential sources: PAHs are widespread in the environment and are common byproducts of combustion (burning) processes; they are also a natural constituent of most fossil fuels[12]. The majority of PAHs in ambient air[13] are a result of man-made processes, although they are also produced naturally as a result of forest fires and volcanoes for example.

Man-made processes that result in the production of PAHs include:

- burning fuels for industrial processes such as coal, wood, petroleum, petroleum products, or oil, (via domestic heating and cooking for example), and vehicle emissions
- burning refuse, agricultural waste, used tyres, polypropylene, or polystyrene, and
- tobacco burning

Once PAHs are in the atmosphere, the weight of the molecule dictates their final destination; heavier PAH mixtures tend to become solid while lighter mixtures remain in a gaseous state until removed via precipitation (rainfall). They can be absorbed by plants and accumulate in soil.

Human exposure to PAHs may occur from inhalation, dermal (skin) exposure or the ingestion of food or drink contaminated with PAHs.

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10 https://www.who.int/europe/publications/i/item/9789289056533#:~:text=Epidemiological%20studies%20have%20shown%20that,or%20behavioural%20function%20in%20children.

11 https://www.snexplores.org/article/explainer-chemistry-organic-carbon

12 https://www.atsdr.cdc.gov/csem/polycyclic-aromatic-hydrocarbons/where_are_pahs_found.html#:~:text=PAHs%20can%20be%20absorbed%20by%20plants%20and%20can%20accumulate%20in%20soil.&text=Cigarette%20smoke%20contains%20many%20PAHs,are%20additional%20sources%20of%20PAHs.&text=Benzo(a)pyrene%2C%20a%20potent%20carcinogen%2C%20is%20generally,an%20environmental%20indicator%20for%20PAHs

13 Please see glossary of terms for definition.

Existing limits: In the UK, ambient (outdoor) air quality is regulated by the Air Quality Standards Regulations (AQSR). These Air Quality Standards Regulations set a 'Target Value' that relates to PAH as the annual mean concentration of B[a]P which is set at 1 ng/m^3. Target values are not legally binding, but the UK Government must take all necessary measures not entailing disproportionate costs to meet them.

In addition, the UK National Air Quality objective for PAH[14] is an annual mean of 0.25 ng/m^3 of B[a]P in ambient air published in the UK Air Quality Strategy.

In 1999, the UK Expert Panel on Air Quality Standards issued a report (EPAQS, 1999) recommending an air quality standard for B[a]P in air of 0.25 ng/m^3 as an annual average concentration and judged that the attainment of this would make the risk to human health from inhalation of PAH insignificant and was included in the 2007 Air Quality Strategy[15] document which was however superseded in England only by the 2023 Air Quality Strategy: framework for local authority delivery[16], when the target was removed.

The UK PAH Monitoring and Analysis Network provides data that can be compared to the target value and level recommended by the Expert Panel on Air Quality Standards (EPAQS) 0.25 ng/m^3 with concentrations measured at a network of sites around the UK[17].

By the end of 2022 there were 34 ambient air sampling sites in the network, and two deposition samplers. Most of the sampling locations in the network are urban background, but also includes urban industrial, rural background and a single site that is urban traffic.

In 2022[18], the AQSR target value for B[a]P (annual mean concentration of 1 ng/m^3) was not exceeded at any of the network sites; however, nine sites exceeded the UK Air Quality Objective for B[a]P (annual mean concentration of 0.25 ng/m^3), these were:

- Port Talbot Margam (industrial)
- Scunthorpe Town (industrial)
- Scunthorpe Low Santon (industrial)
- Royston (urban background)
- Swansea Cwm Level Park (urban background)
- Bristol St Paul's (urban background)
- Derry Brandywell (Northern Ireland)
- Ballymena Ballykeel (Northern Ireland)
- Kilmakee Leisure Centre (Northern Ireland)

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14 https://uk-air.defra.gov.uk/networks/network-info?view=pah

15 Defra, 2007. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volume 1). URL https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69336/pb12654-airquality-strategy-vol1-070712.pdf

16 Defra, 2023. Policy paper. Air quality strategy: Framework for local authority delivery.

URL https://www.gov.uk/government/publications/the-air-quality-strategy-for-england/air-quality-strategy-framework-for-local-authority-delivery

17 Figure 2-1: Map of UK PAH monitoring stations in 2022 https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281159_UK_PAH_Monitoring_and_Analysis_Network_Annual_Report_2022.pdf

18 https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281159_UK_PAH_Monitoring_and_Analysis_Network_Annual_Report_2022.pdf

The average data capture of the operational sites in 2022, taking into account any closure or start dates, continued to be very high at 98% which is slightly higher than in 2021.

2.1 Results

The samples collected for PAH levels were analysed against a standard suite of 16 compounds; the full set of results can be found in Appendix A.1 PAH Descriptions.

Of these 16 compounds, B[a]P has been examined further as an indicator compound, in line with common practice[19]. As mentioned in the Background text of this section (Section 2 Monitoring Results - PAHs), monitoring the levels of B[a]P in the environment serves as an effective way to assess the overall presence of PAHs.

2.1.1 Benzo[a]pyrene (B[a]P)

Benzo[a]pyrene (B[a]P), a potent carcinogen, is commonly used as an environmental indicator for PAHs[20] and has a national air quality objective associated with it. The reported levels of this compound at both locations are shown below in Figure 3.

The national objective for B[a]P is as an annual mean value of 0.25 ng/m^3. Compliance with this objective can be demonstrated via the data presented below comparing the National Objective and the LAL annual average figures.

The annual average period from September 2023 when all of sites were fully commissioned through to August 2024. The calculated annual averages for B[a]Ps at LAL1 and LAL2 are 0.029ng/m^3 and 0.023ng/m^3 respectively, which are both below the annual mean target of 0.25 ng/m^3

[19] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281159_UK_PAH_Monitoring_and_Analysis_Network_Annual_Report_2022.pdf

[20] https://www.atsdr.cdc.gov/csem/polycyclic-aromatic-hydrocarbons/where_are_pahs_found.html#:~:text=PAHs%20can%20be%20absorbed%20by%20plants%20and%20can%20accumulate%20in%20soil.&text=Cigarette%20smoke%20contains%20many%20PAHs,are%20additional%20sources%20of%20PAHs.&text=Benzo(a)pyrene%2C%20a%20potent%20carcinogen%2C%20is%20generally,an%20environmental%20indicator%20for%20PAHs

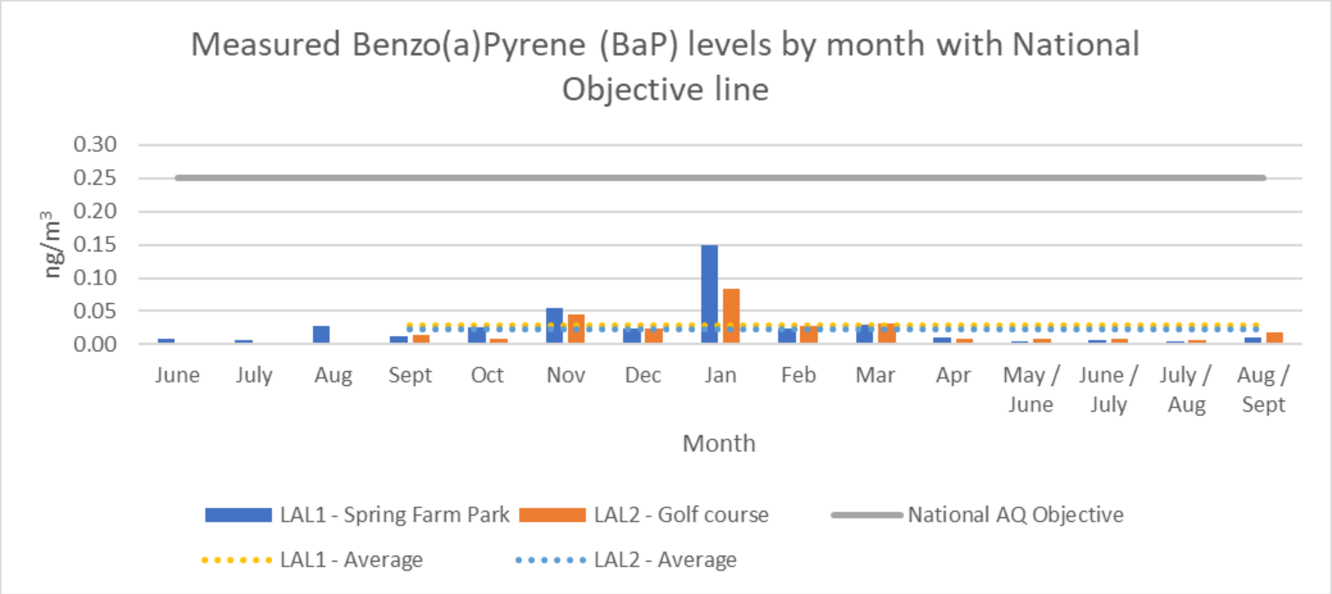


Figure 3: Measured Benzo(a)pyrene levels at both primary Launders Lane (LAL) sites compared against the national objective limit (0.25ng/m^3). B[a]P monitoring at LAL1 commenced in June 2023 and at LAL2 in September 2023

To provide further context to the measured values of B[a]P, data from two DEFRA (Department for Environment, Food and Rural Affairs) operated PAH monitoring sites[21] has been included in Figure 4 below. The two locations included are Marylebone Road in central London and Chilbolton Observatory in Stockbridge providing an urban and rural comparison. At the time of writing this report the 2024 comparison data is still at a provisional stage and only extends to June.

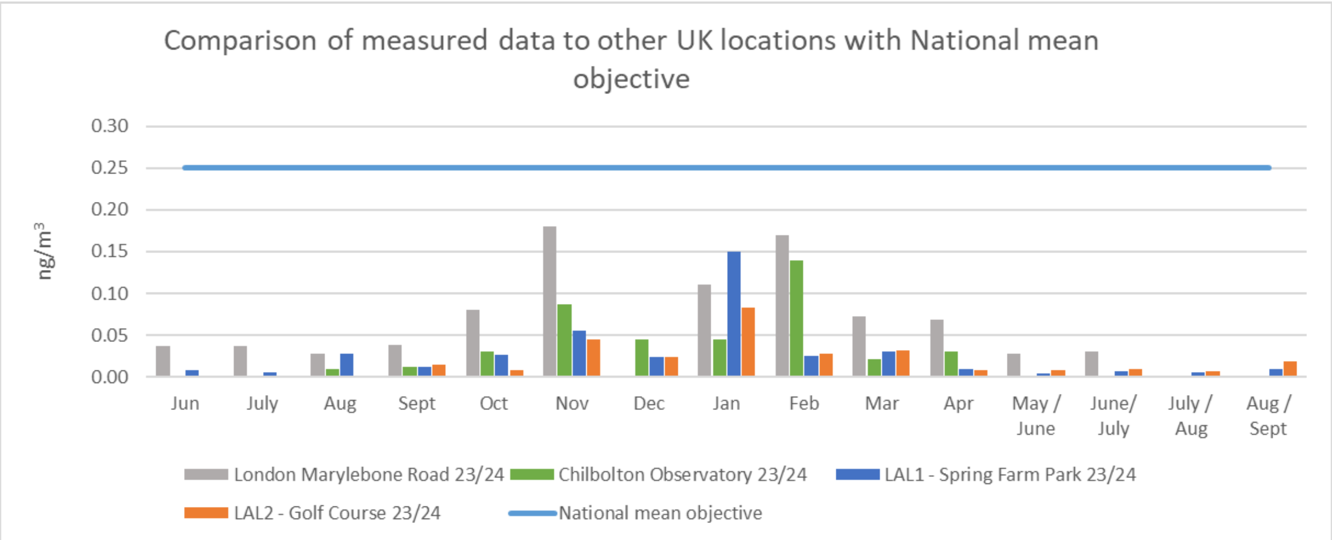


Figure 4: Comparison of measured Benzo(a)pyrene values at LAL1 and LAL2 with two other UK monitoring locations. LAL2 monitoring commenced in September 2023

[21] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281159_UK_PAH_Monitoring_and_Analysis_Network_Annual_Report_2022.html

2.2 Discussion

Figure 3 demonstrates compliance with the National annual mean objective through the 12 months of readings from October 2023 through to September 2024. This shows that the average readings for the period are around 10% of the UK Objective level of $0.25ng/^3$. Even in months when fires were active and increased levels can be seen, no exceedances of the objective were measured. Levels of B[a]P recorded at LAL1 and LAL2 were correlated against fires for the June/July and July/August periods of 2024 (see Table 3 for monitoring periods). This represented the highest total number of fires for the year (number of fires for the exact period monitored were 12 recorded days requiring LFB attendance). The levels measured were similar to the April 2024 period where there were no fires. Since monitoring began, measured levels of B[a]P at both sites have been similar. This implies that the levels of B[a]P measured have not been influenced by the presence of a fire.

- In January 2024 measured levels of B[a]P at LAL1 were higher than the comparison site data and LAL2. This does not coincide with any recorded fires at the Arnolds Field site and is likely to be an unrelated local event.
- In order to understand how the Launders Lane B[a]P PAH data compares to other UK locations, Figure 4 shows LAL1 and LAL2 results compared to two other UK monitoring locations, Marylebone Road in central London and Chilbolton Observatory in the Oxfordshire countryside, these sites providing an urban and rural comparison. The Launders Lane data is consistently lower than the urban site and largely comparable to the countryside site.
- The full set of PAH results for 16 compounds are plotted in Appendix A.1 PAH Descriptions for sites LAL1 and LAL2.

3 Monitoring Results - PCBs

Background

Reasons for monitoring PCBs: Polychlorinated Biphenyls (PCBs) are toxic pollutants which can cause serious health effects in humans[22] and are classified as carcinogenic to humans by the International Agency for Research on Cancer (IARC)[23]. They are a group of man-made organic chemicals consisting of carbon, hydrogen and chlorine atoms; they have no known taste or smell, and range in consistency from an oil to a waxy solid.

In the UK, the commercial production of PCBs began in 1954[24]; their use was progressively restricted from the early 1970s. By the end of 1972 sales of PCBs for open applications were discontinued and sales of UK manufactured material ceased in 1977[25]. Their use in production has been illegal in the UK since 1987[26].

Potential sources: Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, in the past PCBs were used in hundreds of industrial and commercial applications including:

- Electrical insulation and cooling of transformers, capacitors and other electrical equipment
- Electrical equipment including voltage regulators, switches, re-closers, bushings, and electromagnets
- Oil used in motors and hydraulic systems
- Fluorescent light ballasts
- Cable insulation
- Thermal insulation material including fiberglass, felt, foam, and cork.
- Adhesives and tapes
- Oil-based paint
- Caulking
- Plastics
- Carbonless copy paper
- Floor finish

PCBs tend to be found everywhere, with levels typically higher in urban areas compared to rural areas. As highlighted above, PCBs were widely used in industrial applications, including electrical equipment, insulation materials, and hydraulic systems. Consequently, urban areas tend to have higher concentrations of PCBs due to historical industrial activities, such as those described in the bullet points above as well as waste disposal, and urban runoff. The current atmospheric levels of PCBs found in the environment can be accounted for by the accidental release of products or materials containing PCBs, or they can be released

22 https://chm.pops.int/TheConvention/ThePOPs/The12InitialPOPs/tabid/296/Default.aspx

23 https://www.atsdr.cdc.gov/csem/polychlorinated-biphenyls/adverse_health.html

24 https://doi.org/10.1016/0269-7491(94)90079-5

25 https://www.energynetworks.org/assets/images/Resource%20library/Environment%20Briefing%2004%20-%20Polychlorinated%20Biphenyls%20(PCBs).pdf

26 https://assets.publishing.service.gov.uk/media/5ed921cfd3bf7f46049120f9/RPC-4455_1_-DEFRA_Removal_of_equipment_containing_polychlorinated_biphenyls__PCBs__by_2025.pdf

from environmental reservoirs or stores such as oceans or soil, that are able to sequester (or store) them[27].

Existing limits: There is no UK National Objective for PCBs.

3.1 Results

A standard set of 12 PCBs have been measured, with each reported PCB BZ# figure relating directly to a specific chemical.

Following checks with the Environment Agency, DEFRA, UKHSA and several other independent organisations we have confirmed that there are currently no routine measurements of these pollutants undertaken in the UK. Appropriate historical data has been identified in the form of the 2018 TOMPS report - 2109211254_TOMPS_report_2018.pdf (defra.gov.uk). Eight of the compounds measured in this report, match of those measured at Launders Lane for this project.

Table 4 below summarises the eight compounds that can be directly compared between Launders Lane and the 2018 TOMPS report to provide some context for what is being measured locally.

PCB type	Measured at Launders Lane 2023	Historic PCB data TOMPS 2018
PCB BZ#77	X	
PCB BZ#81	X	
PCB BZ#105	X	X
PCB BZ#114	X	X
PCB BZ#118	X	X
PCB BZ#123	X	X
PCB BZ#126	X	
PCB BZ#156	X	X
PCB BZ#157	X	X
PCB BZ#167	X	X
PCB BZ#169	X	
PCB BZ#189	X	X

Table 4: Historic network PCB data and measured Launders Lane data compound comparison table

27 https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2109211254_TOMPS_report_2018.pdf

There is data for the 4 remaining compounds, not reported in the 2018 TOMPS report (#81, 77, 126 and 169) in Appendix A.2 PCBs.

To identify periods where there were increased measured levels of PCBs in the air, the total of the eight chemicals have been plotted by month and location; this provides a clear comparison between the sites and highlights any trends or anomalies. This data is illustrated in Appendix A.2 PCBs.

Figure 5 represents the combined total of the same eight compounds measured at Launders Lane, compared to the London annual average of the same compounds as measured in 2018 and reported in the TOMPS report. The London data set selected represents geographically the closest set of historical monitoring data and would have been subject to similar background influences. As a direct comparison the annual averages for LAL1 and LAL2 are 0.0011 ng/m^3 and 0.0019 ng/m^3 respectively, which is below the 2018 London average of 0.0073 ng/m^3 (when calculated between October 23 to August 24).

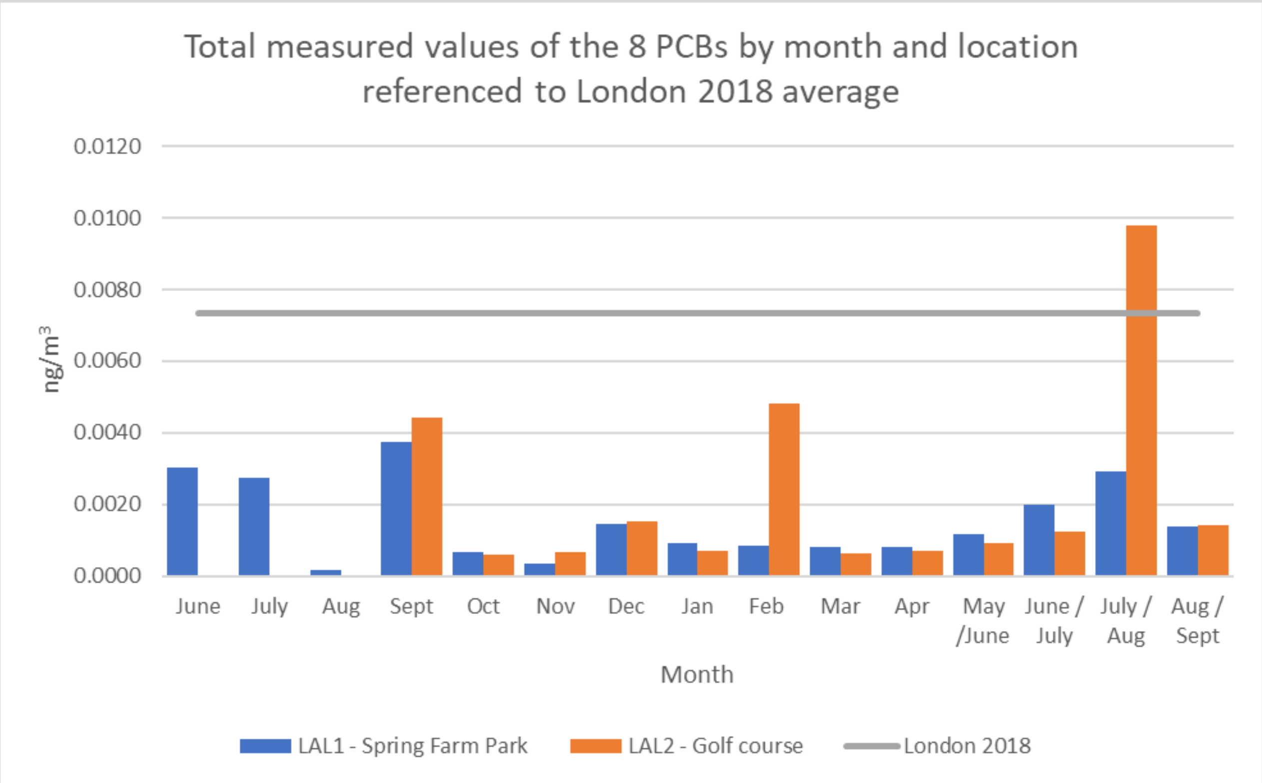


Figure 5: Total of the 8 measured PCBs at the two primary LAL sites by month, with the 2018 London average line included for comparison (monitoring at LAL2 commenced in September 2023). Including annual averages.

Figure 6 to Figure 13 examine the eight individual PCBs and compares them against the most recent TOMPS report data available from 2018. For each of the comparable PCB measurements, the annual average values (October 2023 - September 2024) of the current LAL data sets are presented and compared against annual average data for London as reported in the 2018 TOMPS report.

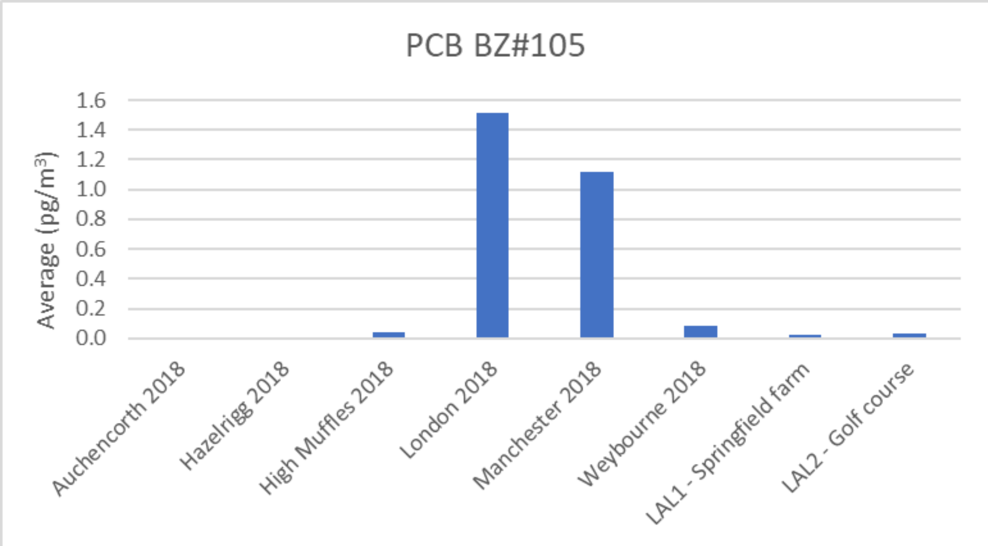


Figure 6: PCB BZ#105, 2018 annual averages and Launders Lane Annual average.

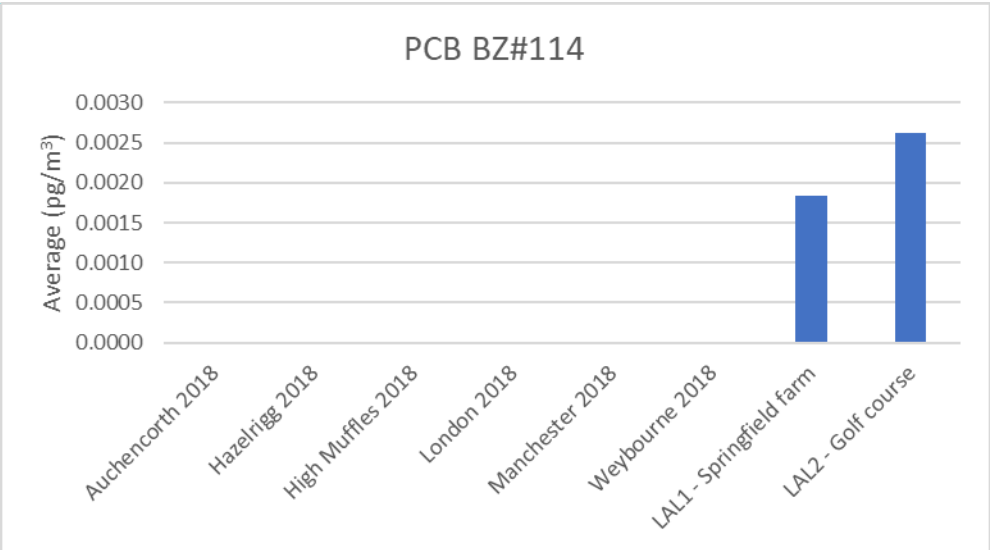


Figure 7: PCB BZ#114, 2018 annual averages and Launders Lane Annual average.

Note: Following investigation into the original 2018 data, the lowest limit of detection at the time was 0.02pg/m^3, as the values measured historically were below this level they were documented as zero. The limit of detection has since been reduced, with advances in technology, providing more accurate readings.

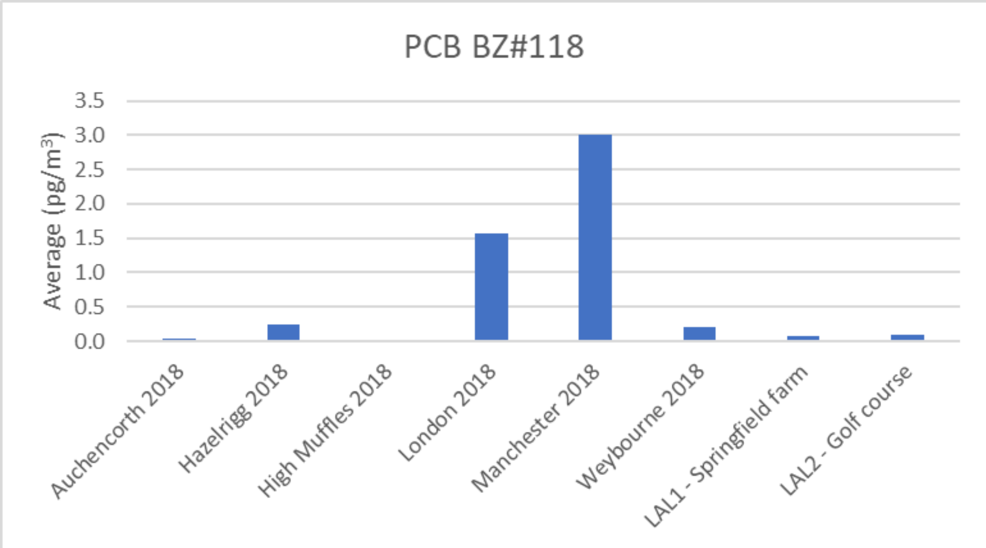


Figure 8: PCB BZ#118, 2018 annual averages and Launders Lane Annual average.

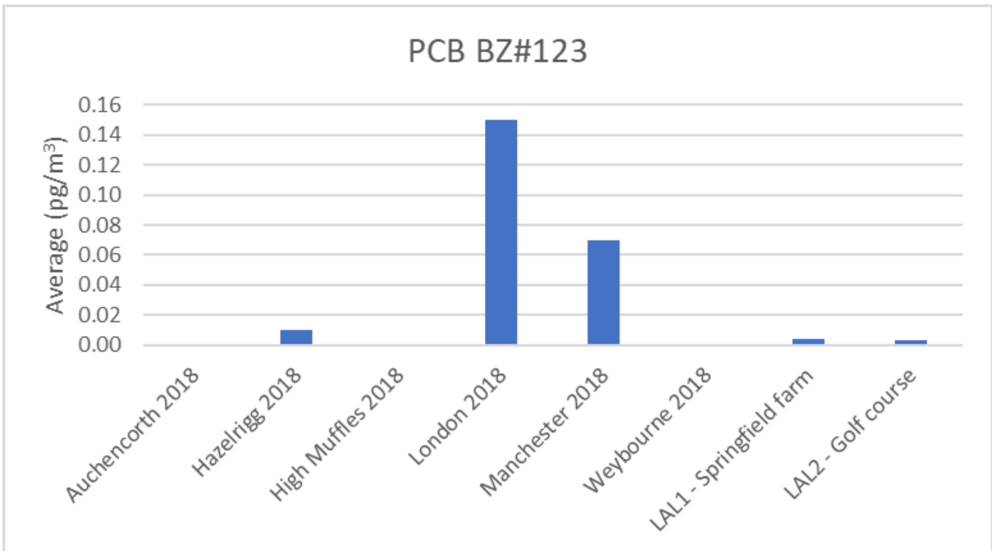


Figure 9: PCB BZ#123, 2018 annual averages and Launders Lane Annual average.

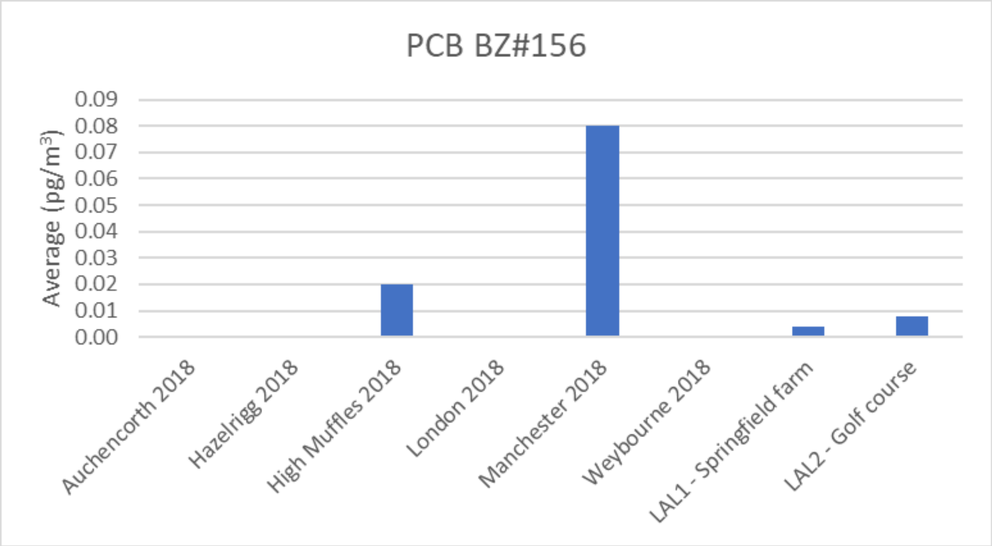


Figure 10: PCB BZ#156, 2018 annual averages and Launders Lane Annual average.

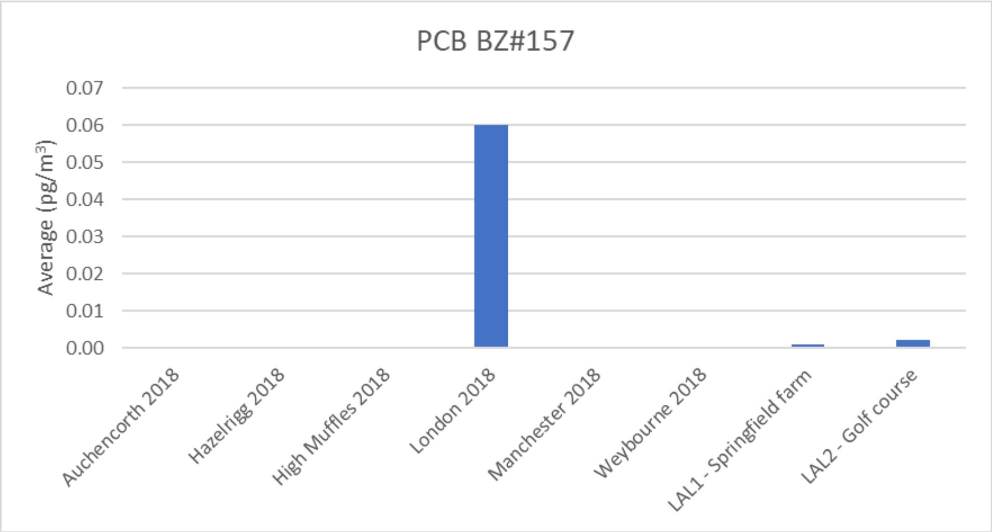


Figure 11: PCB BZ#157, 2018 annual averages and Launders Lane Annual average.

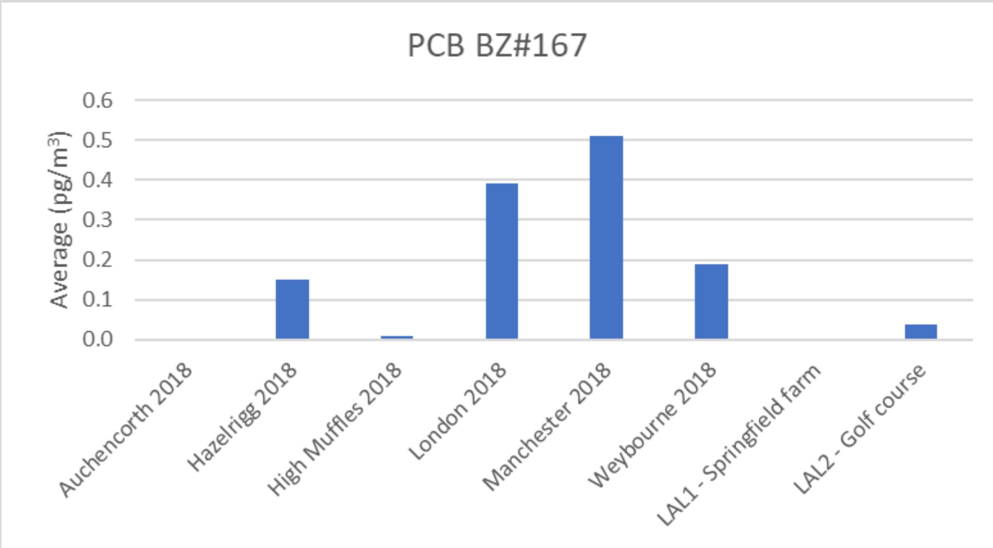


Figure 12: PCB BZ#167, 2018 annual averages and Launders Lane Annual average.

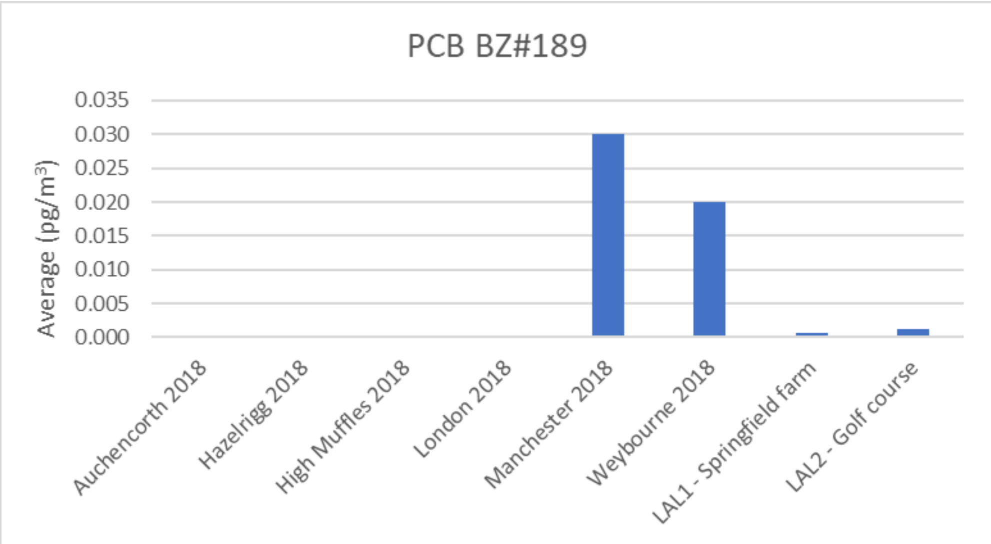


Figure 13: PCB BZ#189, 2018 annual averages and Launders Lane Annual average.

Further comparison and trend plots can be found in Appendix A.2 PCBs.

3.2 Discussion

It has been confirmed by the Environment Agency and others that there is no current routine monitoring of PCBs in the UK. For the reported measurements from Launders Lane an annual average has been calculated for October 2023 to September 2024. This average figure has been compared to an annual average for other UK sites (2018 data) and provides an indication of potential comparison between the two data sets. Due to the differences in time periods the conclusions should be treated as an indication and weighted as such.

- It can be seen from Figure 5 that all but one of the LAL1 and LAL2 results are below the 2018 TOMPS report London average.
- The high levels measured at LAL2 (golf course) in July/August 2024 do correlate with fires at the Arnolds Field site but are not seen at LAL1 (Spring Farm Park). The average

wind direction for this period is West / South-West, which aligns with the location of the Arnolds Field site and the LAL 2 monitoring station. The average wind direction combined with the low values measured at LAL1, is coherent with the potential source of the chemicals being the fires. This can be seen in Figure 14 below.

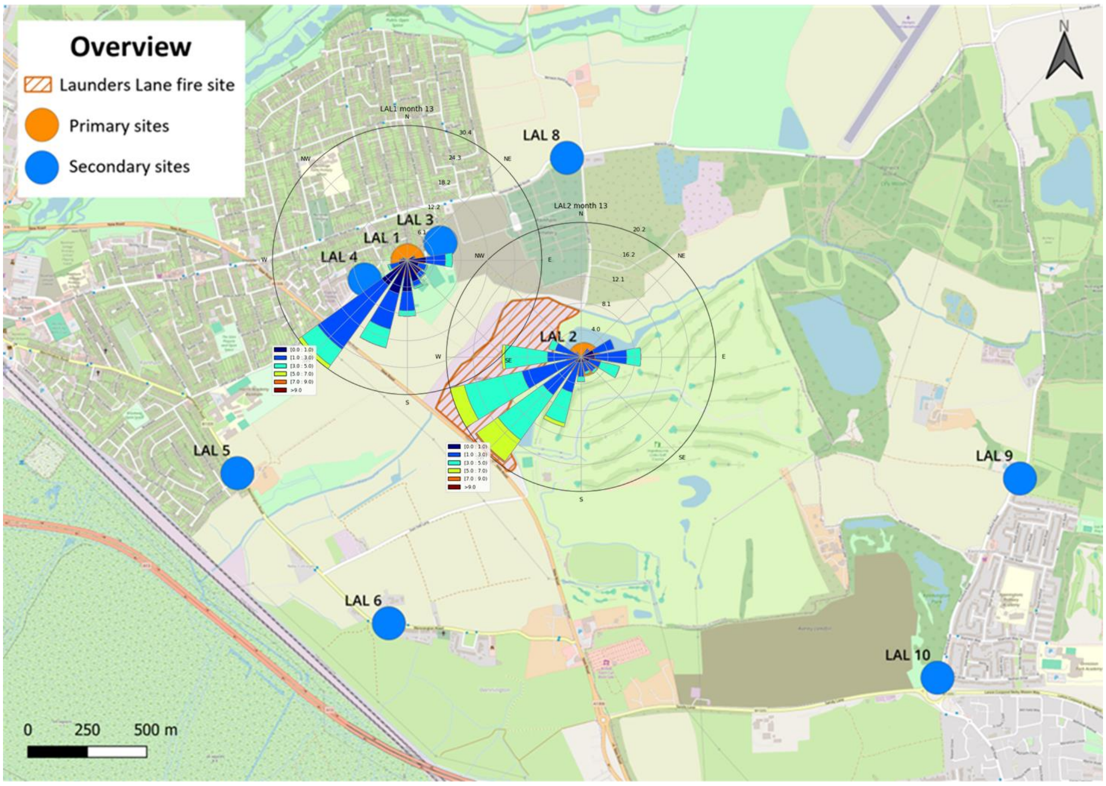


Figure 14 July/August 2024 wind rose over location map, depicting the direction and speed of wind for the monitoring period.

- Looking at the data for individual PCBs, Figure 7 PCB BZ#114 indicates higher levels at LAL1 and LAL2 when compared to the historical data. Following investigation into the original 2018 data, the lowest limit of detection at the time was 0.02pg/m^3, as the values measured historically were below this level they were documented as zero. The limit of detection has since been reduced, with advances in technology providing more accurate readings. If the same (2018) analytical techniques had been used on our current samples they would also have provided a zero reading.
- The data recorded for the remaining seven PCBs (Figure 6 and Figure 8 to Figure 13) is consistently lower than the comparison sites in the 2018 TOMPS report.
- Reviewing the fire information in Table 1 and Table 3 together with Figure 5 suggests that the September 2023 and July/August 2024 PCB levels are raised which coincides with recorded fires at Arnolds Field. With these occurrences incorporated into the annual average figure the overall reading remains well below the figures seen in London during 2018.

4 Monitoring Results - Metals

Background – Lead (Pb)

Reasons for monitoring Lead: Lead (Pb) can affect almost every organ and system in the body, with children and pregnant women being the most susceptible to the effects of lead. It is naturally occurring in the environment, in air, soil and water, but can also occur as a result of current and historic human activities including the use of fossil fuels and heavy industry. Leaded petrol (banned from sale in January 2000) continues to contribute to ambient air and soil levels of lead, especially in urban environments.

Potential sources: Lead can enter the environment from historic use in paint, ceramics, pipes and plumbing materials, solders, petrol, batteries, ammunition and cosmetics.

Existing limits available: In the UK[28], the annual mean objective for lead in the air is 0.25µg/m^3.

Background – Mercury (Hg)

Reasons for monitoring Mercury: All forms of Mercury (Hg), which can be organic, inorganic or elemental, can affect the nervous system and kidneys. The health effects from exposure to mercury depend on several factors including the amount and form of mercury, route and length of exposure, and age[29]. Mercury is a persistent contaminant that does not break down in the environment; it seldom appears as a silver liquid in the environment. In water, it can evaporate into the air. In soil, it can stick to soil and sediments (dirt deposits at the bottom of bodies of water). One type of organic mercury compound called methylmercury can build up in plants and fish.

Potential sources: Most people are exposed to organic mercury compounds (typically methylmercury) in food (such as fish, seafood, rice) or to elemental mercury from amalgam used in dental fillings. It is also used in a number of industries and products. It is primarily used in the manufacture of electronics, fluorescent-lighting, and production of chlorine-caustic soda. Other historical uses of mercury (batteries, thermometers and other scientific and medical devices, electronic switches and lighting applications, paints and pigments, fungicides and pesticides) have been eliminated or drastically reduced.

Existing limits available: The World Health Organization (WHO) have established a health-based air quality guideline for Europe for mercury of 1µg/m^3 as an annual average[30]. There are currently no UK objectives for airborne mercury, however the Environment Agency published updated Environmental Assessment Levels (EAL) for mercury and its inorganic compounds[31] in 2023 providing an EAL of 0.06µg/m^3 averaged over a 24-hour period. The

[28] https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf

[29] https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=113&toxid=24#bookmark05

[30] E71922.pdf (who.int)

[31] https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit#environmental-standards-for-air-emissions EAL for mercury in the 2nd phase consultation published in 2023.

mercury data is recorded as a monthly average in this project, but this EAL may be a useful comparison.

4.1 Results

The results for both lead and mercury have been plotted by month and site.

4.1.1 Lead

Figure 15 below shows the measured values of lead at each site, compared against the UK objective. A more detailed plot of lead levels can be found in Appendix A.3 Metals

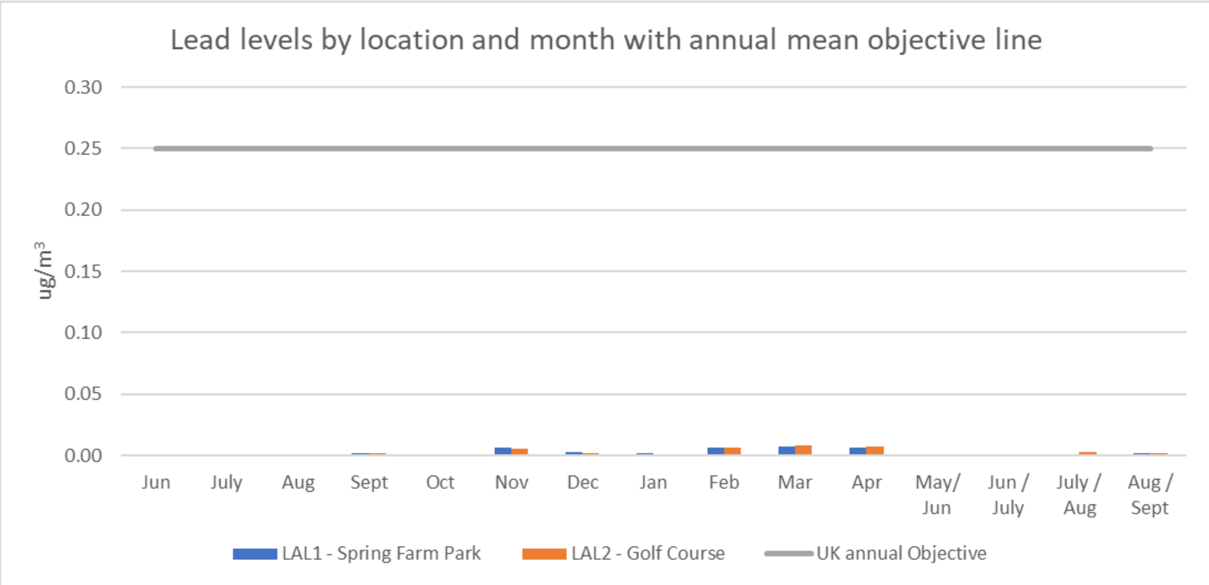


Figure 15: Measured values of Lead at both LAL primary sites with annual mean objective line. Monitoring at LAL2 commenced in September 2023

4.1.2 Mercury

There are currently no UK objectives for airborne mercury, however there is a WHO[32] air quality guideline of 1µg/m^3 as an annual average established for Europe which is appropriate to compare the Launders Lane data against. The graph below (Figure 16) shows the measured levels at the two Launders Lane sites to allow for comparison and the potential identification of trends.

[32] E71922.pdf (who.int)

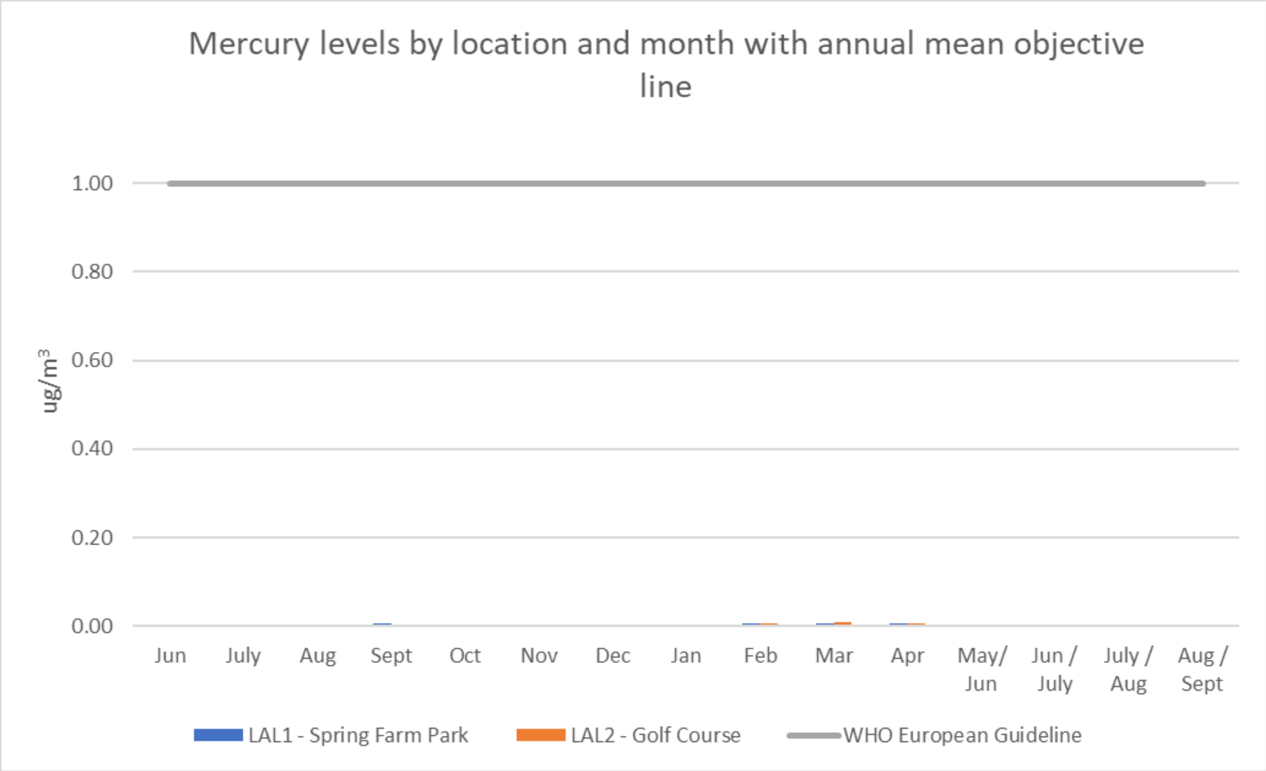


Figure 16: Measured values of Mercury at both LAL primary sites. Monitoring at LAL2 commenced in September 2023. (For context, the WHO European guideline annual average for Mercury is 1ug/m^3)

4.2 Discussion

With 12 months of recorded data, we can make direct comparisons to the annual mean objectives.

- **Lead -** Figure 15 compares the LAL data against the annual mean objective and shows that there are no exceedances of the UK annual mean objective of 0.25µg/m^3.
- The February, March and April readings are slightly elevated due to a laboratory analysis variation, in these months the minimum limit of detection increased slightly leading to the higher reported readings.
- **Mercury -** Figure 16 shows the LAL data shows no exceedances of the WHO European guideline annual average of 1ug/m^3.

  Figure 16 also shows that the LAL data is lower than the Environmental Assessment Level (EAL) of 0.06µg/m^3 for mercury and its inorganic compounds.

  It is likely that some days provided higher readings than others. The data collected is an accumulative reading for the total period i.e. one month. If at any time in that month a single reading was to exceed the EAL threshold, the monthly value would be in excess 0.06µg/m^3

  As an indication, the average 24-hour reading can be calculated by dividing the monthly total by the number of days covered by the sample.

  For example, looking at July 2023 data with a monthly level of approximately 0.002ug/m^3 and assuming 30 days in a month, the value, averaged over a 24-hour period would be $0.002 \div 30 = 0.0006$ ug/m^3 which is a 100th of the EAL.

5 Monitoring Results - VOCs

Background

Reasons for monitoring these compounds – Non-Methane Volatile Organic Compounds (NMVOCs) are often referred to simply as VOCs and are emitted as gases from certain solids or liquids; they include a variety of chemicals, some of which may have short- and long-term adverse health effects. These[33] may include eye, nose and throat irritation, headaches, loss of coordination, nausea, damage to liver, kidney, central nervous system, and some have been found to cause cancer in animals and are suspected or known to cause cancer in humans. As with other pollutants, the extent and nature of the health effect will depend on many factors including level of exposure and length of time exposed. The International Agency for Research on Cancer (IARC) has determined that the specific VOCs benzene and 1,3-butadiene are carcinogenic to humans. Details of the assessment of the carcinogenicity of these VOCs carried out by IARC can be found online.[34]

Potential sources both process and material - VOCs are emitted by a wide array of products including the following:

- paints, paint strippers and other solvents
- wood preservatives
- aerosol sprays
- cleansers and disinfectants
- moth repellents (historically naphthalene was used in moth repellents, but this is no longer the case as the EEA banned the practice in 2008) and air fresheners
- stored fuels and automotive products
- hobby supplies
- dry-cleaned clothing
- pesticide
- building materials and furnishings
- office equipment such as copiers and printers, correction fluids and carbonless copy paper
- graphics and craft materials including glues and adhesives, permanent markers and photographic solutions.

Sources of VOCs in the UK have changed considerably since 1990 as illustrated in Appendix A.4.1 NAEI figure showing change in VOC emissions since 1990[35].

Existing limits available - As of 2022, the European Union Ambient Air Quality Directive (2008/50/EC) sets limit values for certain VOCs in outdoor air. The VOCs in Table 5 are among those regulated.

[33] https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality

[34] https://uk-air.defra.gov.uk/networks/network-info?view=hc

[35] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281151_UK_Hydrocarbons_Network_Annual_Report_2022.html#fig-emission_plot

For Benzene[36], there is a UK running annual mean objective of 16.25 µg/m^3 and an England and Wales annual average objective of 5 µg/m^3. The England and Wales objective is the same as the European objective.

Currently, there are no UK mean objectives for toluene, ethylbenzene and xylene.

There are also recommended guidelines for VOCs indoors and details of these can be found in Appendix A.4.1 Recommended guidelines for VOCs indoors.

Table 5: 2008/50/EC VOC annual mean objectives

Compound	Annual mean Objective (µg/m^3)
Benzene (C6H6)	5 – UK / EU
Toluene (C7H8)	10 - EU
Ethylbenzene (C8H10)	5 - EU
Xylenes (C8H10)	10 - EU

5.1 Results

As listed above in Table 5 there are annual mean objectives for 4 of these compounds which act as indicators. A comparison based on the annual average (October 2023 - September 2024) for each of these 4 compounds at the 9 sites has shown that no objectives have been exceeded.

There are no results for November 2023 due to technical issues. Due to a storage issue, the measurement tubes were subjected to high temperature prior to deployment. This has the potential to affect detection levels and accuracy of readings. The decision was made not to utilise the tubes. The lead time for replacement prevented timely replacement so the November monitoring of VOCs could not be undertaken.

Figure 17 to Figure 20 below provide an indication of the current trends.

36 Air_Quality_Objectives_Update_20230403.pdf (defra.gov.uk)

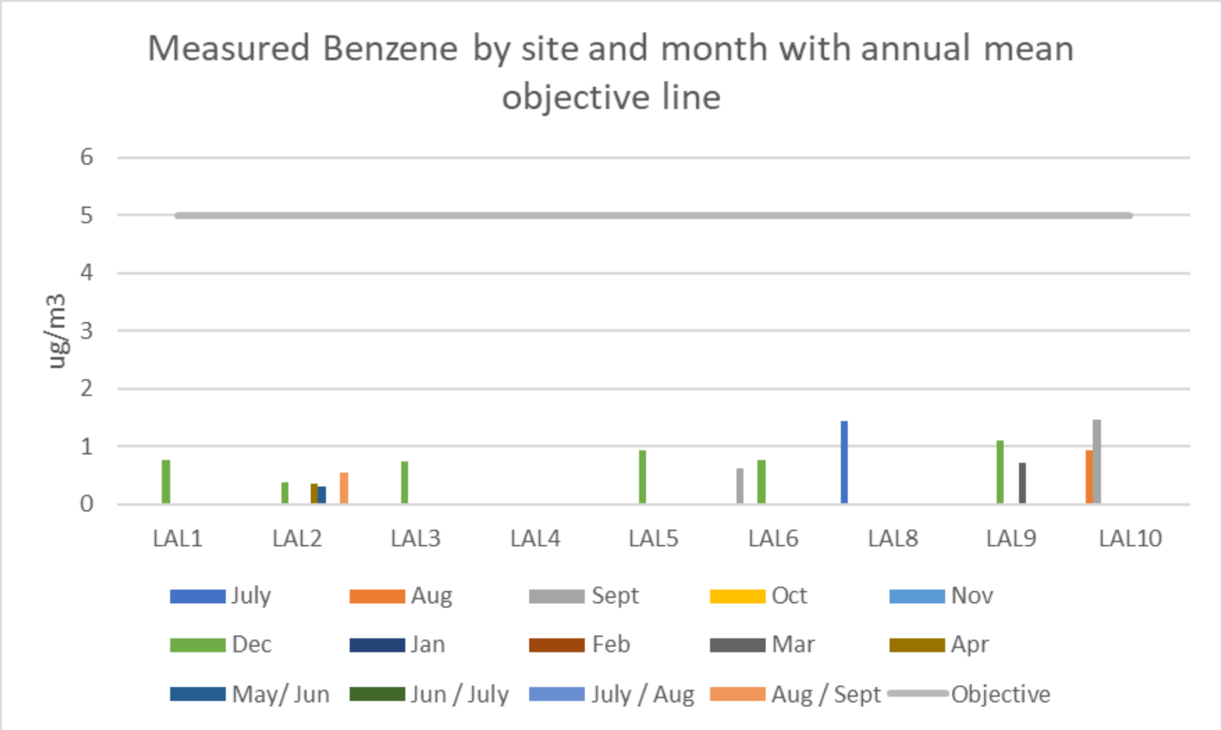


Figure 17: Measured levels of Benzene compared to National annual objective

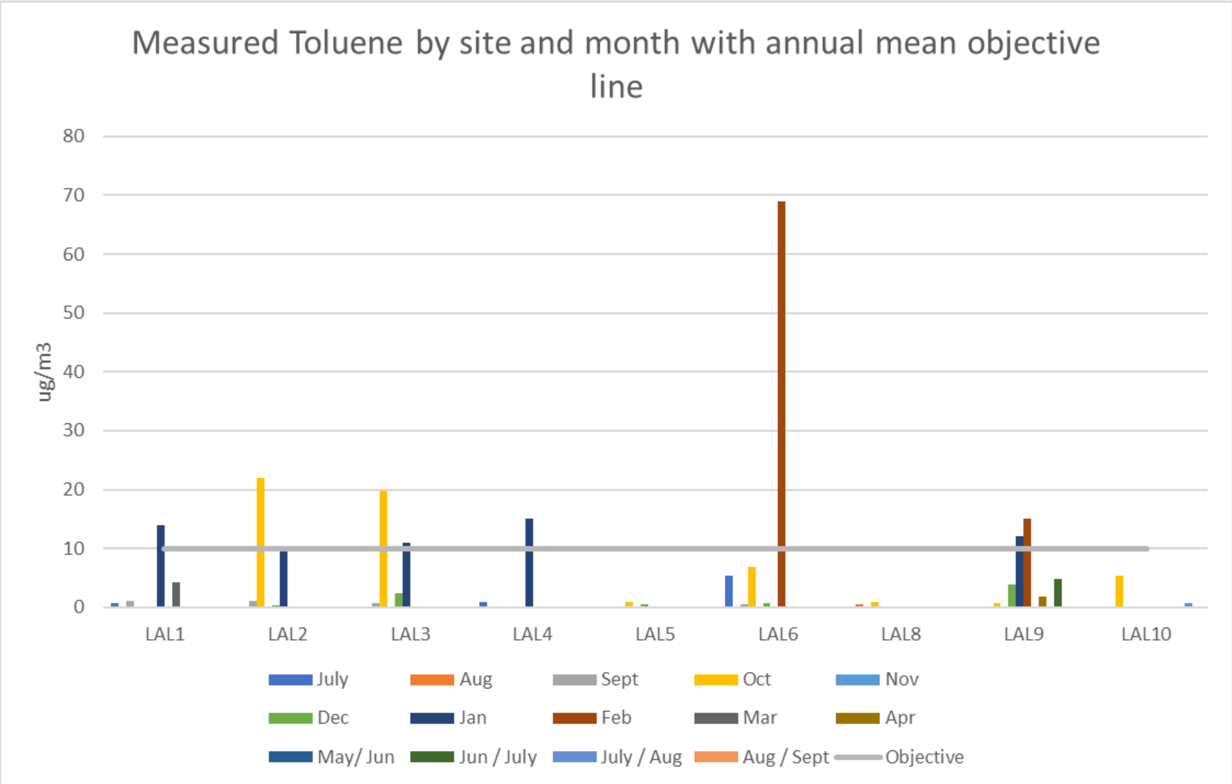


Figure 18: Measured levels of Toluene compared to National annual objective

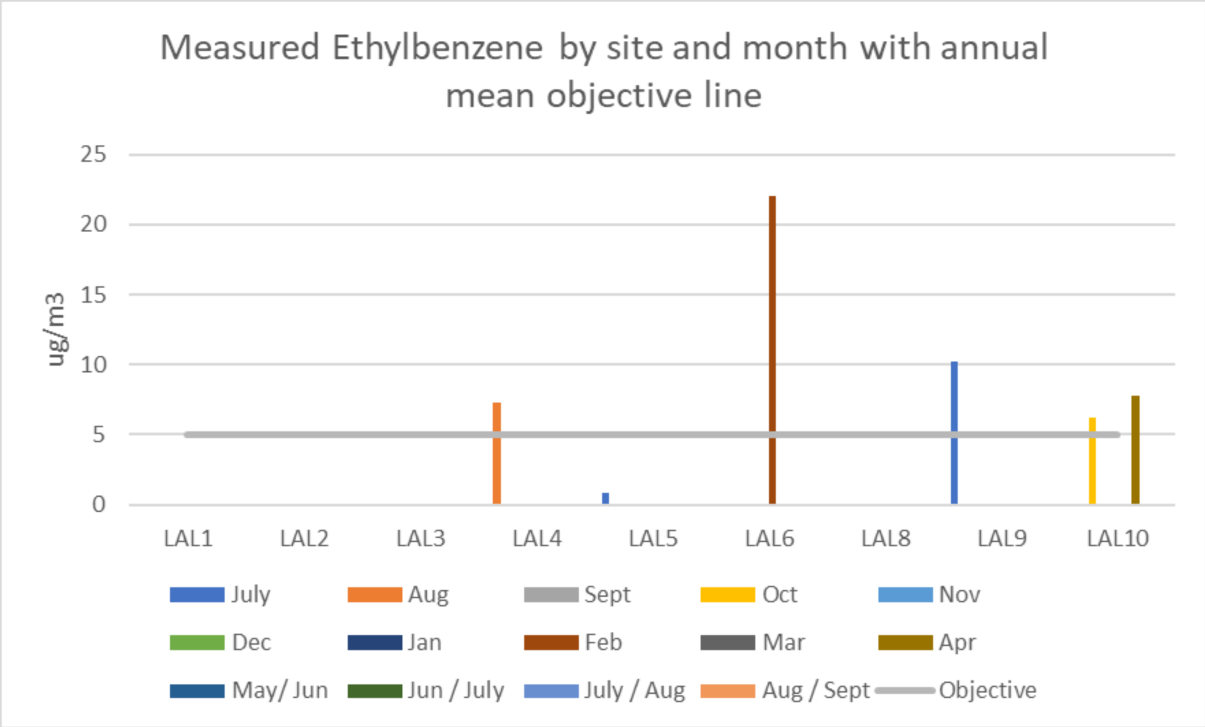


Figure 19: Measured levels of Ethylbenzene compared to National annual objective.

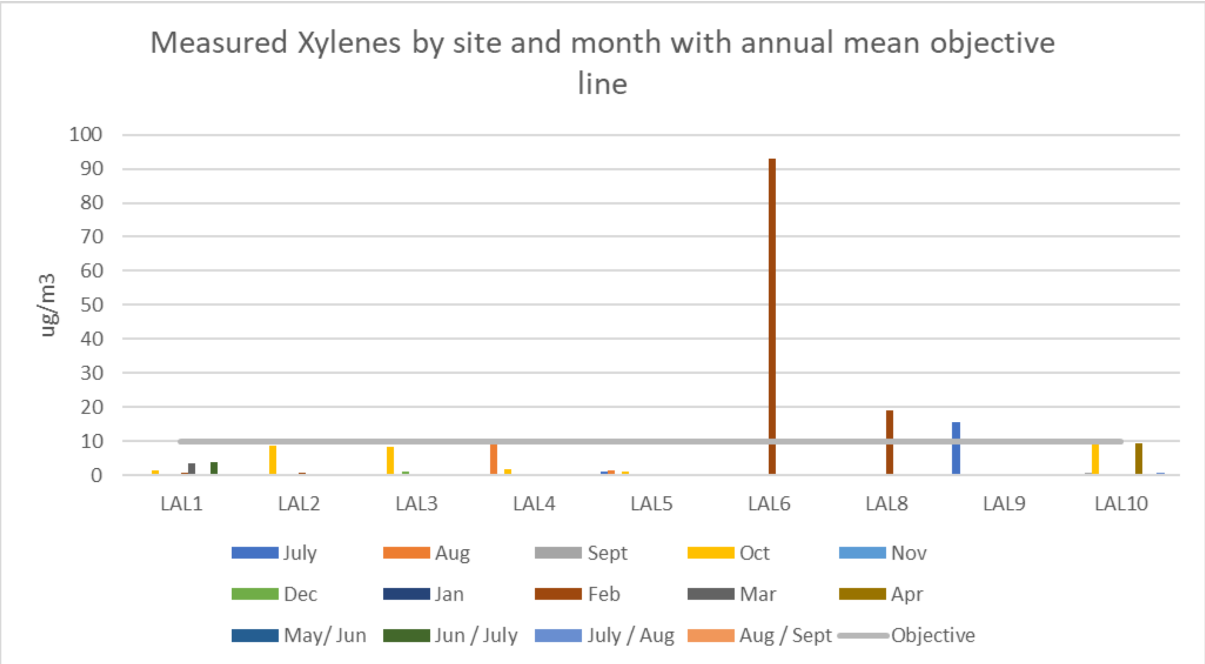


Figure 20: Measured levels of Xylenes compared to National annual objective.

From the data shown above, annual averages were derived, and in Table 6 the results are shown for each of the four compounds at each monitoring location along with the objective value.

Table 6: Comparison of measured VOC figures compared to Objective annual average values.

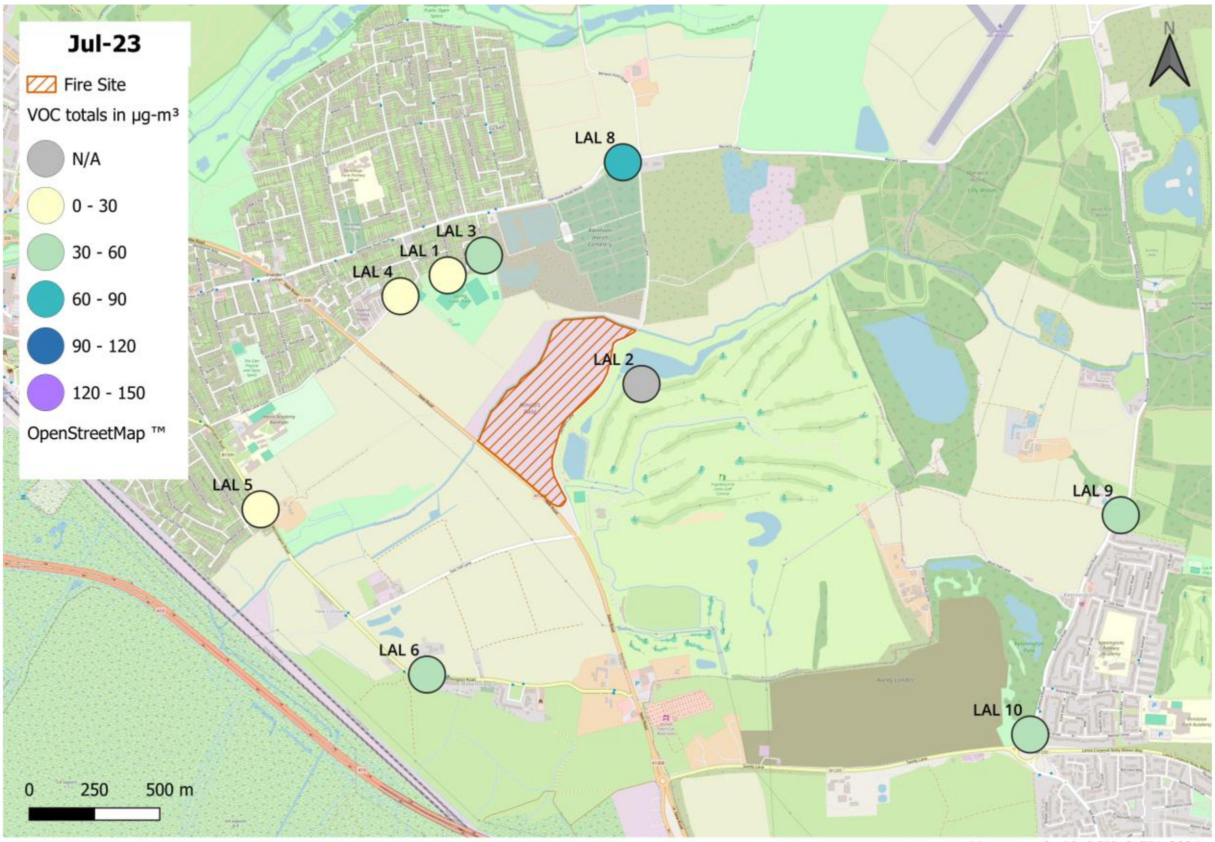
Compound	UK /EU Objective	Location								
	ug/m^3	LAL1	LAL2	LAL3	LAL4	LAL5	LAL6	LAL8	LAL9	LAL10
Benzene	5.00	0.06	0.13	0.06	0.00	0.08	0.06	0.00	0.15	0.00
Toluene	10.00	1.52	2.69	2.76	1.25	0.13	6.38	0.07	3.20	0.50
Ethylbenzene	5.00	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00	1.16
Xylenes	10.00	0.80	0.77	0.81	0.15	0.13	7.75	1.60	0.00	1.70

For each of the nine locations being monitored for VOCs, the top ten compounds have been analysed and reported. This method allows for the identification of a much wider range of potentially harmful compounds that might not be seen in a smaller quantity or fixed compound analysis.

Multiple compounds have been measured at all the locations, many of which do not have UK objectives. During the project, 97 different compounds have been measured. The raw VOC data is available in Appendix B.

To provide a visual representation of the overall levels of VOCs and their locations, monthly maps have been produced with a sliding scale which relates to the total value of the measured mass of all compounds at each single location. The aim is to identify any hotspots or patterns in the data that might indicate where pollution from the fire is being blown to, or areas that might provide a background reference.

For clarity, N/A on the key represents locations / months where no data is available. This can be due to loss or damage to a TENEX tube.



Map created with QGIS @ TRL 2024

Figure 21: Total measured VOC levels by location for July 2023

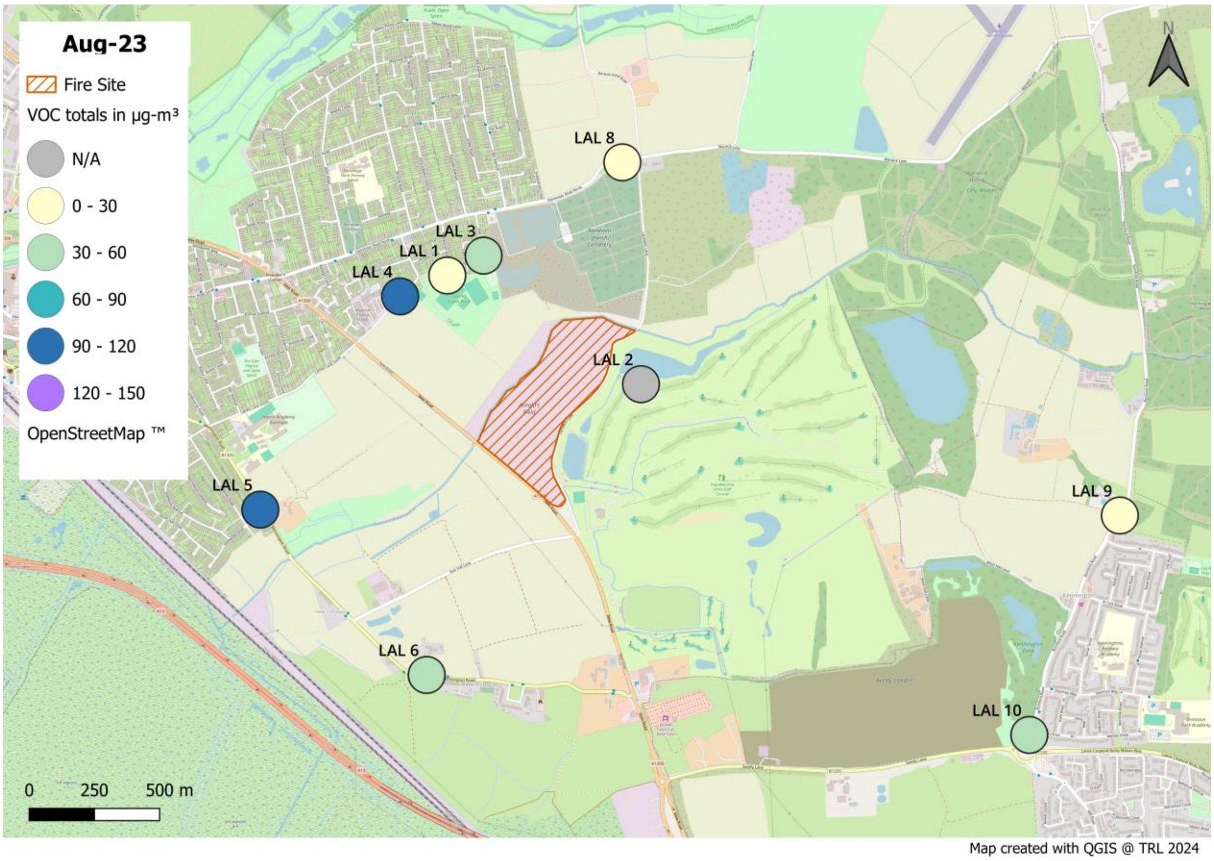


Figure 22: Total measured VOC levels by location for August 2023

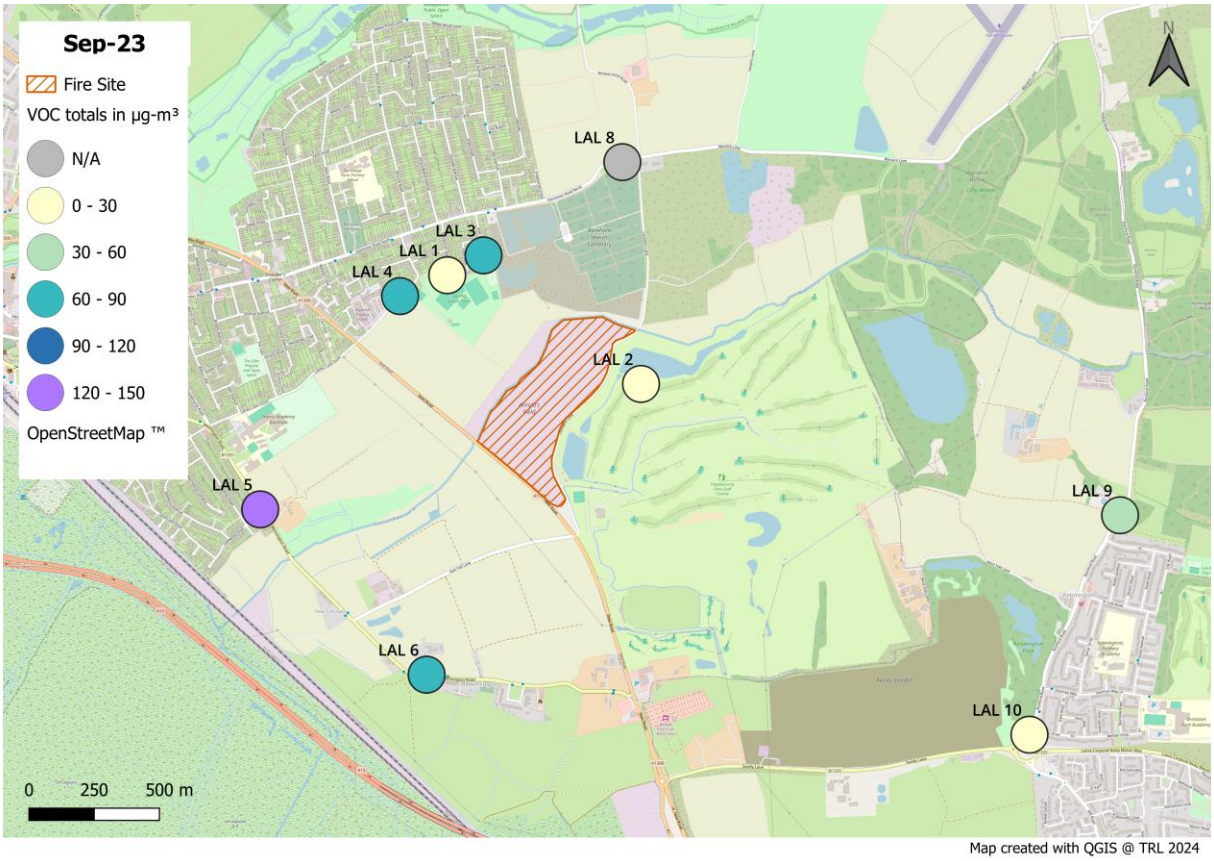


Figure 23: Total measured VOC levels by location for September 2023

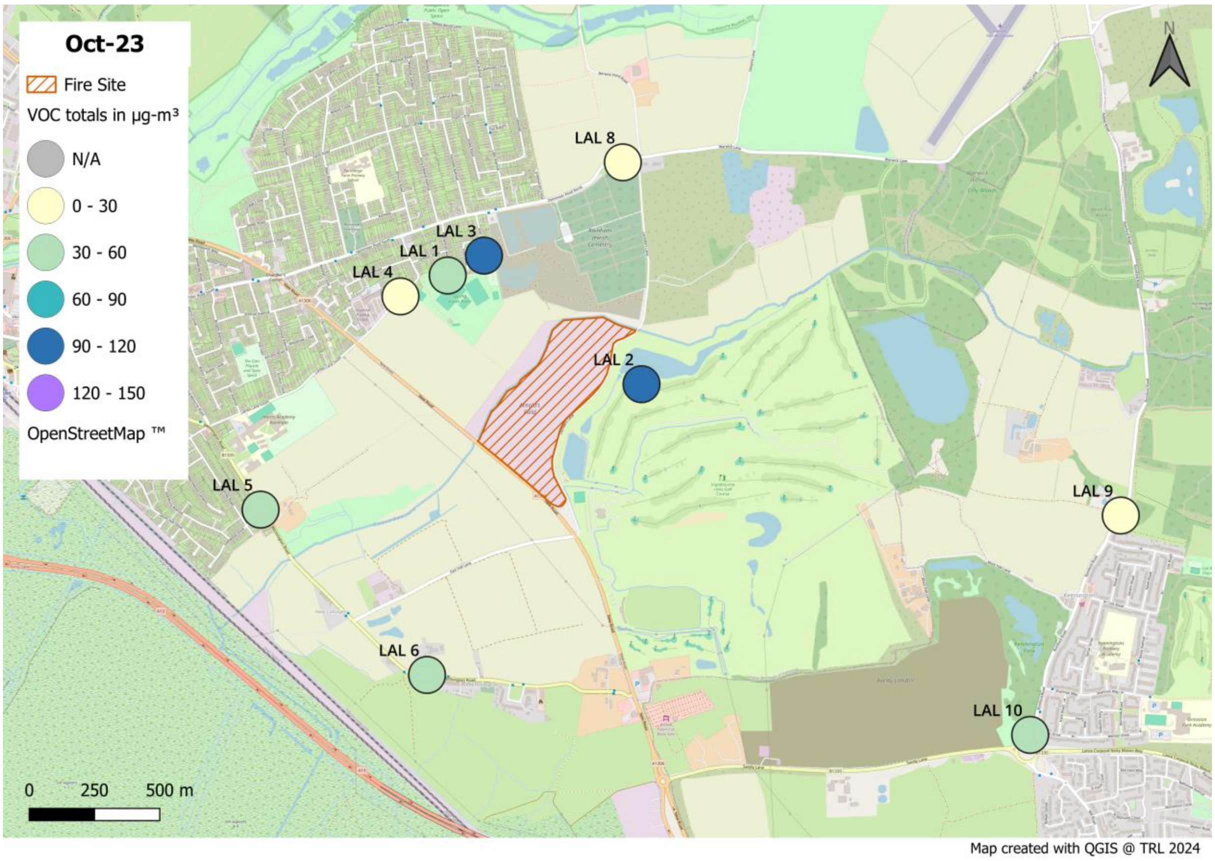


Figure 24: Total measured VOC levels by location for October 2023

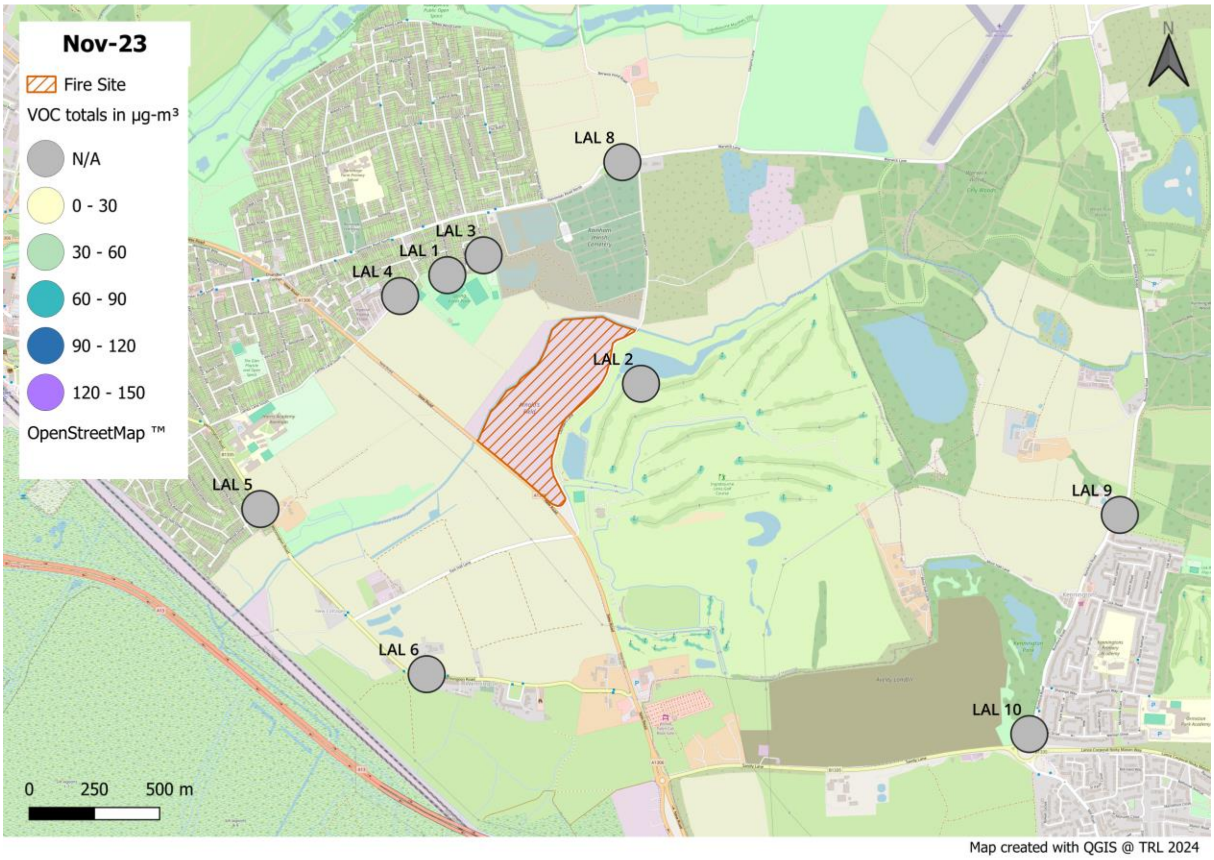


Figure 25: Due to a technical issue, no measurements were taken in November 2023

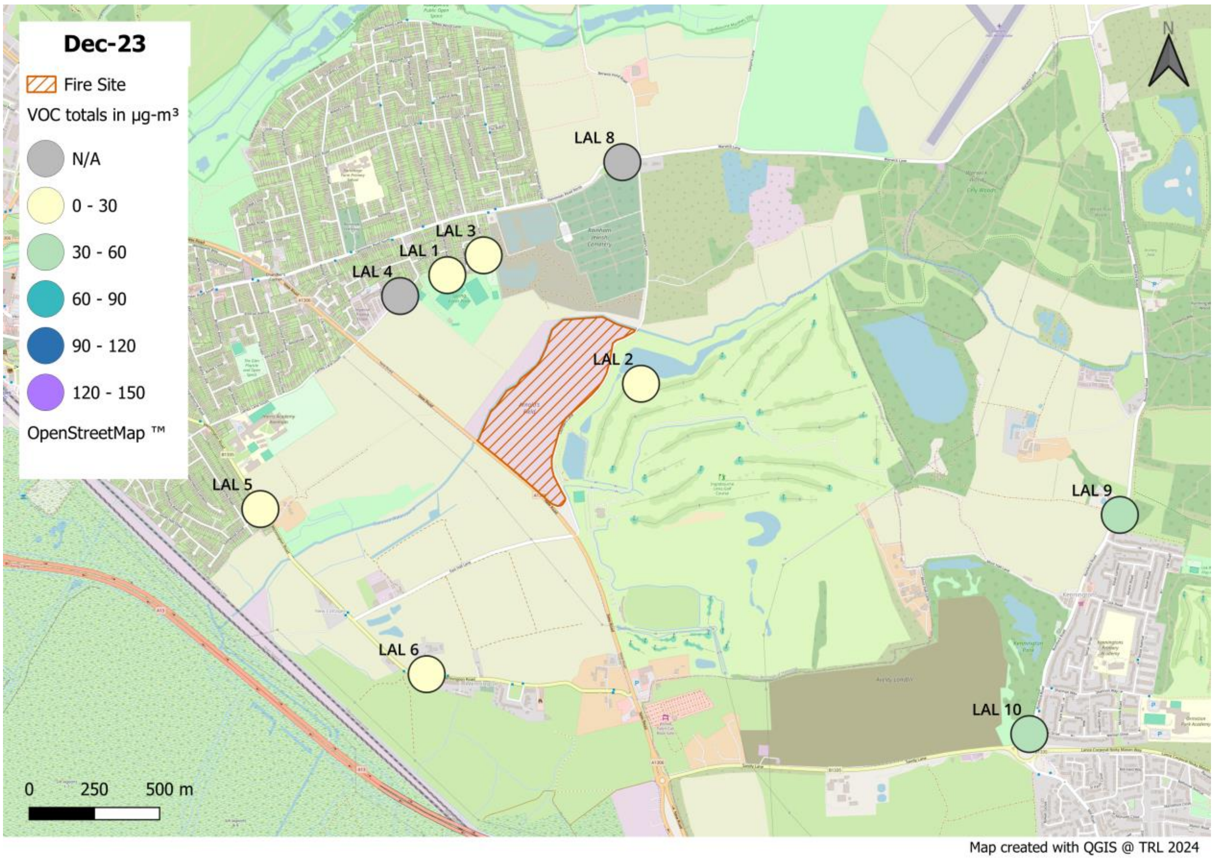


Figure 26: Total measured VOC levels by location for December 2023

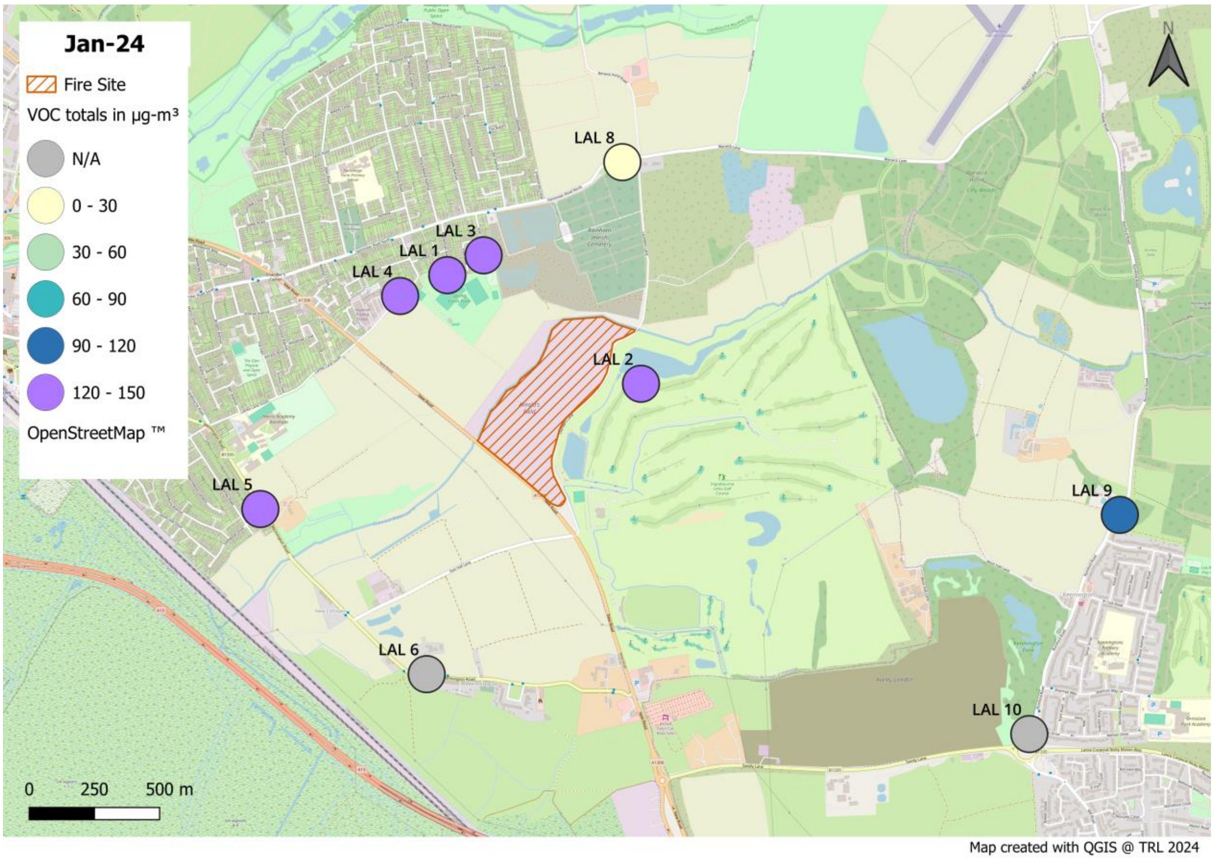


Figure 27: Total measured VOC levels by location for January 2024

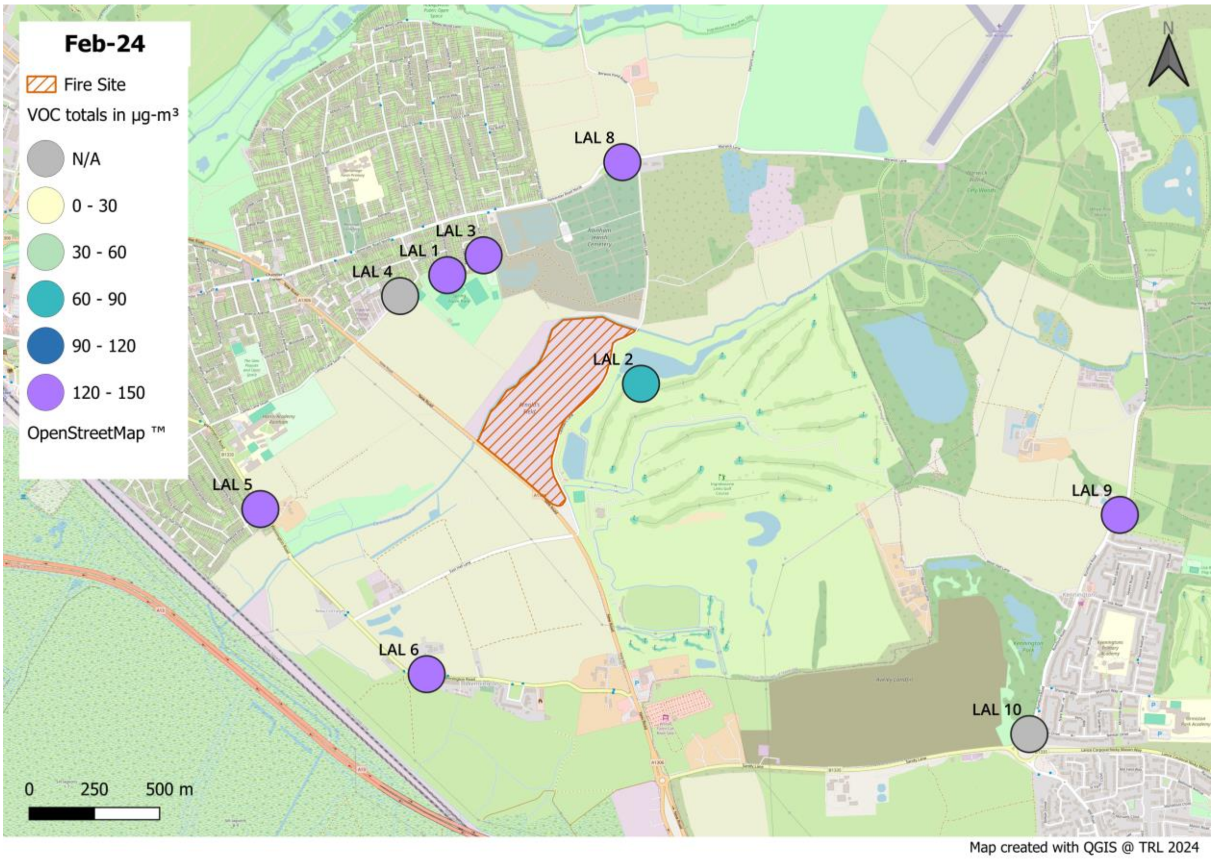


Figure 28: Total measured VOC levels by location for February 2024

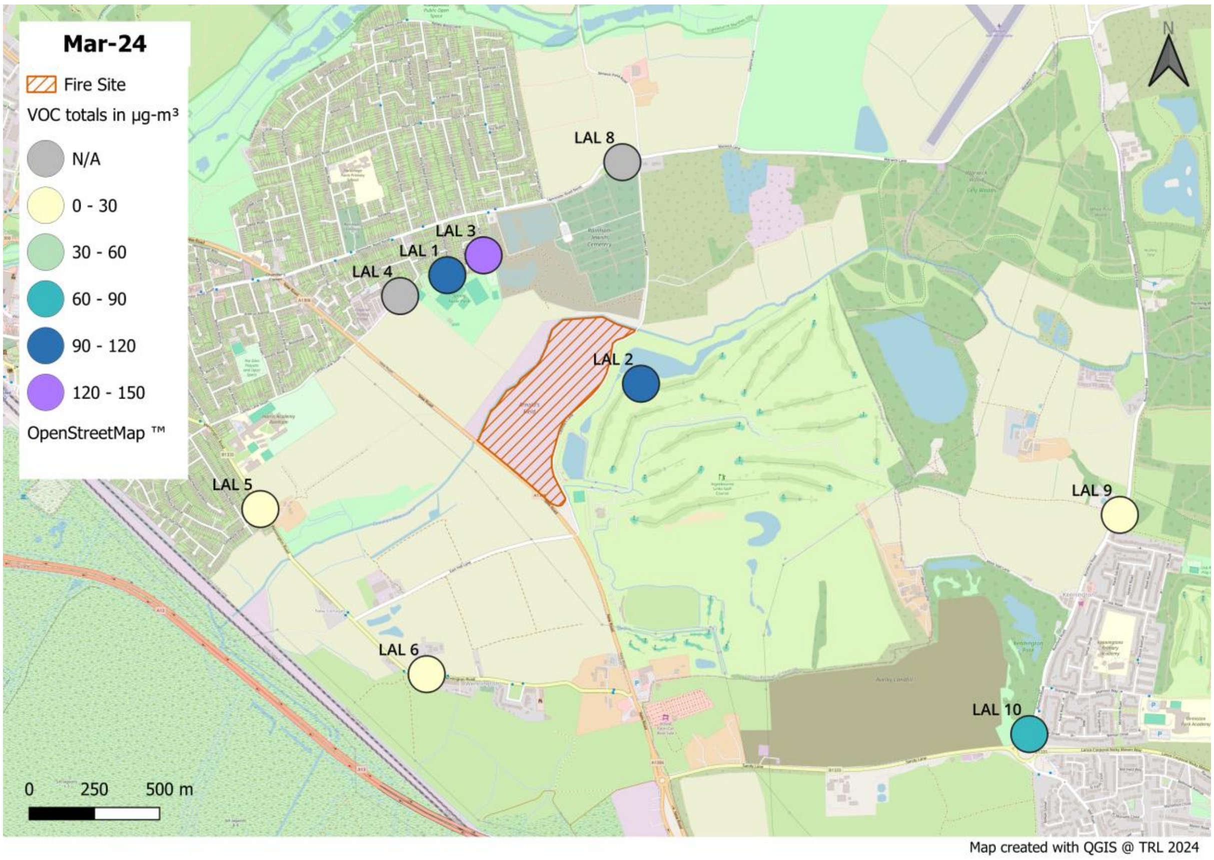


Figure 29: Total measured VOC levels by location for March 2024

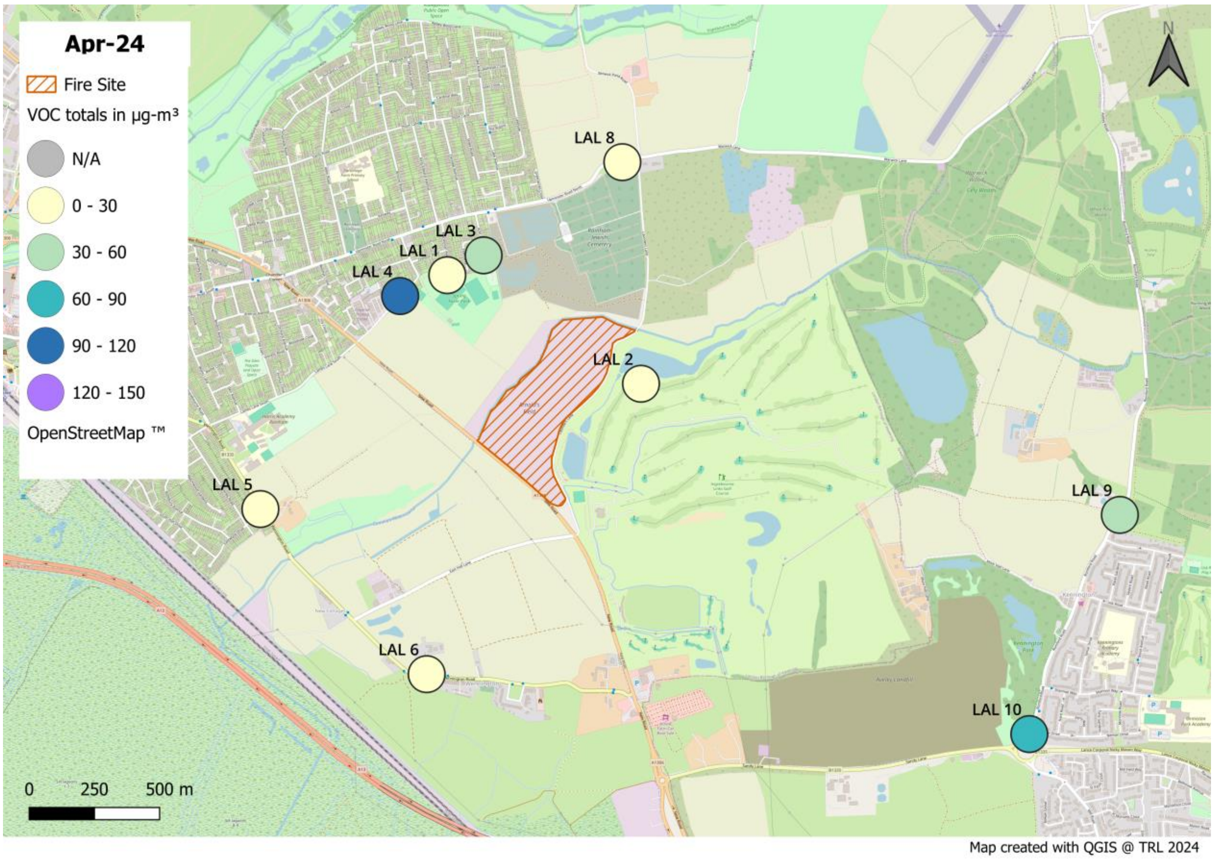


Figure 30: Total measured VOC levels by location for April 2024

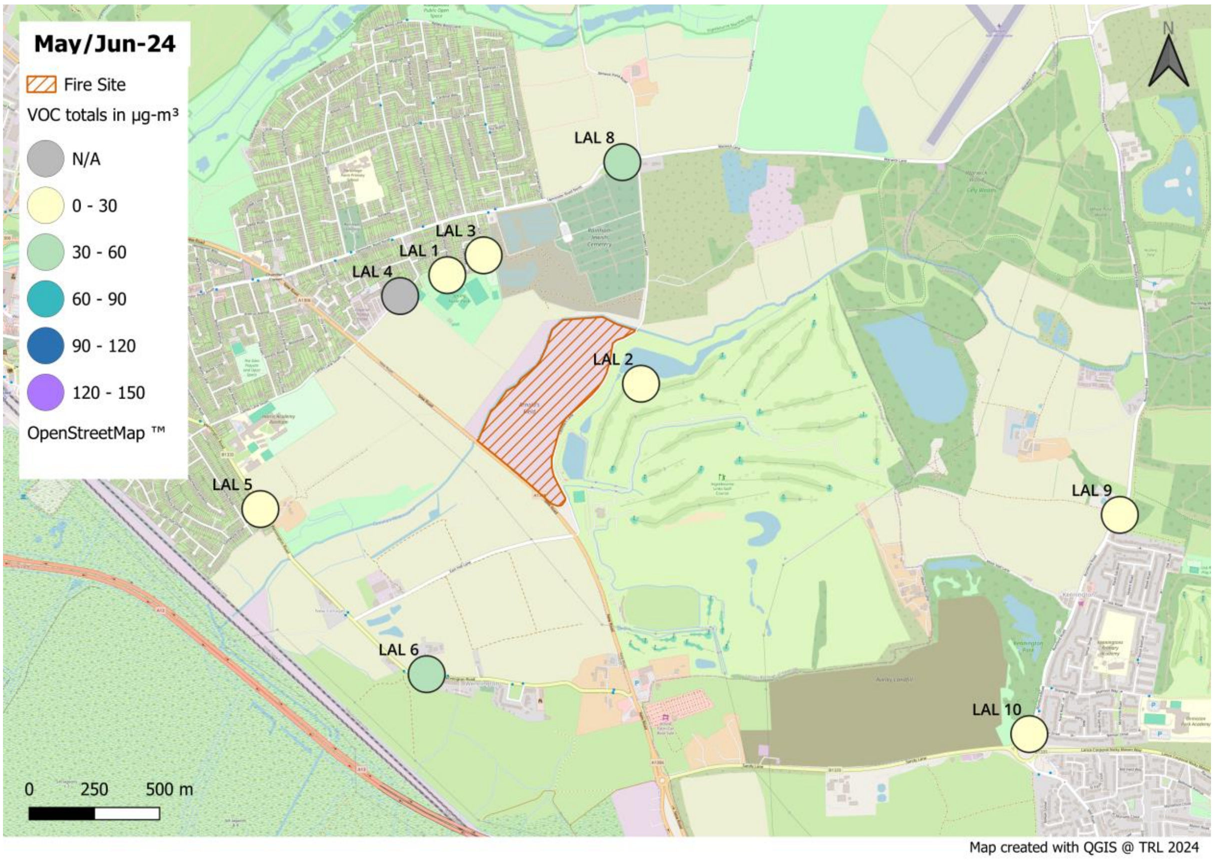


Figure 31: Total measured VOC levels by location for May/June 2024

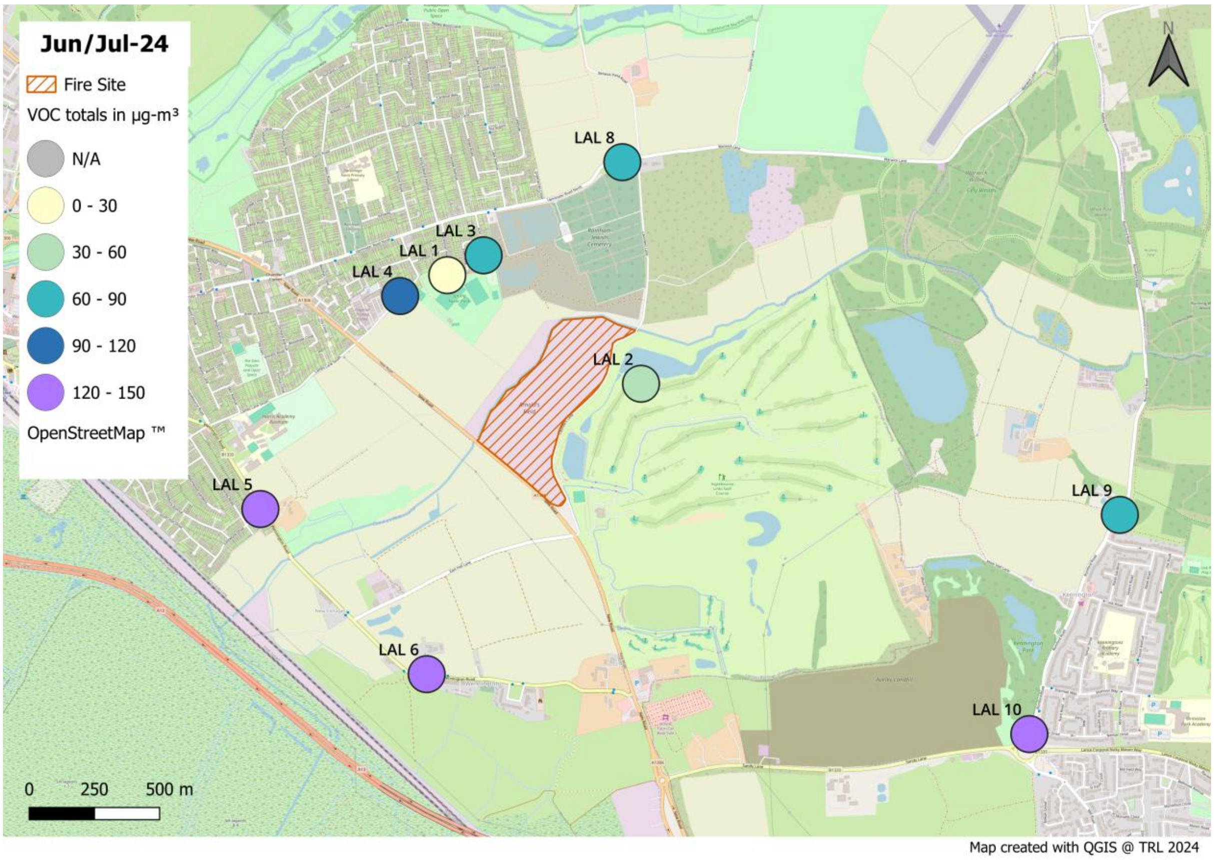


Figure 32: Total measured VOC levels by location for June/July 2024

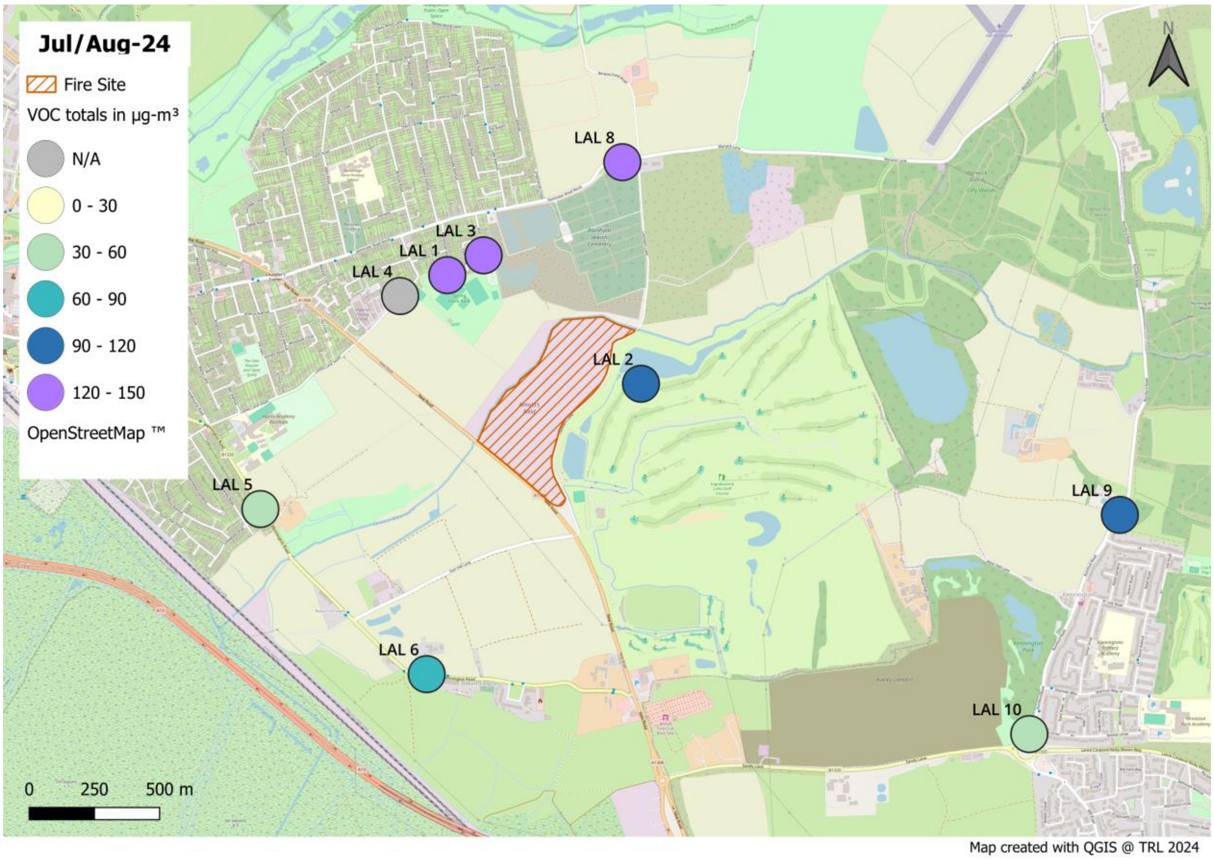


Figure 33: Total measured VOC levels by location for July/August 2024

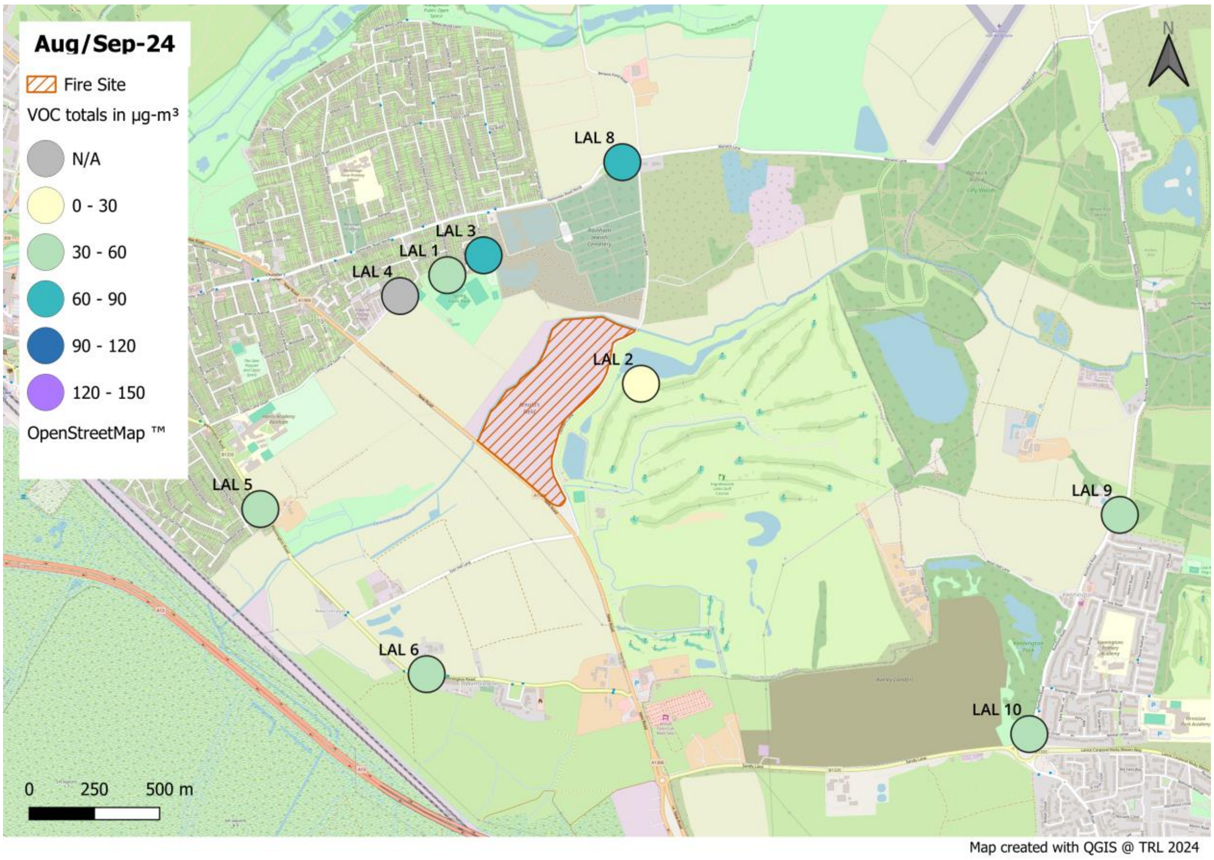


Figure 34: Total measured VOC levels by location for August/September 2024

5.2 Discussion

Compliance with the annual mean objective is demonstrated in Figures 16-19 and Table 6, with no exceedances of the annual mean objectives being measured. These objectives are for the protection of human health, meaning that by not exceeding them the risk of adverse health effects is low.

For the VOCs with an annual mean health-based objective:

- Benzene levels are below annual mean objective.
- Toluene - There are eight measured monthly values above the annual average objective at LAL1, 2, 6 and 9 across the monitoring period. These do not coincide with any recorded fires attended by LFB. While individually these measurements are above the annual objective figure, once compared on an annual average basis they are well below the objective levels.
- Ethylbenzene - There are five measured monthly values above annual average objective; LAL9 in July 2023, LAL4 in August 2023, LAL 6 in February 2024 and LAL10 in October 2023 and April 2024. While some of these do coincide with fires attended by LFB, others do not. The annual average figure does not exceed the UK objective.
- Xylenes - There are three measured monthly values above annual average objective; LAL9 in July 2023 and LAL8 and LAL6 in February 2024. While the July 2023 readings do coincide with a fire attended by LFB, the annual figure does not exceed the UK objective.
- For all compounds, it is worth noting that there were periods of smouldering/burning at the site when the LFB were not in attendance and would not have been reported. Some of the higher values were measured in the winter when fires are less likely to occur at the site, and so these readings may be associated with other localised burning. All these factors need to be considered when assessing any plausible links between fires at the site and compounds being measured.

6 Monitoring results - Wind Speed and Direction

Background

Reasons for monitoring – To understand a potential source of pollution it is essential to monitor wind direction and speed at the monitoring locations. For this project, wind speed and direction measurements were taken at both primary sites LAL1 and 2, at a height of approximately 2 meters. This height was selected as it will provide a more representative set of values for human exposure.

There are two reasons for measuring wind speed and direction: 1) To determine in which direction any pollution from fires is likely to be dispersed and in turn who it may affect, and 2) It allows for analysis of the results with respect to up and downwind, i.e. where the wind is blowing predominantly from one direction, the measurement upwind of the Launders Lane site can be considered as background, while the measurements taken from downwind of the site will be the background levels plus any addition pollution from a fire. This approach does have limitations and can be affected by the placement of the measurement equipment and weather conditions, however through experience, careful planning and interpretation of findings, can provide robust and useful data.

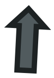
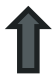
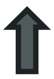
6.1 Results

The two tables below represent the two primary locations, the wind speed and direction data from each site has been processed and interpreted. Further information can be found in Appendix A.5 Wind roses.

Two wind directions are provided, the first is the average direction for the month in degrees and is derived from where the wind is blowing from (i.e. a Southerly wind would be blowing from Dartford). The second column provides an easy reference arrow, which when looking at a map can be overlaid to show how the wind would travel from the Launders Lane site.

It is also important to consider the period when the wind speed is low, which may lead to pollution from a single point source, such as fire, lingering in the area and not being dispersed.

Table 7: Wind speed and direction monitoring results for Spring Farm Park

LAL1 - Spring Farm Park primary site.	Average measured wind direction, based on where the wind is blowing from.	Average wind direction across the monitoring site.	Percentage of time where measured wind speed below 1 m/s *	Average wind speed for the period	Wind speed based on the Beaufort scale
June - 23	134° – South/East		17%	1.4 m/s	Light air
July - 23	177° – South		4%	1.2 m/s	Light air
August - 23	196° – South South/ West		15%	0.6 m/s	Calm
September - 23	178° South		39%	1.2 m/s	Light air
October - 23	189° South		36%	1.3 m/s	Light Air
November – 23	209° South South/ West		49%	1 m/s	Light Air
December – 23	217° South/ West		19%	2.2 m/s	Light Breeze
January – 24	207° South South/ West		35%	1.6 m/s	Light Air
February – 24	185° South		34%	1.6 m/s	Light Air
March – 24	180° South		21%	2 m/s	Light Breeze

April – 24	205° South South/ West		27%	1.7 m/s	Light Air
May/June - 24	185° South		38%	1.1 m/s	Light Air
June/July - 24	183° South		47%	0.8 m/s	Light Air
July/August - 24	187° South		45%	1 m/s	Light Air
August/September - 24	185° South		47%	1 m/s	Light Air

*** Wind speeds below 1m/s can be considered as 'no wind', these periods would lead to a significant reduction in the dispersion of air borne pollution.**

Table 8: Wind speed and direction monitoring results for the Golf Course

LAL2 - Golf Course primary site.	Average measured wind direction, based on where the wind is blowing from.	Average wind direction across the monitoring site.	Percentage of time where measured wind speed below 1 m/s *	Average wind speed for the period	Wind speed based on the Beaufort scale
September - 23	176° South		20%	2.1 m/s	Light breeze
October - 23	195° South South/ West		15%	2.3 m/s	Light Breeze
November - 23	208° South South/ West		15%	2.2 m/s	Light breeze
December - 23	231° South/ West		9%	3 m/s	Gentle breeze
January - 24	206° South South/ West		9%	3.1 m/s	Gentle Breeze
February - 24	189° South South/ West		10%	2.7 m/s	Light Breeze

March - 24	193° South South/ West		7%	3 m/s	Gentle Breeze
April - 24	201° South South/ West		5%	3.3 m/s	Gentle Breeze
May/June - 24	184° South South/ West		13%	2.2 m/s	Light Breeze
June/July - 24	197° South South/ West		14%	2.1 m/s	Light Breeze
July/August - 24	202° South South/ West		11%	2.4 m/s	Light Breeze
August/September - 24	175° South		12%	2.3 m/s	Light Breeze

*** Wind speeds below 1m/s can be considered as 'no wind', these periods would lead to a significant reduction in the dispersion of air borne pollution.**

6.2 Discussion

The data collected and reported here summarises the average wind speed and direction recorded at sites LAL1 and LAL2, as well as the percentage (%) of time when the wind speed was less than 1m/s when there is "no wind". This percentage is of interest as it gives an indication of periods when pollutants are staying very local to the Launders Lane site due to very low wind speed and not being dispersed across the area.

This data set enables further investigation into exceedances, helping to identify patterns or relationships between the wind direction and the source of measured pollutants. As seen in Figure 14 (in the PCB section), wind speed and direction, along with LFB's logs of fires can provide a clear plausible link between higher measured levels of pollutants and a potential source.

As there were no exceedances of annual objectives or guidelines, no further analysis of the wind data has been undertaken.

7 Monitoring conclusions

This report has been prepared to summarise the air quality monitoring that has been undertaken by TRL at the Launders Lane site between August 2023 and September 2024.

The main objective of this monitoring task was to gain an understanding of how the fires influence emissions from the Launders Lane site. The monitoring carried out at site has been robust, with high levels of data capture, correct sample handling and data processing.

As of the end of September 2024, most measurements recorded at the TRL Launders Lane air quality monitoring locations are below any available national and WHO annual objectives.

For some pollutants, several short term (monthly) readings do exceed objectives, discussed above. To demonstrate an exceedance, these values would have to average above the objective line over a 12-month period. By extending the monitoring period to include two summers and providing a full set of data for more than 12 months, it is seen that no exceedances of objectives have occurred.

Some short term raised levels of pollutants do correlate to known fires at the Launders Lane site. The wind direction at the period also indicates that the fires are likely to be the source of the raised levels. As above these short periods do not exceed any national or WHO objectives once averaged out over a 12-month period.

From the monitoring carried out and summarised in this report, it is likely that the emissions of some pollutants do increase during fires at the Launders Lane site. However, the increased levels do not exceed any National or WHO objectives, and therefore the risk of adverse health effects is low.

Due to the findings outlined above we do not recommend the need for any further monitoring of these pollutants.

Appendix A. Additional supporting documentation.

This appendix provides additional information for: PAH Descriptions; PCBs; Metals; VOC; and Wind Roses. Raw data for the first four of these is provided in Appendix B.

A.1 PAH Descriptions

The full set of PAH results can be seen below. These graphs are used to identify anomalies and patterns in the measurements. The January 2024 reading presents as an outlier and does not align with any reported fires at the Arnolds Field site. Potential explanation could be due to New Year's Eve fireworks, localised (garden fires), or a wider national event.

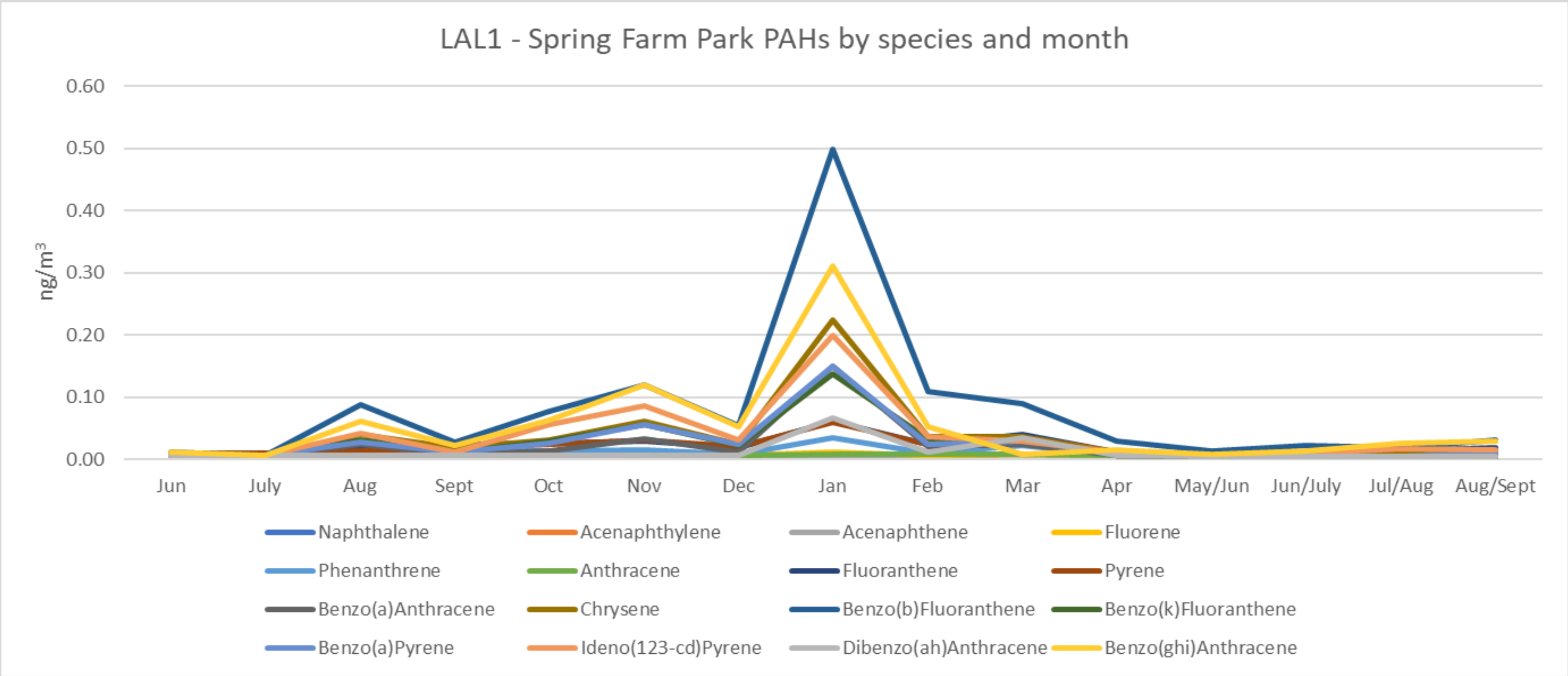


Figure 35: Measured PAH levels at LAL1 - Spring Farm Park

The Ingrebourne Golf course site (LAL2) came online 3 months later than the Spring Farm Park site (LAL1).

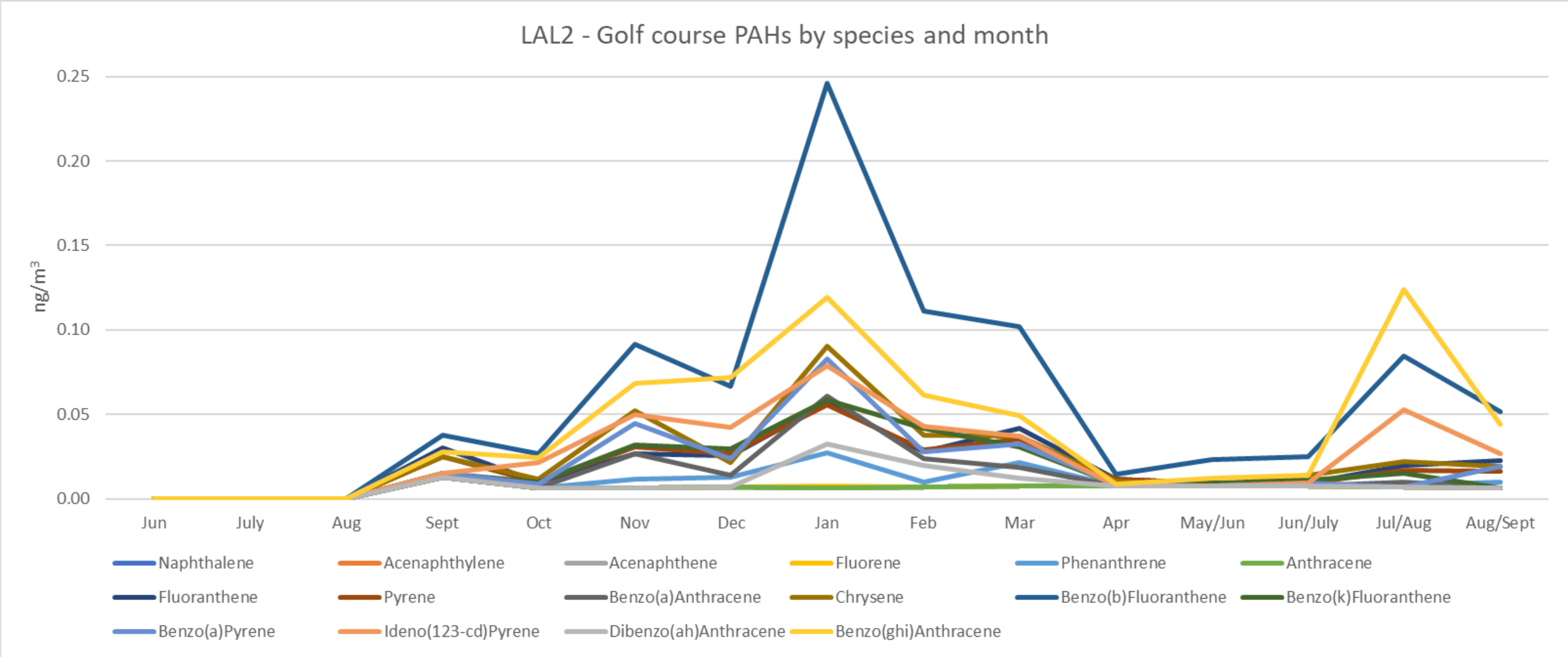


Figure 36: Measured PAH levels at LAL2 – Ingrebourne Golf course, monitoring commenced in September 2023

A.2 PCBs

The following two graphs show the measured values of the individual PCBs recorded at each site (one graph per location).

Note: the scale on the vertical axis is logarithmic to help with the display of results.

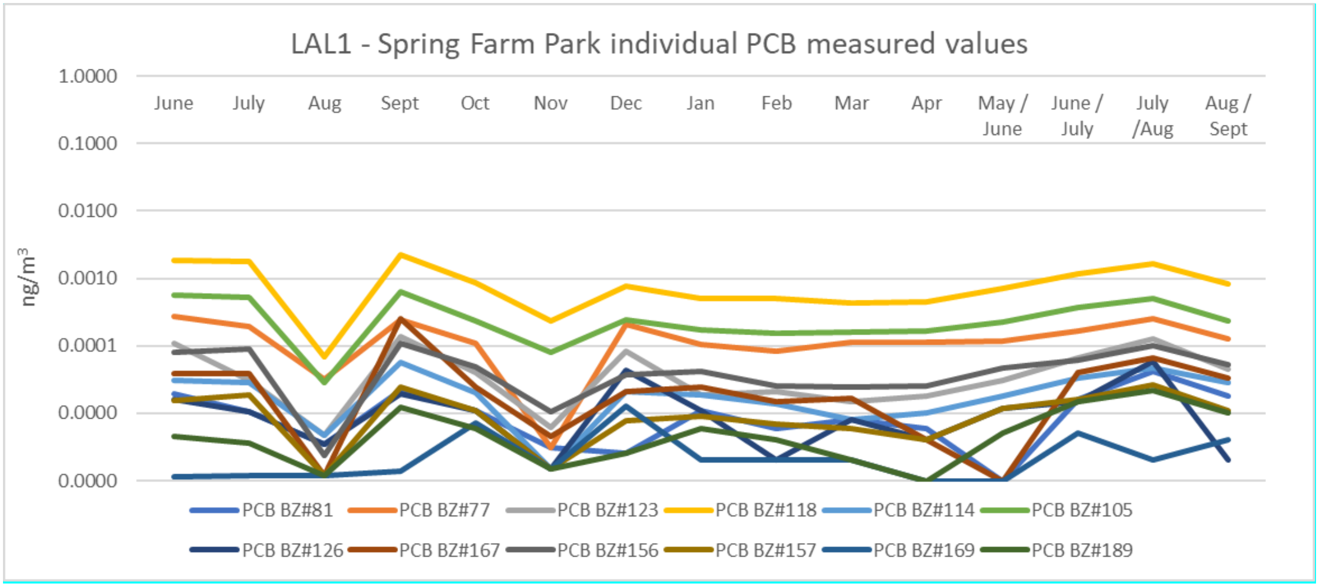


Figure 37: Levels of individual PCBs recorded at LAL1 in 2023 and 2024 (this site came online in June 2023)

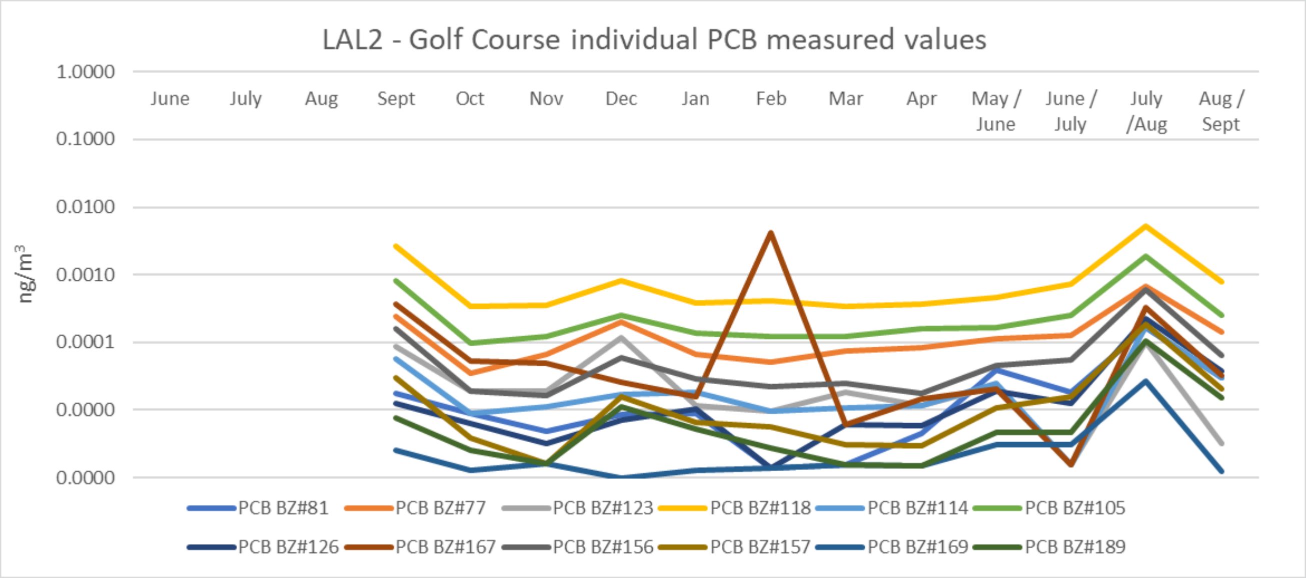
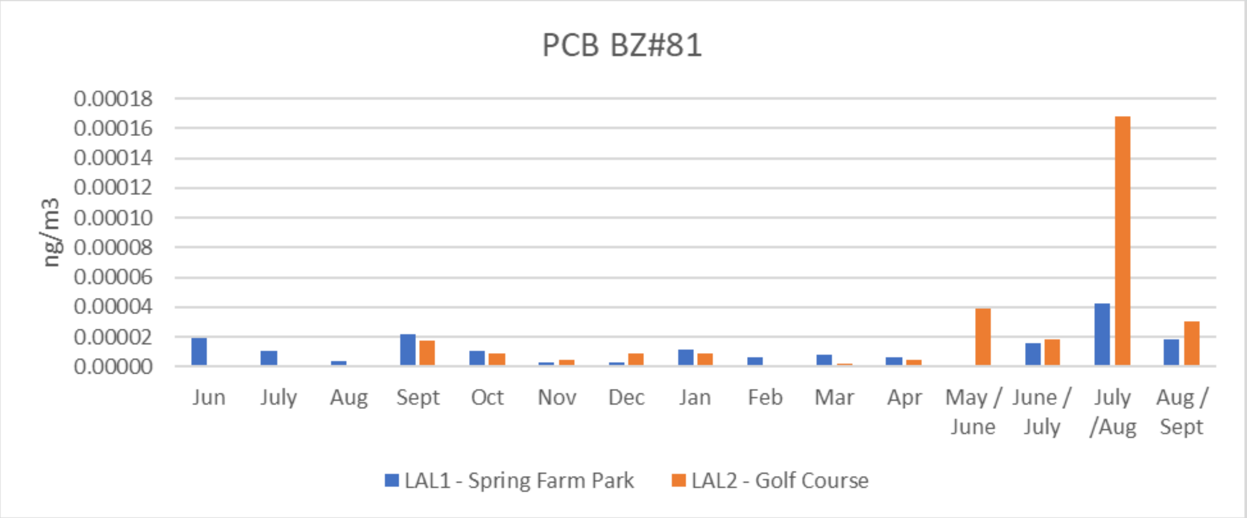
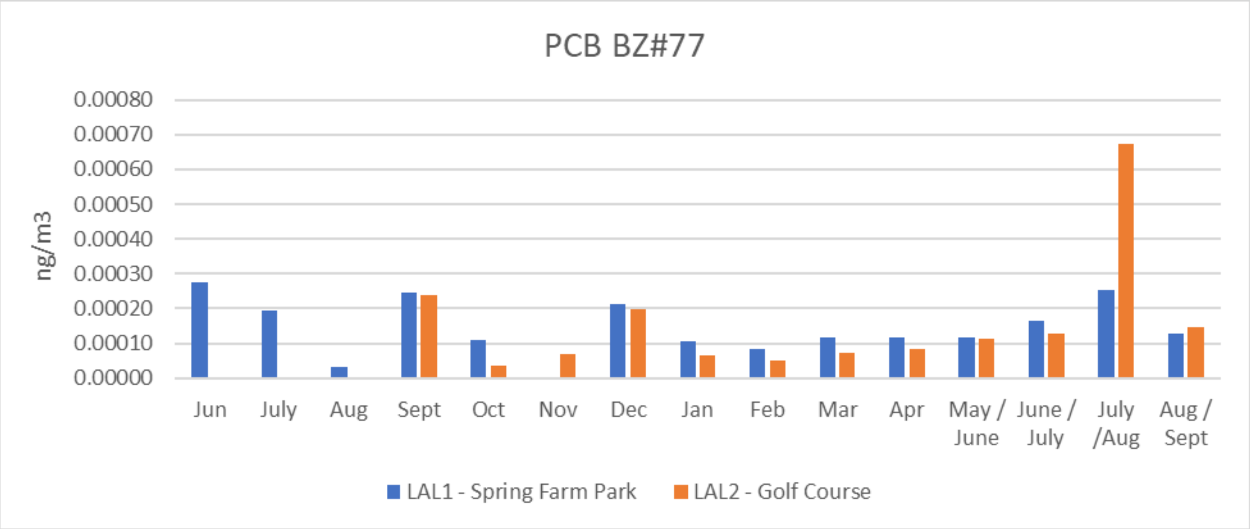
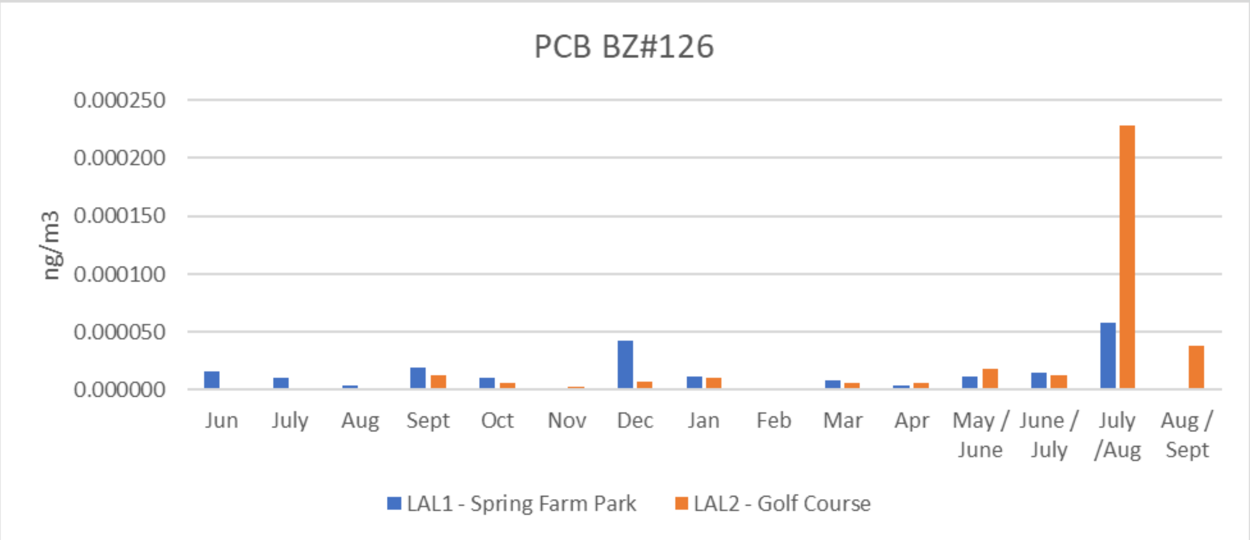


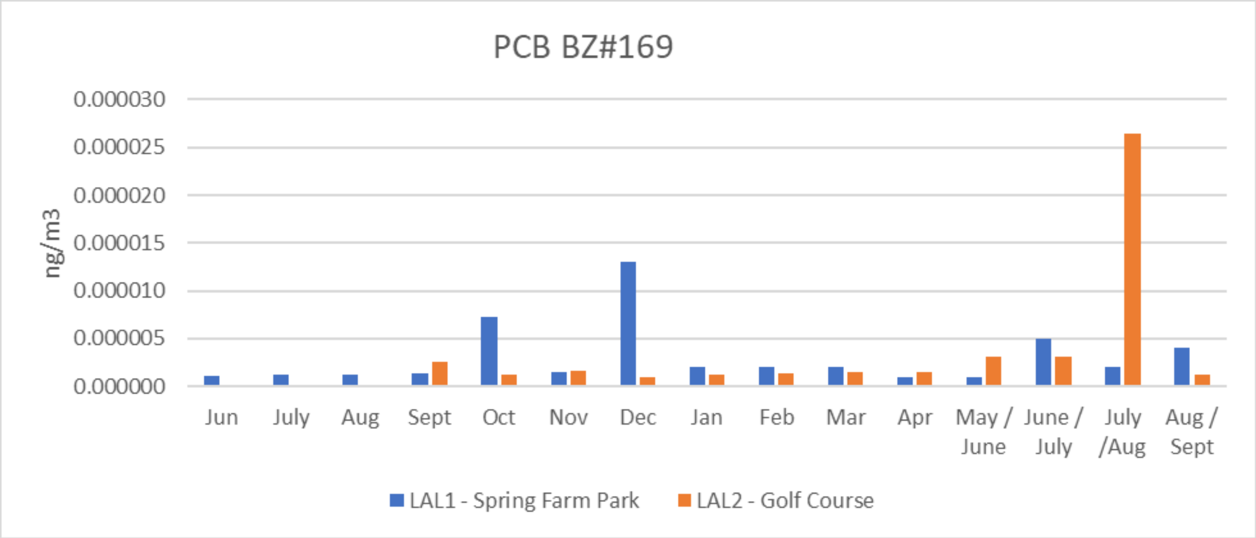
Figure 38: Levels of individual PCBs recorded at LAL2 in 2023 and 2024 (this site came online in Sept 2023)

The 4 graphs below show the data from the 4 PCB compounds with no direct comparison to the DEFRA TOMPS network (See Section 3.1 Results).








PCB BZ#169
ng/m3
0.000030
0.000025
0.000020
0.000015
0.000010
0.000005
0.000000
Jun
July
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May / June
June / July
July /Aug
Aug / Sept
LAL1 - Spring Farm Park
LAL2 - Golf Course

A.3 Metals

Levels of Lead recorded at LAL1 & LAL2:

It should be noted that displayed levels for February, March and April 2024 are higher than expected due to a change in the minimum detection level at the laboratory.

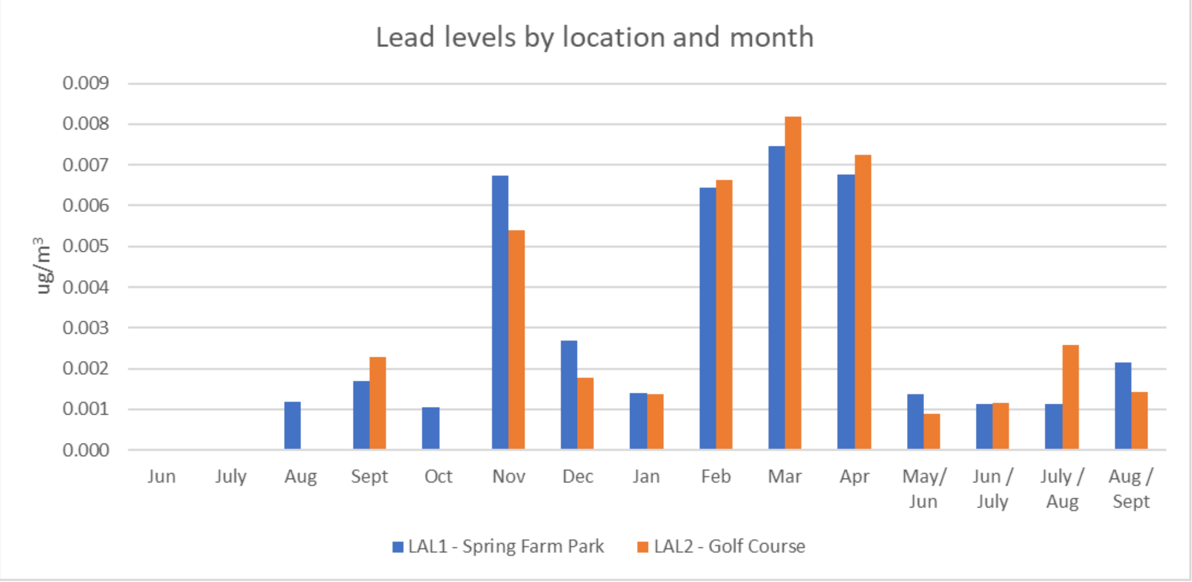


Figure 39: Levels of Lead (Pb) recorded at LAL1 & LAL2 through the whole monitoring period.

Levels of Mercury recorded at LAL1 & LAL2:

As with the lead readings, it should be noted that displayed levels for February, March and April 2024 are higher than expected due to a change in the minimum detection level at the laboratory.

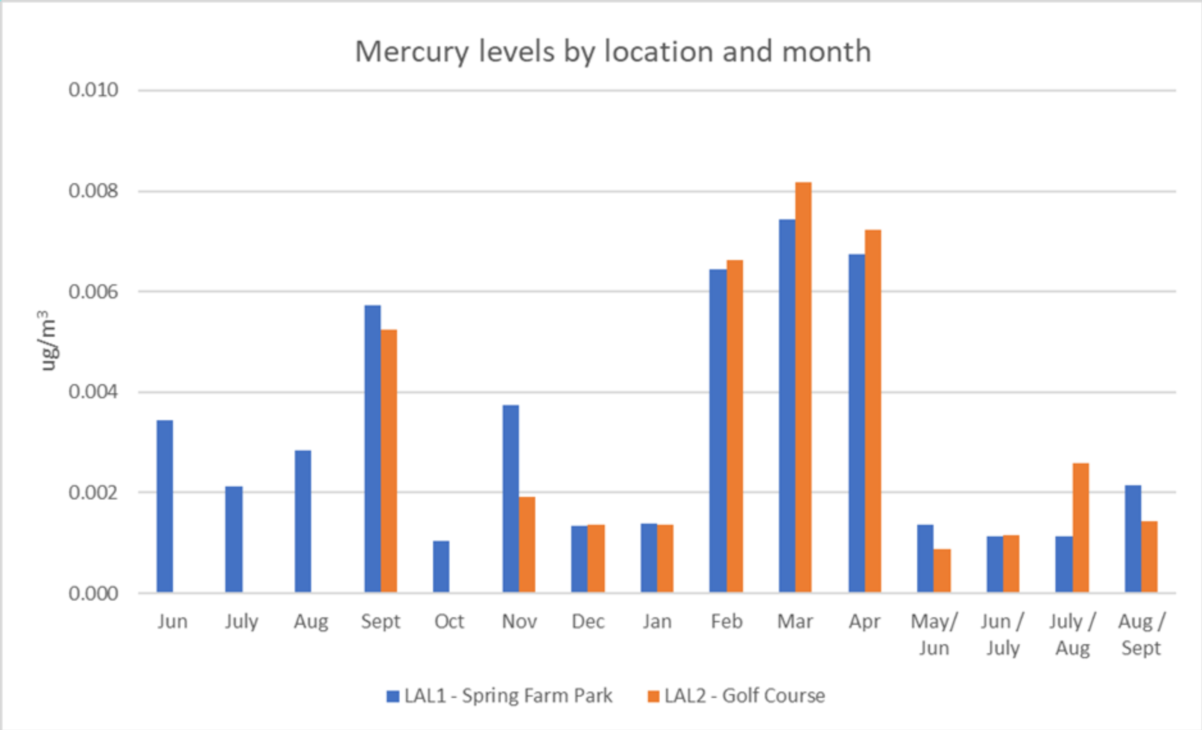


Figure 40; Levels of Mercury (Hg) recorded at LAL1 and LAL2 through the whole monitoring period.

A.4 VOC

A.4.1 NAEI figure showing change in VOC emissions since 1990

The Figure below is Figure 1, copied from the National Atmospheric Emissions Inventory (NAEI) estimated NMVOCs emission from 1990[37] which illustrates how much sources of VOCs in the UK have changed since 1990.

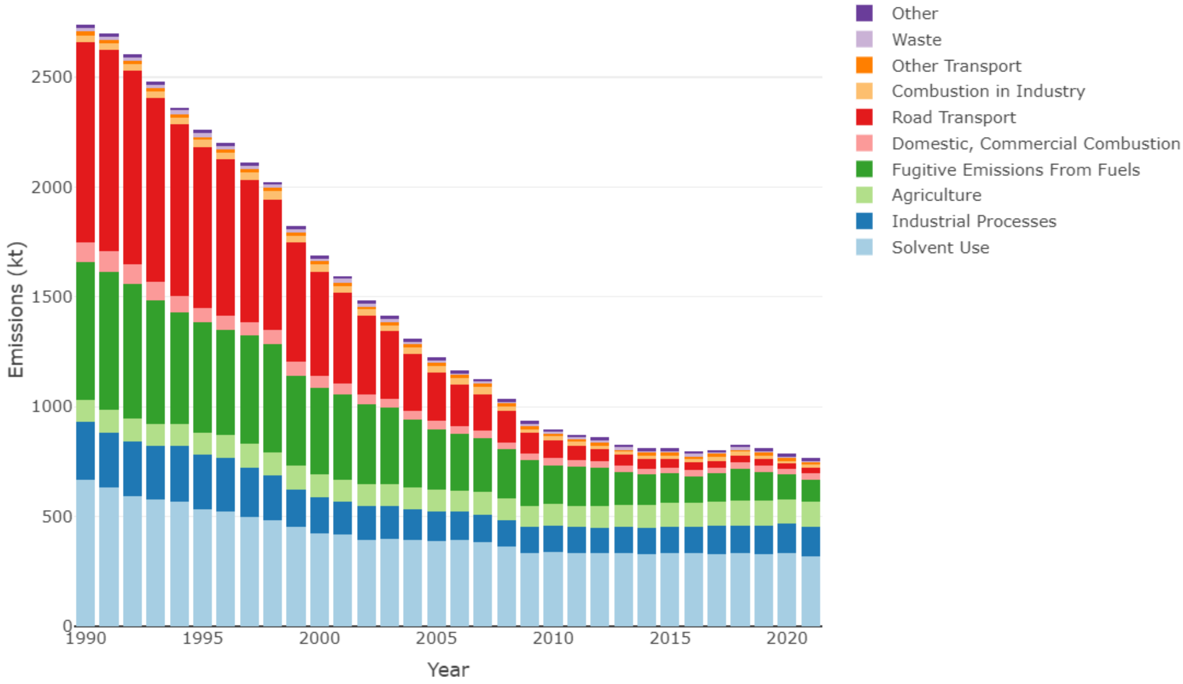


Figure 1: NAEI estimated NMVOCs emission from 1990.

A.4.2 Recommended guidelines for VOCs indoors

Although not relevant to this project, as all monitoring is taking place outdoors at Launders Lane, the link to Indoor Air Quality Guidelines for selected Volatile Organic Compounds (VOCs) in the UK is provided here for information.

https://assets.publishing.service.gov.uk/media/5d7a2912ed915d522e4164a5/VO__statement_Final_12092019_CS__1_.pdf

[37] https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2309281151_UK_Hydrocarbons_Network_Annual_Report_2022.html#fig-emission_plot

A.5 Wind roses

For each location, the wind speed (meters/second) and direction (degrees) are measured, 15-minute averages are logged at site and transmitted remotely. The data is then converted into a wind rose (as below), each covering a given period, in this case one month.

The individual segments represent the direction the wind blew from, and the colours denote the speed of the wind.

For the first graphic LAL1 month 0, there are three prevalent sections, these align with directions, 1) South, 2) East and 3) North, North-East and demonstrate from which direction the wind was blowing from and is based on the percentage of the total readings taken.

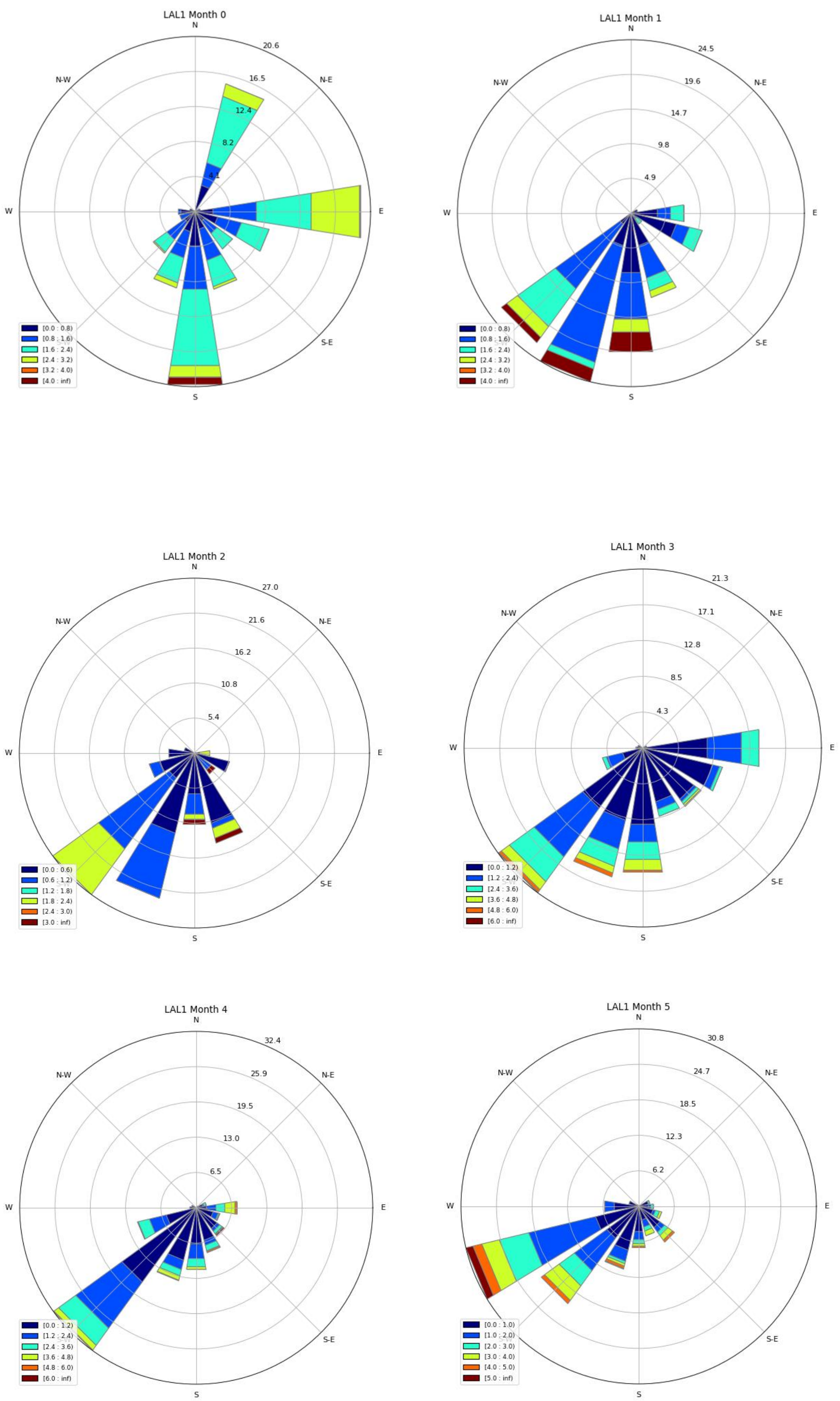
The highest wind speeds were from the South, as seen by the darkest outer segment.

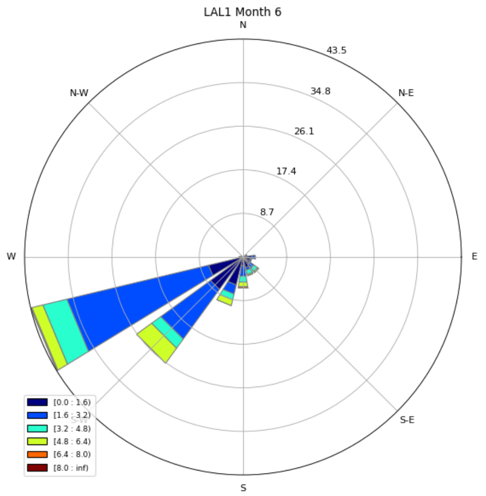
These wind roses were used to produce the results in Section 6 Monitoring results - Wind Speed and Direction.

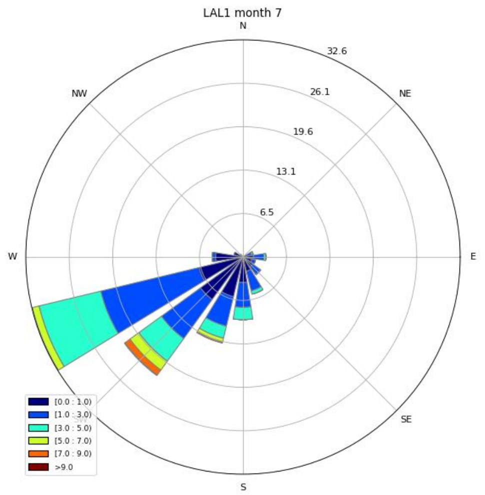
Due to the way wind roses are created they have been given a month number rather than name. The table below provides a refence.

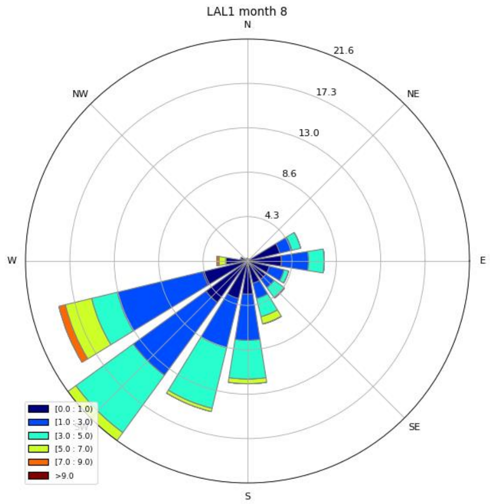
Sample period	Month	Wind rose month number
18th May - 22nd June 2023	June 23	0
22nd June – 28th July	July 23	1
28th July – 31st August	August 23	2
31st August – 5th October	September 23	3
5th October – 8th November	October 23	4
8th November – 6th December	November 23	5
6th December – 5th January 2024	December 23	6
5th January 2024 – 6th February 2024	January 24	7
6th February 2024 – 8th March 2024	February 24	8
8th March 2024 – 3rd April 2024	March 24	9
3rd April 2024 – 1st May 2024	April 24	10
1st May 2024 – 18th June 2024	May / June 24	11
18th June 2024 – 23rd July 2024	June / July 24	12
23rd July 2024 – 22nd August 2024	July / August 24	13
22nd August 2024 – 3rd October 2024	August / September 24	14

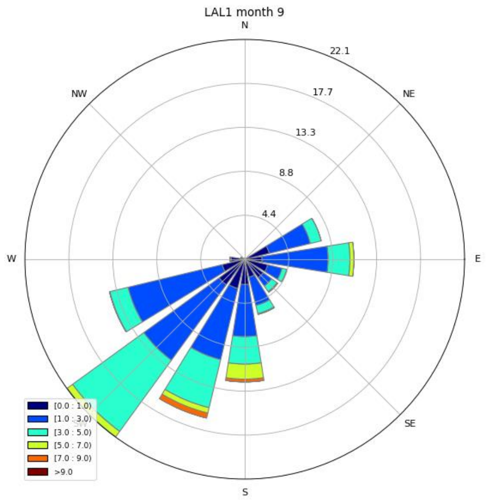
Figure 41: Wind roses for LAL1 – Launders Lane Spring Farm Park

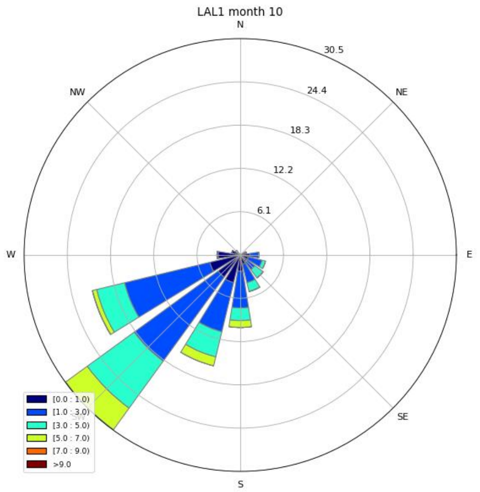


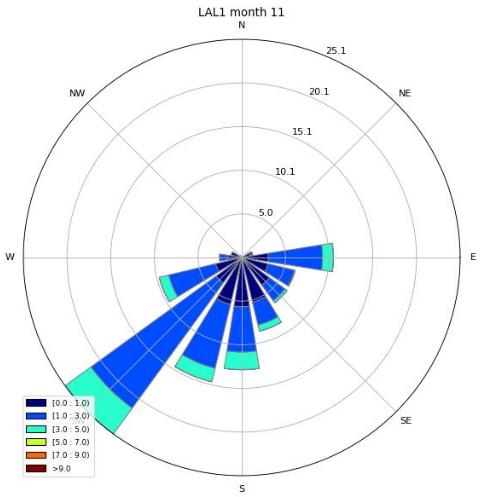

LAL1 Month 6
N
N-E
E
S-E
S
W
N-W
43.5
34.8
26.1
17.4
8.7
[0.0 : 1.6)
[1.6 : 3.2)
[3.2 : 4.8)
[4.8 : 6.4)
[6.4 : 8.0)
[8.0 : inf)

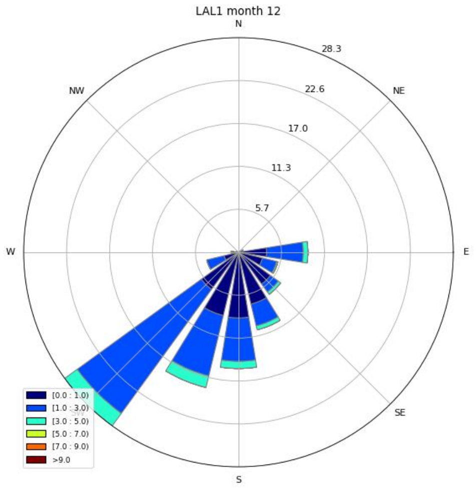

LAL1 month 7
N
NE
E
SE
S
W
NW
32.6
26.1
19.6
13.1
6.5
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0

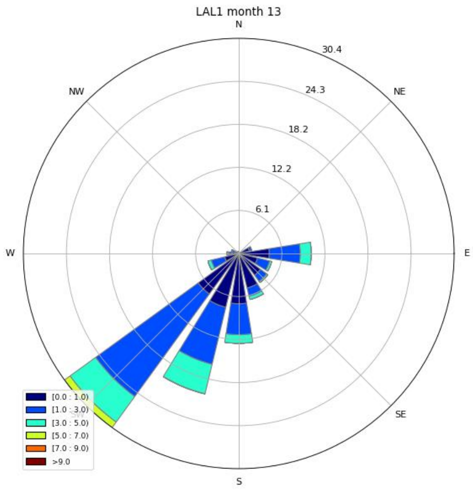

LAL1 month 8
N
NE
E
SE
S
W
NW
21.6
17.3
13.0
8.6
4.3
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL1 month 9
N
NE
E
SE
S
W
NW
22.1
17.7
13.3
8.8
4.4
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL1 month 10
N
NE
E
SE
S
W
NW
30.5
24.4
18.3
12.2
6.1
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL1 month 11
N
NE
E
SE
S
W
NW
25.1
20.1
15.1
10.1
5.0
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL1 month 12
N
NE
E
SE
S
W
NW
28.3
22.6
17.0
11.3
5.7
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL1 month 13
N
NE
E
SE
S
W
NW
30.4
24.3
18.2
12.2
6.1
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0

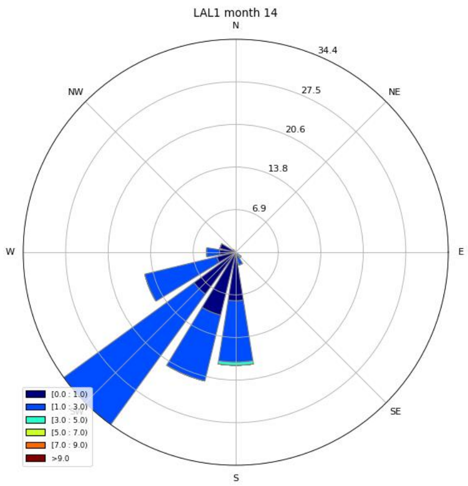
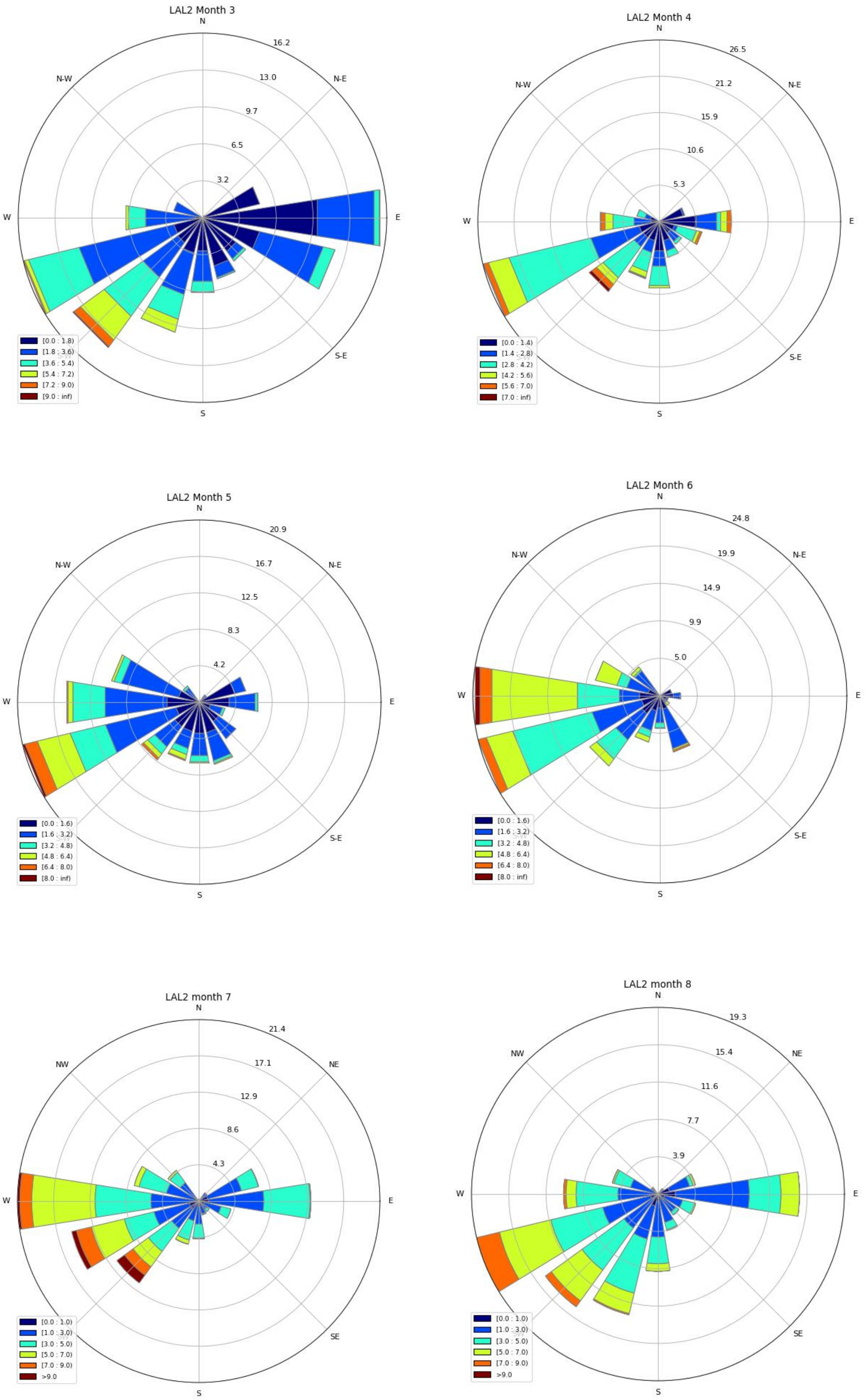
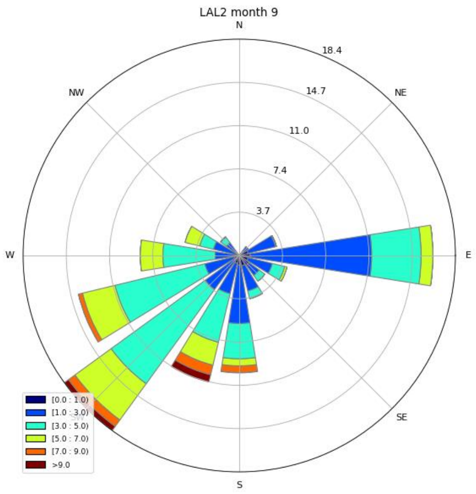
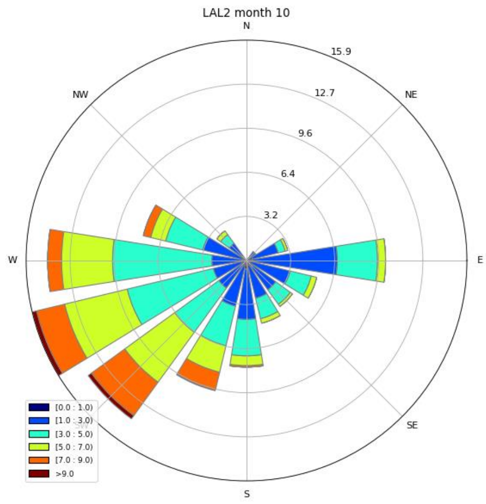
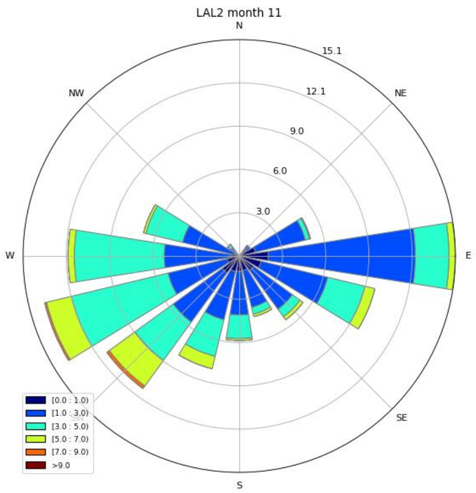

LAL1 month 14
N
NE
E
SE
S
W
NW
34.4
27.5
20.6
13.8
6.9
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0

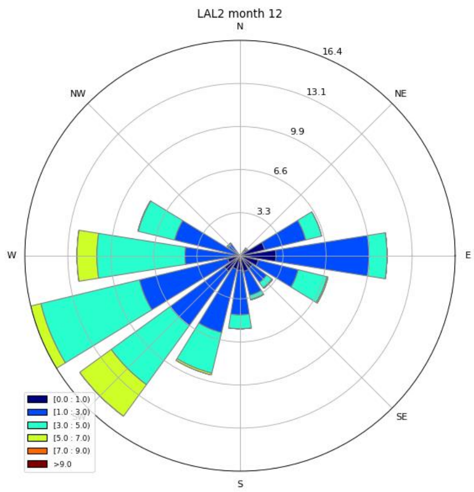
Figure 42: Wind roses for LAL2 – Launders Lane Ingrebourne Golf Course monitoring at his site only started in September 2023 / Month 3




LAL2 month 9
N
NE
E
SE
S
W
NW
3.7
7.4
11.0
14.7
18.4
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL2 month 10
N
NE
E
SE
S
W
NW
3.2
6.4
9.6
12.7
15.9
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL2 month 11
N
NE
E
SE
S
W
NW
3.0
6.0
9.0
12.1
15.1
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0


LAL2 month 12
N
NE
E
SE
S
W
NW
3.3
6.6
9.9
13.1
16.4
[0.0 : 1.0)
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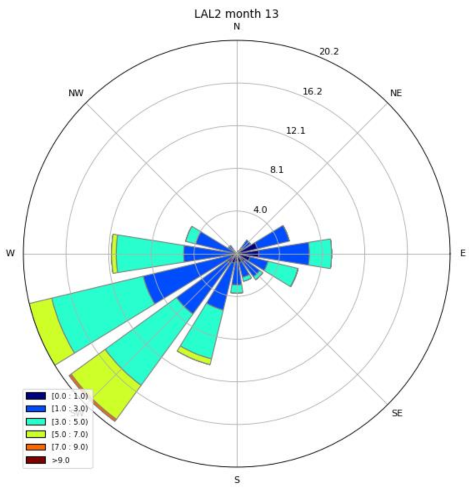
LAL2 month 13
N
NW
NE
W
E
SE
S
20.2
16.2
12.1
8.1
4.0
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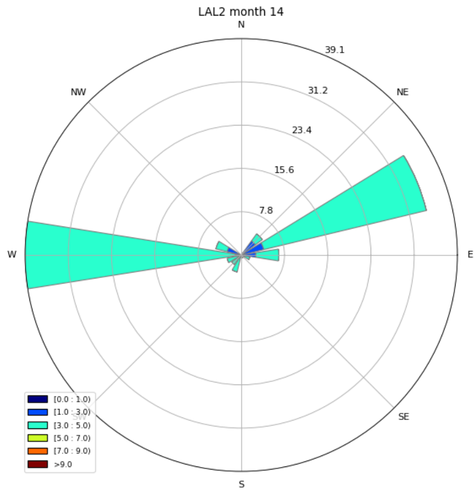
LAL2 month 14
N
NW
NE
W
E
SE
S
39.1
31.2
23.4
15.6
7.8
[0.0 : 1.0)
[1.0 : 3.0)
[3.0 : 5.0)
[5.0 : 7.0)
[7.0 : 9.0)
>9.0

A.5.1 Beaufort wind scale

As used in section 6 wind speed and direction, the Beaufort scale[38] has been used to express wind conditions. Table 9 provides the correlation between the measured speeds, scale, and descriptions from the Beaufort Scale.

Table 9: Beaufort wind scale

Beaufort wind scale	Mean wind speed (m/s)	Limits of wind speed (m/s)	Wind descriptive terms
0	0	<1	Calm
1	1	1-2	Light air
2	3	2-3	Light breeze
3	5	4-5	Gentle breeze
4	7	6-8	Moderate breeze
5	10	9-11	Fresh breeze
6	12	11-14	Strong breeze
7	15	14-17	Near gale
8	19	17-21	Gale
9	23	21-24	Strong gale
10	27	25-28	Storm
11	31	29-32	Violent storm
12		33+	Hurricane

[38] Beaufort wind force scale - Met Office

Appendix B. Raw Data

This appendix includes all the raw data processed to produce this Final Report.

The data contained in this document has been processed in line with TRL procedures and checked internally for quality.

For each species and measurement method, the total collected volume of an individual compound has been divided by total volume of sampled air, this provides a mass / volume comparable result i.e. ug/m^3

B.1 VOC data

Compound	Location	Month	Year	Result
Phenol	LAL1	July	2023	7.9
Benzaldehyde**	LAL1	July	2023	2.4
Benzoic acid	LAL1	July	2023	2.7
1-Hexanol, 2-ethyl-	LAL1	July	2023	2.5
Acetophenone**	LAL1	July	2023	1.8
Cyclotrisiloxane, hexamethyl-	LAL1	July	2023	2.8
Toluene	LAL1	July	2023	0.8
Phenylmaleic anhydride	LAL1	July	2023	1.4
Nonane	LAL1	July	2023	1.0
Cyclotrisiloxane, hexamethyl-	LAL2	July	2023	
Nonane	LAL2	July	2023	
Diethyl Phthalate	LAL2	July	2023	
1-Hexanol, 2-ethyl-	LAL2	July	2023	
Cyclopentasiloxane, decamethyl-	LAL2	July	2023	
Nonanal**	LAL2	July	2023	
Silanediol, dimethyl-	LAL2	July	2023	
Cyclotetrasiloxane, octamethyl-	LAL2	July	2023	
Benzaldehyde**	LAL2	July	2023	
Toluene	LAL2	July	2023	
Benzoic acid	LAL3	July	2023	12.9
Phenol	LAL3	July	2023	9.1
Nonanal**	LAL3	July	2023	5.0
Benzaldehyde**	LAL3	July	2023	2.7
Acetophenone**	LAL3	July	2023	2.7
Cyclotrisiloxane, hexamethyl-	LAL3	July	2023	4.9
1-Hexanol, 2-ethyl-	LAL3	July	2023	2.6
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL3	July	2023	7.0
Phenylmaleic anhydride	LAL3	July	2023	3.2
Phenol	LAL4	July	2023	7.4
Cyclotrisiloxane, hexamethyl-	LAL4	July	2023	5.8
Benzaldehyde**	LAL4	July	2023	2.2
Benzoic acid	LAL4	July	2023	2.4

1-Hexanol, 2-ethyl-	LAL4	July	2023	2.5
Nonane	LAL4	July	2023	2.1
Acetophenone**	LAL4	July	2023	1.3
Toluene	LAL4	July	2023	1.0
Cyclotetrasiloxane, octamethyl-	LAL4	July	2023	3.0
Benzoic acid	LAL5	July	2023	8.0
Benzaldehyde**	LAL5	July	2023	1.8
Phenylmaleic anhydride	LAL5	July	2023	2.7
Acetophenone**	LAL5	July	2023	1.8
Cyclotrisiloxane, hexamethyl-	LAL5	July	2023	3.3
2-Phenacyl-quinoxaline	LAL5	July	2023	3.1
m/p-Xylene	LAL5	July	2023	1.2
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL5	July	2023	3.6
Ethylbenzene	LAL5	July	2023	0.9
Benzoic acid	LAL6	July	2023	20.5
Styrene	LAL6	July	2023	6.8
Benzaldehyde**	LAL6	July	2023	6.5
Toluene	LAL6	July	2023	5.4
Nonanal**	LAL6	July	2023	7.2
Phenol	LAL6	July	2023	4.1
1-Hexanol, 2-ethyl-	LAL6	July	2023	5.1
Acetophenone**	LAL6	July	2023	3.4
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL7	July	2023	
Cyclotrisiloxane, hexamethyl-	LAL7	July	2023	
Benzene	LAL7	July	2023	
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL7	July	2023	
Benzaldehyde**	LAL7	July	2023	
Silanediol, dimethyl-	LAL7	July	2023	
Acetic acid	LAL7	July	2023	
Dimethyl sulfone	LAL7	July	2023	
Cyclotetrasiloxane, octamethyl-	LAL7	July	2023	
Benzoic acid	LAL8	July	2023	14.9
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL8	July	2023	39.4
Phenylmaleic anhydride	LAL8	July	2023	3.7
2-Phenacyl-quinoxaline	LAL8	July	2023	4.8
Benzene	LAL8	July	2023	1.4
Benzaldehyde**	LAL8	July	2023	1.8
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	July	2023	5.6
Acetophenone**	LAL8	July	2023	1.6
Cyclotrisiloxane, hexamethyl-	LAL8	July	2023	2.3
m/p-Xylene	LAL9	July	2023	10.5
Ethylbenzene	LAL9	July	2023	10.2
Benzoic acid	LAL9	July	2023	7.8
o-Xylene	LAL9	July	2023	5.3
Nonane	LAL9	July	2023	3.3
Benzaldehyde**	LAL9	July	2023	2.5

Acetophenone**	LAL9	July	2023	2.6
Phenylmaleic anhydride	LAL9	July	2023	3.0
Nonanal**	LAL9	July	2023	2.1
Benzoic acid	LAL10	July	2023	14.4
2-Phenacyl-quinoxaline	LAL10	July	2023	5.3
Phenylmaleic anhydride	LAL10	July	2023	3.7
Acetophenone**	LAL10	July	2023	2.1
Benzaldehyde**	LAL10	July	2023	1.7
Cyclotrisiloxane, hexamethyl-	LAL10	July	2023	3.5
Benzoylformic acid	LAL10	July	2023	1.5
Phenylglyoxal	LAL10	July	2023	0.9
Phenol	LAL10	July	2023	0.6
Benzoic acid	LAL1	August	2023	4.6
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL1	August	2023	10.7
Benzaldehyde**	LAL1	August	2023	1.5
Cyclotrisiloxane, hexamethyl-	LAL1	August	2023	2.5
Acetophenone**	LAL1	August	2023	1.4
Nonanal**	LAL1	August	2023	1.6
Phenylmaleic anhydride	LAL1	August	2023	1.6
Acetic acid	LAL1	August	2023	0.5
2-Phenacyl-quinoxaline	LAL1	August	2023	1.7
Cyclotrisiloxane, hexamethyl-	LAL2	August	2023	
Acetic acid	LAL2	August	2023	
Benzaldehyde**	LAL2	August	2023	
Benzene	LAL2	August	2023	
1-Hexanol, 2-ethyl-	LAL2	August	2023	
Silanediol, dimethyl-	LAL2	August	2023	
Toluene	LAL2	August	2023	
Benzenesulfonamide, N-butyl-	LAL2	August	2023	
Benzoic acid	LAL3	August	2023	17.0
Nonanal**	LAL3	August	2023	9.9
Nonanoic acid	LAL3	August	2023	5.8
Benzaldehyde**	LAL3	August	2023	2.4
Phenylmaleic anhydride	LAL3	August	2023	3.9
Cyclotrisiloxane, hexamethyl-	LAL3	August	2023	4.9
Acetophenone**	LAL3	August	2023	2.4
2-Phenacyl-quinoxaline	LAL3	August	2023	4.8
Pentacosane	LAL3	August	2023	5.6
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL4	August	2023	42.7
Benzoic acid	LAL4	August	2023	11.0
m/p-Xylene	LAL4	August	2023	7.5
Ethylbenzene	LAL4	August	2023	7.3
Tetracosane	LAL4	August	2023	22.1
Cyclotrisiloxane, hexamethyl-	LAL4	August	2023	7.2
Nonanal**	LAL4	August	2023	4.3
o-Xylene	LAL4	August	2023	3.1

Benzaldehyde**	LAL4	August	2023	2.1
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	August	2023	75.3
Benzoic acid	LAL5	August	2023	7.3
Tetracosane	LAL5	August	2023	16.0
Nonanal**	LAL5	August	2023	5.4
Benzaldehyde**	LAL5	August	2023	1.8
Acetophenone**	LAL5	August	2023	1.7
m/p-Xylene	LAL5	August	2023	1.4
Phenylmaleic anhydride	LAL5	August	2023	2.2
Cyclotrisiloxane, hexamethyl-	LAL5	August	2023	2.7
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL6	August	2023	30.2
Benzoic acid	LAL6	August	2023	5.4
Nonanal**	LAL6	August	2023	2.8
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL6	August	2023	7.5
Benzaldehyde**	LAL6	August	2023	1.6
Cyclotrisiloxane, hexamethyl-	LAL6	August	2023	3.1
Acetophenone**	LAL6	August	2023	1.5
1-Hexanol, 2-ethyl-	LAL6	August	2023	1.5
Benzothiazole	LAL6	August	2023	1.3
Cyclotrisiloxane, hexamethyl-	LAL7	August	2023	
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL7	August	2023	
Benzaldehyde**	LAL7	August	2023	
Acetic acid	LAL7	August	2023	
1-Hexanol, 2-ethyl-	LAL7	August	2023	
Cyclotetrasiloxane, octamethyl-	LAL7	August	2023	
Acetophenone**	LAL7	August	2023	
Cyclopentasiloxane, decamethyl-	LAL7	August	2023	
Benzene	LAL7	August	2023	
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL8	August	2023	14.9
Benzoic acid	LAL8	August	2023	3.5
Benzaldehyde**	LAL8	August	2023	1.5
1-Hexanol, 2-ethyl-	LAL8	August	2023	1.8
Nonanal**	LAL8	August	2023	1.8
Acetophenone**	LAL8	August	2023	1.3
Phenylmaleic anhydride	LAL8	August	2023	1.6
Cyclotrisiloxane, hexamethyl-	LAL8	August	2023	1.8
Toluene	LAL8	August	2023	0.5
Benzoic acid	LAL9	August	2023	6.8
Benzaldehyde**	LAL9	August	2023	1.7
Nonanal**	LAL9	August	2023	2.0
2-Phenacyl-quinoxaline	LAL9	August	2023	3.4
Acetophenone**	LAL9	August	2023	1.5
Phenylmaleic anhydride	LAL9	August	2023	2.1
cis-9-Hexadecenoic acid, heptyl ester	LAL9	August	2023	4.1
Cyclotrisiloxane, hexamethyl-	LAL9	August	2023	2.0
Phenol	LAL9	August	2023	0.8

1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL10	August	2023	29.5
Benzoic acid	LAL10	August	2023	7.5
Nonanal**	LAL10	August	2023	2.3
Benzaldehyde**	LAL10	August	2023	1.7
Acetophenone**	LAL10	August	2023	1.7
4-Cyclopentene-1,3-dione, 2,4-diphenyl-	LAL10	August	2023	3.3
Cyclotrisiloxane, hexamethyl-	LAL10	August	2023	2.9
Phenylmaleic anhydride	LAL10	August	2023	2.2
Benzene	LAL10	August	2023	0.9
Benzoic acid	LAL1	September	2023	10.5
Acetic acid, butyl ester	LAL1	September	2023	2.4
Benzaldehyde**	LAL1	September	2023	2.1
Phenylmaleic anhydride	LAL1	September	2023	3.2
Acetophenone**	LAL1	September	2023	2.0
Butane, 2-methyl-	LAL1	September	2023	0.9
Cyclotrisiloxane, hexamethyl-	LAL1	September	2023	2.6
Toluene	LAL1	September	2023	1.0
Pentane, 2-methyl-	LAL1	September	2023	0.7
Benzoic acid	LAL2	September	2023	9.8
Acetic acid, butyl ester	LAL2	September	2023	2.6
Benzaldehyde**	LAL2	September	2023	2.2
Acetophenone**	LAL2	September	2023	2.5
Phenylmaleic anhydride	LAL2	September	2023	3.4
Cyclotrisiloxane, hexamethyl-	LAL2	September	2023	3.7
Butane, 2-methyl-	LAL2	September	2023	0.9
Toluene	LAL2	September	2023	1.1
Benzoylformic acid	LAL2	September	2023	1.4
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL3	September	2023	31.1
Diethyl Phthalate	LAL3	September	2023	16.8
Benzoic acid	LAL3	September	2023	7.6
Benzaldehyde**	LAL3	September	2023	1.8
Acetophenone**	LAL3	September	2023	1.9
Phenylmaleic anhydride	LAL3	September	2023	2.7
1-Hexanol, 2-ethyl-	LAL3	September	2023	1.7
Cyclotrisiloxane, hexamethyl-	LAL3	September	2023	2.2
Toluene	LAL3	September	2023	0.7
Benzoic acid	LAL4	September	2023	20.8
Nonanal**	LAL4	September	2023	14.4
Pentacosane	LAL4	September	2023	14.8
Acetic acid, butyl ester	LAL4	September	2023	4.4
Benzaldehyde**	LAL4	September	2023	2.9
Phenylmaleic anhydride	LAL4	September	2023	4.6
Acetophenone**	LAL4	September	2023	2.6
Cyclotrisiloxane, hexamethyl-	LAL4	September	2023	4.7
Butane, 2-methyl-	LAL4	September	2023	1.4
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	September	2023	91.4

Tetracosane	LAL5	September	2023	39.9
Benzoic acid	LAL5	September	2023	5.8
Benzaldehyde**	LAL5	September	2023	1.7
Cyclotrisiloxane, hexamethyl-	LAL5	September	2023	3.3
Nonanal**	LAL5	September	2023	1.9
Acetophenone**	LAL5	September	2023	1.6
1,2-Benzenedicarboxylic acid	LAL5	September	2023	2.2
Phenylmaleic anhydride	LAL5	September	2023	2.1
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL6	September	2023	54.1
Benzoic acid	LAL6	September	2023	9.4
Nonanal**	LAL6	September	2023	3.8
Benzaldehyde**	LAL6	September	2023	2.0
Phenylmaleic anhydride	LAL6	September	2023	3.0
Acetophenone**	LAL6	September	2023	1.9
Cyclohexane, isothiocyanato-	LAL6	September	2023	1.5
Benzene	LAL6	September	2023	0.6
Toluene	LAL6	September	2023	0.6
Benzene	LAL7	September	2023	
Toluene	LAL7	September	2023	
Ethylbenzene	LAL7	September	2023	
m/p-Xylene	LAL7	September	2023	
o-Xylene	LAL7	September	2023	
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL7	September	2023	
Acetic acid, butyl ester	LAL7	September	2023	
Cyclotrisiloxane, hexamethyl-	LAL7	September	2023	
Benzaldehyde**	LAL7	September	2023	
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL9	September	2023	24.6
Cyclotrisiloxane, hexamethyl-	LAL9	September	2023	8.2
Benzoic acid	LAL9	September	2023	3.7
Benzaldehyde**	LAL9	September	2023	2.0
Nonanal**	LAL9	September	2023	2.5
Acetophenone**	LAL9	September	2023	1.7
Phenylmaleic anhydride	LAL9	September	2023	1.8
Cyclotetrasiloxane, octamethyl-	LAL9	September	2023	2.8
1-Hexanol, 2-ethyl-	LAL9	September	2023	1.2
Benzene	LAL10	September	2023	1.1
Cyclotrisiloxane, hexamethyl-	LAL10	September	2023	5.4
Benzaldehyde**	LAL10	September	2023	1.4
Acetophenone**	LAL10	September	2023	1.4
Nonanal**	LAL10	September	2023	1.2
Cyclotetrasiloxane, octamethyl-	LAL10	September	2023	2.3
m/p-Xylene	LAL10	September	2023	0.8
1-Hexanol, 2-ethyl-	LAL10	September	2023	0.7
Benzene	LAL10	September	2023	0.4
Phenol	LAL10	September	2023	0.4
Nonanal**	LAL1	October	2023	10.6

Benzoic acid	LAL1	October	2023	5.4
Cyclotrisiloxane, hexamethyl-	LAL1	October	2023	9.6
Diethyl Phthalate	LAL1	October	2023	3.5
Phenylmaleic anhydride	LAL1	October	2023	2.5
m/p-Xylene	LAL1	October	2023	1.4
Benzaldehyde**	LAL1	October	2023	1.4
Cyclotetrasiloxane, octamethyl-	LAL1	October	2023	3.7
Acetophenone**	LAL1	October	2023	1.2
Toluene	LAL2	October	2023	21.9
Nonane	LAL2	October	2023	17.6
Pentane, 2-methyl-	LAL2	October	2023	7.4
m/p-Xylene	LAL2	October	2023	8.6
Benzaldehyde**	LAL2	October	2023	7.3
Cyclopentasiloxane, decamethyl-	LAL2	October	2023	24.2
Acetic acid, butyl ester	LAL2	October	2023	7.5
Butane, 2-methyl-	LAL2	October	2023	4.4
Pentane, 2-chloro-2-methyl-	LAL2	October	2023	7.2
Toluene	LAL3	October	2023	19.8
Nonane	LAL3	October	2023	16.4
m/p-Xylene	LAL3	October	2023	8.2
Pentane, 2-methyl-	LAL3	October	2023	6.1
Cyclopentasiloxane, decamethyl-	LAL3	October	2023	23.3
Acetic acid, butyl ester	LAL3	October	2023	7.1
Benzaldehyde**	LAL3	October	2023	5.8
Butane, 2-methyl-	LAL3	October	2023	3.9
Nonanal**	LAL3	October	2023	6.9
Benzoic acid	LAL4	October	2023	6.2
Cyclotrisiloxane, hexamethyl-	LAL4	October	2023	7.1
Nonanal**	LAL4	October	2023	3.6
Benzaldehyde**	LAL4	October	2023	2.2
m/p-Xylene	LAL4	October	2023	1.8
Phenylmaleic anhydride	LAL4	October	2023	2.4
Acetophenone**	LAL4	October	2023	1.5
Cyclotetrasiloxane, octamethyl-	LAL4	October	2023	3.4
Acetic acid, butyl ester	LAL4	October	2023	1.3
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL5	October	2023	28.1
1-Hexanol, 2-ethyl-	LAL5	October	2023	2.9
Acetic acid, butyl ester	LAL5	October	2023	1.7
Cyclotrisiloxane, hexamethyl-	LAL5	October	2023	3.2
Benzaldehyde**	LAL5	October	2023	1.4
Toluene	LAL5	October	2023	1.0
m/p-Xylene	LAL5	October	2023	1.0
Acetophenone**	LAL5	October	2023	1.1
Nonanal**	LAL5	October	2023	1.0
Toluene	LAL6	October	2023	4.5
Benzoic acid	LAL6	October	2023	7.9

Nonanal**	LAL6	October	2023	4.2
Cyclotrisiloxane, hexamethyl-	LAL6	October	2023	6.1
Toluene	LAL6	October	2023	2.4
Benzaldehyde**	LAL6	October	2023	2.4
Acetic acid, butyl ester	LAL6	October	2023	2.1
Pentane, 2-methyl-	LAL6	October	2023	1.5
Butane, 2-methyl-	LAL6	October	2023	1.2
Phenylmaleic anhydride	LAL6	October	2023	2.7
Ethylbenzene	LAL7	October	2023	
m/p-Xylene	LAL7	October	2023	
o-Xylene	LAL7	October	2023	
Cyclotrisiloxane, hexamethyl-	LAL7	October	2023	
Benzaldehyde**	LAL7	October	2023	
Silanediol, dimethyl-	LAL7	October	2023	
Isopropyl myristate	LAL7	October	2023	
Benzoic acid	LAL8	October	2023	5.2
Cyclotrisiloxane, hexamethyl-	LAL8	October	2023	4.2
Nonanal**	LAL8	October	2023	2.4
Benzaldehyde**	LAL8	October	2023	1.7
Acetic acid, butyl ester	LAL8	October	2023	1.8
Phenylmaleic anhydride	LAL8	October	2023	2.0
Acetophenone**	LAL8	October	2023	1.3
Toluene	LAL8	October	2023	0.8
2-Propanone, 1-methoxy-	LAL8	October	2023	0.8
Benzoic acid	LAL9	October	2023	7.5
Nonanal**	LAL9	October	2023	3.2
Cyclotrisiloxane, hexamethyl-	LAL9	October	2023	4.0
Benzaldehyde**	LAL9	October	2023	1.9
Phenylmaleic anhydride	LAL9	October	2023	2.6
1-Hexanol, 2-ethyl-	LAL9	October	2023	1.7
Acetophenone**	LAL9	October	2023	1.4
Acetic acid	LAL9	October	2023	0.5
Toluene	LAL9	October	2023	0.8
Diethyl Phthalate	LAL10	October	2023	17.7
m/p-Xylene	LAL10	October	2023	7.3
2-Pentanone, 4-hydroxy-4-methyl-	LAL10	October	2023	7.5
Ethylbenzene	LAL10	October	2023	6.2
Toluene	LAL10	October	2023	5.3
o-Xylene	LAL10	October	2023	3.2
Benzoic acid	LAL10	October	2023	3.6
Butane, 2-methyl-	LAL10	October	2023	2.0
Benzaldehyde**	LAL10	October	2023	2.8
No Data		November	2023	
Nonanal**	LAL1	December	2023	6.6
Cyclotrisiloxane, hexamethyl-	LAL1	December	2023	6.8
Benzoic acid	LAL1	December	2023	2.4

Benzaldehyde**	LAL1	December	2023	1.9
Acetophenone**	LAL1	December	2023	1.8
Benzene	LAL1	December	2023	0.8
1-Hexanol, 2-ethyl-	LAL1	December	2023	1.2
Pentacosane	LAL1	December	2023	3.3
Octane	LAL1	December	2023	1.1
Benzoic acid	LAL2	December	2023	4.7
Benzaldehyde**	LAL2	December	2023	1.5
Acetophenone**	LAL2	December	2023	1.7
Nonanal**	LAL2	December	2023	1.1
Cyclotrisiloxane, hexamethyl-	LAL2	December	2023	1.5
Phenylmaleic anhydride	LAL2	December	2023	0.9
Benzene	LAL2	December	2023	0.4
Toluene	LAL2	December	2023	0.4
Acetic acid	LAL2	December	2023	0.3
Phenol	LAL3	December	2023	2.8
Toluene	LAL3	December	2023	2.4
Benzaldehyde**	LAL3	December	2023	1.5
Cyclotrisiloxane, hexamethyl-	LAL3	December	2023	3.0
1-Hexanol, 2-ethyl-	LAL3	December	2023	1.6
Nonane	LAL3	December	2023	1.3
Benzene	LAL3	December	2023	0.8
m/p-Xylene	LAL3	December	2023	1.0
Acetophenone**	LAL3	December	2023	1.0
Benzoic acid	LAL5	December	2023	4.2
1-Hexanol, 2-ethyl-	LAL5	December	2023	4.3
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL5	December	2023	6.1
Benzene	LAL5	December	2023	0.9
Benzaldehyde**	LAL5	December	2023	1.3
Cyclotrisiloxane, hexamethyl-	LAL5	December	2023	2.2
Acetophenone**	LAL5	December	2023	0.8
Toluene	LAL5	December	2023	0.6
m/p-Xylene	LAL5	December	2023	0.6
Benzoic acid	LAL6	December	2023	10.9
Benzaldehyde**	LAL6	December	2023	2.5
Acetophenone**	LAL6	December	2023	2.1
Cyclotrisiloxane, hexamethyl-	LAL6	December	2023	2.5
Phenylmaleic anhydride	LAL6	December	2023	1.9
Benzene	LAL6	December	2023	0.8
Phenol	LAL6	December	2023	0.9
Toluene	LAL6	December	2023	0.6
Benzeneacetaldehyde	LAL6	December	2023	0.7
Phenol	LAL9	December	2023	6.3
Nonanal**	LAL9	December	2023	7.8
Toluene	LAL9	December	2023	3.9
Benzoic acid	LAL9	December	2023	4.1

Benzaldehyde**	LAL9	December	2023	2.3
1-Hexanol, 2-ethyl-	LAL9	December	2023	2.7
Cyclotrisiloxane, hexamethyl-	LAL9	December	2023	4.2
Nonane	LAL9	December	2023	1.9
Benzene	LAL9	December	2023	1.1
Benzoic acid	LAL10	December	2023	15.7
Nonanal**	LAL10	December	2023	10.1
Cyclotrisiloxane, hexamethyl-	LAL10	December	2023	10.9
Benzaldehyde**	LAL10	December	2023	2.1
Phenylmaleic anhydride	LAL10	December	2023	2.6
Acetophenone**	LAL10	December	2023	1.7
1-Octene	LAL10	December	2023	1.4
Benzenecarbothioic acid	LAL10	December	2023	1.1
Cyclotetrasiloxane, octamethyl-	LAL10	December	2023	2.4
2-Propanol, 1-methoxy-	LAL1	January	2024	166.8
Propylene Glycol	LAL1	January	2024	32.5
Ethyl Acetate	LAL1	January	2024	25.9
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	LAL1	January	2024	43.7
Acetone	LAL1	January	2024	12.0
Toluene	LAL1	January	2024	14.0
1-Methoxy-2-propyl acetate	LAL1	January	2024	17.5
Benzoic acid	LAL1	January	2024	15.7
Nonanal**	LAL1	January	2024	15.8
2-Propanol, 1-methoxy-	LAL2	January	2024	180.9
Ethyl Acetate	LAL2	January	2024	42.2
Acetone	LAL2	January	2024	9.1
1-Methoxy-2-propyl acetate	LAL2	January	2024	19.3
Toluene	LAL2	January	2024	9.7
1-Butanamine, 2-methyl-	LAL2	January	2024	3.6
Cyclohexane	LAL2	January	2024	3.3
Methylene chloride	LAL2	January	2024	2.6
Nicotyrine	LAL2	January	2024	3.5
2-Butanone	LAL2	January	2024	1.5
Phenol	LAL3	January	2024	41.6
2-Propanol, 1-methoxy-	LAL3	January	2024	22.7
Toluene	LAL3	January	2024	11.2
Nonane	LAL3	January	2024	10.3
1-Hexanol, 2-ethyl-	LAL3	January	2024	9.2
Cyclotrisiloxane, hexamethyl-	LAL3	January	2024	15.6
Benzoic acid	LAL3	January	2024	8.5
Nonanal**	LAL3	January	2024	9.4
Trichloromonofluoromethane	LAL3	January	2024	8.6
2-Propanol, 1-methoxy-	LAL4	January	2024	91.7
Acetone	LAL4	January	2024	10.4
Toluene	LAL4	January	2024	15.1
Ethyl Acetate	LAL4	January	2024	13.7

Cyclohexane	LAL4	January	2024	7.4
1-Methoxy-2-propyl acetate	LAL4	January	2024	7.5
Cyclotrisiloxane, hexamethyl-	LAL4	January	2024	7.9
Methylene chloride	LAL4	January	2024	2.9
Nonanal**	LAL4	January	2024	4.5
2-Propanol, 1-methoxy-	LAL5	January	2024	85.2
Ethyl Acetate	LAL5	January	2024	24.9
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	January	2024	50.3
1-Methoxy-2-propyl acetate	LAL5	January	2024	9.2
Nonanal**	LAL5	January	2024	2.3
Cyclotrisiloxane, hexamethyl-	LAL5	January	2024	3.5
1,3-Dioxolane, 4-methyl-	LAL5	January	2024	1.1
2-Butanone	LAL5	January	2024	0.8
Benzaldehyde**	LAL5	January	2024	1.2
1-Hexanol, 2-ethyl-	LAL8	January	2024	2.6
Cyclotrisiloxane, hexamethyl-	LAL8	January	2024	2.8
Pentacosane	LAL8	January	2024	3.9
Acetic acid	LAL8	January	2024	0.5
Pyrene	LAL8	January	2024	1.6
Benzaldehyde**	LAL8	January	2024	0.7
1-Butanol	LAL8	January	2024	0.5
Fluoranthene	LAL8	January	2024	1.3
Furfural	LAL8	January	2024	0.5
.alpha.-Methylstyrene	LAL8	January	2024	0.6
2-Propanol, 1-methoxy-	LAL9	January	2024	31.0
Acetone	LAL9	January	2024	9.5
Toluene	LAL9	January	2024	12.3
Cyclohexane	LAL9	January	2024	7.4
Nonanal**	LAL9	January	2024	8.9
Cyclotrisiloxane, hexamethyl-	LAL9	January	2024	11.3
Methylene chloride	LAL9	January	2024	2.8
Benzoic acid	LAL9	January	2024	4.0
Benzaldehyde**	LAL9	January	2024	2.8
2,6-Diphenyl-p-benzoquinone	LAL1	February	2024	106.0
Benzoic acid	LAL1	February	2024	8.1
Nonanal**	LAL1	February	2024	6.0
2-Phenacyl-quinoxaline	LAL1	February	2024	6.5
Phenylmaleic anhydride	LAL1	February	2024	2.8
Cyclotrisiloxane, hexamethyl-	LAL1	February	2024	3.4
Benzaldehyde**	LAL1	February	2024	1.6
Acetophenone**	LAL1	February	2024	1.2
m/p-Xylene	LAL1	February	2024	0.9
2-Propanol, 1-methoxy-	LAL1	February	2024	0.8
2-Propanol, 1-methoxy-	LAL2	February	2024	38.0
Ethyl Acetate	LAL2	February	2024	12.0
1-Methoxy-2-propyl acetate	LAL2	February	2024	7.5

1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL2	February	2024	19.0
Methylene chloride	LAL2	February	2024	1.2
Cyclotrisiloxane, hexamethyl-	LAL2	February	2024	2.9
Acetic acid, methyl ester	LAL2	February	2024	0.7
Benzaldehyde**	LAL2	February	2024	0.9
m/p-Xylene	LAL2	February	2024	0.7
2-Propanol, 1-methoxy-	LAL3	February	2024	78.0
2,6-Diphenyl-p-benzoquinone	LAL3	February	2024	123.0
Ethyl Acetate	LAL3	February	2024	20.0
1-Methoxy-2-propyl acetate	LAL3	February	2024	17.0
Benzoic acid	LAL3	February	2024	10.0
Methylene chloride	LAL3	February	2024	3.1
2-Phenacyl-quinoxaline	LAL3	February	2024	7.4
Benzaldehyde**	LAL3	February	2024	2.8
Phenol	LAL3	February	2024	2.0
Phenylmaleic anhydride	LAL3	February	2024	3.4
2,6-Diphenyl-p-benzoquinone	LAL5	February	2024	187.0
2-Propanol, 1-methoxy-	LAL5	February	2024	29.0
Ethyl Acetate	LAL5	February	2024	9.7
Benzoic acid	LAL5	February	2024	6.9
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL5	February	2024	20.0
1-Methoxy-2-propyl acetate	LAL5	February	2024	4.8
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	February	2024	13.0
Benzaldehyde**	LAL5	February	2024	2.4
Phenylmaleic anhydride	LAL5	February	2024	2.8
Methylene chloride	LAL5	February	2024	1.2
2-Propanol, 1-methoxy-	LAL6	February	2024	108.0
Toluene	LAL6	February	2024	69.0
m/p-Xylene	LAL6	February	2024	71.0
2,6-Diphenyl-p-benzoquinone	LAL6	February	2024	167.0
Cyclohexane	LAL6	February	2024	43.0
1-Methoxy-2-propyl acetate	LAL6	February	2024	28.0
Ethylbenzene	LAL6	February	2024	22.0
o-Xylene	LAL6	February	2024	22.0
Ethyl Acetate	LAL6	February	2024	18.0
Benzoic acid	LAL6	February	2024	15.0
2-Propanol, 1-methoxy-	LAL8	February	2024	127.0
1-Methoxy-2-propyl acetate	LAL8	February	2024	64.0
2,6-Diphenyl-p-benzoquinone	LAL8	February	2024	123.0
Ethyl Acetate	LAL8	February	2024	24.0
Toluene	LAL8	February	2024	15.0
m/p-Xylene	LAL8	February	2024	14.0
Cyclohexane	LAL8	February	2024	11.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	February	2024	21.0
o-Xylene	LAL8	February	2024	5.2
Methylene chloride	LAL8	February	2024	3.7

2-Propanol, 1-methoxy-	LAL9	February	2024	71.0
2,6-Diphenyl-p-benzoquinone	LAL9	February	2024	119.0
Ethyl Acetate	LAL9	February	2024	17.0
1-Methoxy-2-propyl acetate	LAL9	February	2024	16.0
Didecyl phthalate	LAL9	February	2024	51.0
Methylene chloride	LAL9	February	2024	3.4
Benzoic acid	LAL9	February	2024	4.5
Benzaldehyde**	LAL9	February	2024	3.1
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL9	February	2024	10.0
Phenol	LAL9	February	2024	1.9
2-Propanol, 1-methoxy-	LAL1	March	2024	60.1
Trichloromonofluoromethane	LAL1	March	2024	10.3
Methylene chloride	LAL1	March	2024	6.1
Nonane	LAL1	March	2024	7.1
Toluene	LAL1	March	2024	4.2
Benzaldehyde**	LAL1	March	2024	4.6
Acetic acid, butyl ester	LAL1	March	2024	3.8
Cyclopentasiloxane, decamethyl-	LAL1	March	2024	11.8
m/p-Xylene	LAL1	March	2024	3.4
Benzoic acid	LAL2	March	2024	22.4
2-Propanol, 1-methoxy-	LAL2	March	2024	15.2
Trichloromonofluoromethane	LAL2	March	2024	18.6
Nonanal**	LAL2	March	2024	12.7
Methylene chloride	LAL2	March	2024	4.9
Cyclotrisiloxane, hexamethyl-	LAL2	March	2024	12.1
Pentacosane	LAL2	March	2024	17.8
Phenylmaleic anhydride	LAL2	March	2024	6.4
Benzaldehyde**	LAL2	March	2024	3.7
Heptadecane, 2,6,10,15-tetramethyl-	LAL3	March	2024	53.1
Tetracosane	LAL3	March	2024	39.6
Heneicosane	LAL3	March	2024	22.8
Octadecane	LAL3	March	2024	7.5
Cyclotrisiloxane, hexamethyl-	LAL3	March	2024	4.7
Benzaldehyde**	LAL3	March	2024	2.0
Acetophenone**	LAL3	March	2024	1.6
Nonanal**	LAL3	March	2024	1.7
Cyclotetrasiloxane, octamethyl-	LAL3	March	2024	2.7
Cyclotrisiloxane, hexamethyl-	LAL5	March	2024	7.5
Nonanal**	LAL5	March	2024	2.1
Trichloromonofluoromethane	LAL5	March	2024	1.8
Benzaldehyde**	LAL5	March	2024	1.3
1-Hexanol, 2-ethyl-	LAL5	March	2024	1.5
Acetophenone**	LAL5	March	2024	1.0
Cyclotetrasiloxane, octamethyl-	LAL5	March	2024	2.3
2-Propanol, 1-methoxy-	LAL5	March	2024	0.6
Cyclopentasiloxane, decamethyl-	LAL5	March	2024	2.5

Cyclotrisiloxane, hexamethyl-	LAL6	March	2024	8.1
Diethyl Phthalate	LAL6	March	2024	6.0
Benzoic acid	LAL6	March	2024	2.7
Benzaldehyde**	LAL6	March	2024	2.3
Nonanal**	LAL6	March	2024	2.9
Acetophenone**	LAL6	March	2024	1.8
Phenylmaleic anhydride	LAL6	March	2024	1.9
1-Hexanol, 2-ethyl-	LAL6	March	2024	1.3
Cyclotetrasiloxane, octamethyl-	LAL6	March	2024	3.0
Nonanal**	LAL9	March	2024	3.1
Phenol	LAL9	March	2024	1.9
Trichloromonofluoromethane	LAL9	March	2024	2.7
Benzaldehyde**	LAL9	March	2024	1.7
Cyclotrisiloxane, hexamethyl-	LAL9	March	2024	3.4
Acetophenone**	LAL9	March	2024	1.7
1-Hexanol, 2-ethyl-	LAL9	March	2024	1.6
Benzene	LAL9	March	2024	0.7
Isopropyl myristate	LAL9	March	2024	1.8
2-Propanol, 1-methoxy-	LAL10	March	2024	12.7
Trichloromonofluoromethane	LAL10	March	2024	15.4
Benzoic acid	LAL10	March	2024	9.8
Pentacosane	LAL10	March	2024	19.2
Nonanal**	LAL10	March	2024	6.7
Methylene chloride	LAL10	March	2024	3.9
Cyclotrisiloxane, hexamethyl-	LAL10	March	2024	9.5
Benzaldehyde**	LAL10	March	2024	3.7
Phenol	LAL10	March	2024	2.6
Nonanal**	LAL1	April	2024	6.4
Cyclotrisiloxane, hexamethyl-	LAL1	April	2024	8.5
Benzaldehyde**	LAL1	April	2024	1.6
1-Hexanol, 2-ethyl-	LAL1	April	2024	1.9
Acetophenone**	LAL1	April	2024	1.3
Acetone	LAL1	April	2024	0.6
Cyclotetrasiloxane, octamethyl-	LAL1	April	2024	3.1
Silanediol, dimethyl-	LAL1	April	2024	0.9
Decanal**	LAL1	April	2024	1.5
Cyclotrisiloxane, hexamethyl-	LAL2	April	2024	3.0
Acetone	LAL2	April	2024	0.4
1-Hexanol, 2-ethyl-	LAL2	April	2024	0.8
Pentacosane	LAL2	April	2024	2.0
Benzaldehyde**	LAL2	April	2024	0.5
Nonanal**	LAL2	April	2024	0.7
Benzene	LAL2	April	2024	0.4
Acetophenone**	LAL2	April	2024	0.5
Cyclotetrasiloxane, octamethyl-	LAL2	April	2024	1.1
Octane	LAL2	April	2024	0.3

Nonanal**	LAL3	April	2024	8.9
Pentacosane	LAL3	April	2024	17.7
Cyclotrisiloxane, hexamethyl-	LAL3	April	2024	5.2
Benzaldehyde**	LAL3	April	2024	2.1
Tetracosane	LAL3	April	2024	6.4
1-Hexanol, 2-ethyl-	LAL3	April	2024	2.2
Acetophenone**	LAL3	April	2024	1.5
Benzoic acid	LAL3	April	2024	1.5
Benzothiazole	LAL3	April	2024	1.6
Tetracosane	LAL4	April	2024	48.8
Heneicosane	LAL4	April	2024	34.1
Benzoic acid	LAL4	April	2024	5.8
Nonanal**	LAL4	April	2024	5.6
Cyclotrisiloxane, hexamethyl-	LAL4	April	2024	8.1
Acetophenone**	LAL4	April	2024	3.8
Benzaldehyde**	LAL4	April	2024	2.7
Styrene	LAL4	April	2024	1.6
Cyclotetrasiloxane, octamethyl-	LAL4	April	2024	3.3
Nonanal**	LAL5	April	2024	5.5
2-Propanol, 1-methoxy-	LAL5	April	2024	1.6
Benzaldehyde**	LAL5	April	2024	1.7
Cyclotrisiloxane, hexamethyl-	LAL5	April	2024	3.3
1-Hexanol, 2-ethyl-	LAL5	April	2024	1.6
Acetophenone**	LAL5	April	2024	1.3
Benzoic acid	LAL5	April	2024	1.3
Isopropyl myristate	LAL5	April	2024	2.4
Decanal**	LAL5	April	2024	1.4
Nonanal**	LAL6	April	2024	5.1
Acetophenone**	LAL6	April	2024	4.1
Benzaldehyde**	LAL6	April	2024	3.2
Cyclotrisiloxane, hexamethyl-	LAL6	April	2024	4.9
2-Propanol, 1-methoxy-	LAL6	April	2024	1.1
Phenol	LAL6	April	2024	1.1
Acetone	LAL6	April	2024	0.7
Cyclotetrasiloxane, octamethyl-	LAL6	April	2024	3.2
Benzenecarbothioic acid	LAL6	April	2024	1.1
Nonanal**	LAL8	April	2024	3.8
Cyclotrisiloxane, hexamethyl-	LAL8	April	2024	5.5
2-Propanol, 1-methoxy-	LAL8	April	2024	1.9
Benzaldehyde**	LAL8	April	2024	1.9
1-Hexanol, 2-ethyl-	LAL8	April	2024	2.0
Acetophenone**	LAL8	April	2024	1.5
Pentacosane	LAL8	April	2024	3.3
Benzoic acid	LAL8	April	2024	1.1
Decanal**	LAL8	April	2024	1.1
2-Propanol, 1-methoxy-	LAL9	April	2024	9.8

Nonanal**	LAL9	April	2024	4.7
Methylene chloride	LAL9	April	2024	2.7
Benzaldehyde**	LAL9	April	2024	3.4
Cyclotrisiloxane, hexamethyl-	LAL9	April	2024	5.4
Acetophenone**	LAL9	April	2024	2.5
1-Hexanol, 2-ethyl-	LAL9	April	2024	2.7
Toluene	LAL9	April	2024	1.9
Phenol	LAL9	April	2024	1.6
Benzoic acid	LAL10	April	2024	17.8
Ethylbenzene	LAL10	April	2024	7.8
Nonanal**	LAL10	April	2024	9.6
m/p-Xylene	LAL10	April	2024	6.2
Pentacosane	LAL10	April	2024	20.1
Acetone	LAL10	April	2024	2.3
Phenylmaleic anhydride	LAL10	April	2024	5.6
o-Xylene	LAL10	April	2024	3.1
Benzaldehyde**	LAL10	April	2024	3.0
2,5-Cyclohexadiene-1,4-dione, 2,5-bis(1,1-dimethylpropyl)-	LAL1	May/June	2024	11.0
1-Hexanol, 2-ethyl-	LAL1	May/June	2024	1.5
Cyclohexanone	LAL1	May/June	2024	1.1
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL1	May/June	2024	4.1
Nonanal**	LAL1	May/June	2024	1.4
Cyclohexane, isocyanato-	LAL1	May/June	2024	0.9
Benzaldehyde**	LAL1	May/June	2024	0.7
Cyclotrisiloxane, hexamethyl-	LAL1	May/June	2024	1.4
Cyclotetrasiloxane, octamethyl-	LAL1	May/June	2024	1.9
Benzothiazole	LAL1	May/June	2024	0.6
Isopropyl myristate	LAL2	May/June	2024	5.0
Acetophenone**	LAL2	May/June	2024	1.3
Benzaldehyde**	LAL2	May/June	2024	1.1
Nonanal**	LAL2	May/June	2024	1.3
Cyclotrisiloxane, hexamethyl-	LAL2	May/June	2024	1.5
Acetic acid	LAL2	May/June	2024	0.3
Silanediol, dimethyl-	LAL2	May/June	2024	0.4
Benzene	LAL2	May/June	2024	0.3
Phenol	LAL2	May/June	2024	0.4
Nonanal**	LAL3	May/June	2024	4.1
Cyclotrisiloxane, hexamethyl-	LAL3	May/June	2024	1.5
Acetophenone**	LAL3	May/June	2024	1.6
Benzaldehyde**	LAL3	May/June	2024	2.2
Cyclotetrasiloxane, octamethyl-	LAL3	May/June	2024	1.5
Cyclopentasiloxane, decamethyl-	LAL3	May/June	2024	0.7
1-Hexanol, 2-ethyl-	LAL3	May/June	2024	0.3
m/p-Xylene	LAL3	May/June	2024	0.5
Benzene, 1,2,4-trimethyl-	LAL3	May/June	2024	0.4
2,5-Cyclohexadiene-1,4-dione, 2,5-bis(1,1-dimethylpropyl)-	LAL5	May/June	2024	7.2

1-Hexanol, 2-ethyl-	LAL5	May/June	2024	1.4
Benzaldehyde**	LAL5	May/June	2024	0.9
Cyclohexanone	LAL5	May/June	2024	0.9
Nonanal**	LAL5	May/June	2024	1.2
Cyclohexane, isocyanato-	LAL5	May/June	2024	1.0
Benzamide, N,N-dimethyl-	LAL5	May/June	2024	1.0
Phenol	LAL5	May/June	2024	0.5
Acetophenone**	LAL5	May/June	2024	0.6
Benzoic acid	LAL6	May/June	2024	19.0
Phenylmaleic anhydride	LAL6	May/June	2024	5.3
Acetophenone**	LAL6	May/June	2024	3.2
Benzaldehyde**	LAL6	May/June	2024	2.6
Isopropyl myristate	LAL6	May/June	2024	5.1
Benzoylformic acid	LAL6	May/June	2024	1.7
Nonanal**	LAL6	May/June	2024	1.5
Phenol	LAL6	May/June	2024	0.6
Acetic acid	LAL6	May/June	2024	0.2
Benzoic acid	LAL8	May/June	2024	14.0
Squalene	LAL8	May/June	2024	14.0
Nonanal**	LAL8	May/June	2024	4.4
Phenylmaleic anhydride	LAL8	May/June	2024	3.6
Benzaldehyde**	LAL8	May/June	2024	2.1
Acetophenone**	LAL8	May/June	2024	2.2
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	May/June	2024	4.6
Isopropyl myristate	LAL8	May/June	2024	2.9
Cyclotrisiloxane, hexamethyl-	LAL8	May/June	2024	1.8
Nonanal**	LAL9	May/June	2024	3.2
Benzoic acid	LAL9	May/June	2024	1.9
Benzaldehyde**	LAL9	May/June	2024	1.5
Isopropyl myristate	LAL9	May/June	2024	3.4
Cyclotrisiloxane, hexamethyl-	LAL9	May/June	2024	2.4
Acetophenone**	LAL9	May/June	2024	1.3
Phenylmaleic anhydride	LAL9	May/June	2024	1.6
Octane	LAL9	May/June	2024	1.0
Acetic acid	LAL9	May/June	2024	0.4
Isopropyl myristate	LAL10	May/June	2024	4.1
Benzoic acid	LAL10	May/June	2024	1.6
Benzaldehyde**	LAL10	May/June	2024	1.3
Acetophenone**	LAL10	May/June	2024	1.5
Phenylmaleic anhydride	LAL10	May/June	2024	1.3
Cyclotrisiloxane, hexamethyl-	LAL10	May/June	2024	1.5
Nonanal**	LAL10	May/June	2024	0.8
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL10	May/June	2024	2.0
Phenol	LAL10	May/June	2024	0.4
Cyclotetrasiloxane, octamethyl-	LAL10	May/June	2024	1.2
Benzoic acid	LAL1	June/July	2024	8.0

m/p-Xylene	LAL1	June/July	2024	2.7
Cyclotrisiloxane, hexamethyl-	LAL1	June/July	2024	4.7
Benzaldehyde**	LAL1	June/July	2024	2.1
Acetophenone**	LAL1	June/July	2024	1.9
Phenylmaleic anhydride	LAL1	June/July	2024	2.5
Nonanal**	LAL1	June/July	2024	1.7
o-Xylene	LAL1	June/July	2024	1.2
1-Hexanol, 2-ethyl-	LAL1	June/July	2024	1.3
Benzoic acid	LAL2	June/July	2024	16.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL2	June/July	2024	21.0
Acetophenone**	LAL2	June/July	2024	2.8
Phenylmaleic anhydride	LAL2	June/July	2024	4.1
Benzaldehyde**	LAL2	June/July	2024	2.1
2-Phenacyl-quinoxaline	LAL2	June/July	2024	3.5
Benzoylformic acid	LAL2	June/July	2024	1.6
Cyclotrisiloxane, hexamethyl-	LAL2	June/July	2024	2.1
Phenylglyoxal	LAL2	June/July	2024	1.0
Benzoic acid	LAL3	June/July	2024	17.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL3	June/July	2024	33.0
Phenylmaleic anhydride	LAL3	June/July	2024	4.2
Acetophenone**	LAL3	June/July	2024	2.5
Benzaldehyde**	LAL3	June/July	2024	2.1
Cyclotrisiloxane, hexamethyl-	LAL3	June/July	2024	3.8
2-Phenacyl-quinoxaline	LAL3	June/July	2024	4.0
Benzoylformic acid	LAL3	June/July	2024	1.7
Nonanal**	LAL3	June/July	2024	1.4
Benzoic acid	LAL4	June/July	2024	24.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL4	June/July	2024	52.0
Phenylmaleic anhydride	LAL4	June/July	2024	6.3
Pentacosane	LAL4	June/July	2024	12.0
2-Phenacyl-quinoxaline	LAL4	June/July	2024	8.5
Benzaldehyde**	LAL4	June/July	2024	3.6
Acetophenone**	LAL4	June/July	2024	3.3
Isopropyl myristate	LAL4	June/July	2024	6.1
Benzoylformic acid	LAL4	June/July	2024	2.1
Benzoic acid	LAL5	June/July	2024	18.0
Docosane	LAL5	June/July	2024	31.0
Pentacosane	LAL5	June/July	2024	34.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	June/July	2024	38.0
Isopropyl myristate	LAL5	June/July	2024	15.0
Tetracosane	LAL5	June/July	2024	12.0
Phenylmaleic anhydride	LAL5	June/July	2024	4.3
Acetophenone**	LAL5	June/July	2024	2.5
Benzaldehyde**	LAL5	June/July	2024	2.1
Docosane	LAL6	June/July	2024	89.0
Benzoic acid	LAL6	June/July	2024	21.0

Eicosane	LAL6	June/July	2024	41.0
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL6	June/July	2024	26.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL6	June/July	2024	27.0
Phenylmaleic anhydride	LAL6	June/July	2024	4.8
Acetophenone**	LAL6	June/July	2024	2.8
Benzoic acid	LAL8	June/July	2024	20.0
Docosane	LAL8	June/July	2024	21.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	June/July	2024	12.0
Phenylmaleic anhydride	LAL8	June/July	2024	4.4
2-Phenacyl-quinoxaline	LAL8	June/July	2024	6.1
Acetophenone**	LAL8	June/July	2024	2.7
Benzoic acid	LAL9	June/July	2024	25.0
Nonanal**	LAL9	June/July	2024	16.0
Benzaldehyde**	LAL9	June/July	2024	12.0
Decane	LAL9	June/July	2024	14.0
1-Hexanol, 2-ethyl-	LAL9	June/July	2024	8.8
Toluene	LAL9	June/July	2024	4.9
Acetic acid, butyl ester	LAL9	June/July	2024	4.6
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL10	June/July	2024	95.0
Benzoic acid	LAL10	June/July	2024	25.0
Docosane	LAL10	June/July	2024	38.0
Benzaldehyde**	LAL10	June/July	2024	12.0
Decane	LAL10	June/July	2024	14.0
1-Hexanol, 2-ethyl-	LAL10	June/July	2024	8.6
Nonanal**	LAL10	June/July	2024	9.1
Pentacosane	LAL10	June/July	2024	20.0
Benzoic acid	LAL2	July/August	2024	26.0
Nonanal**	LAL2	July/August	2024	12.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL2	July/August	2024	32.0
Acetophenone**	LAL2	July/August	2024	3.9
Benzaldehyde**	LAL2	July/August	2024	3.3
Phenylmaleic anhydride	LAL2	July/August	2024	4.7
Cyclotrisiloxane, hexamethyl-	LAL2	July/August	2024	4.0
Pentacosane	LAL2	July/August	2024	6.2
1-Hexanol, 2-ethyl-	LAL2	July/August	2024	2.3
Acetic acid, butyl ester	LAL1	July/August	2024	105.0
Benzoic acid	LAL1	July/August	2024	31.0
Isopropyl Alcohol	LAL1	July/August	2024	11.0
Ethanol, 2-butoxy-	LAL1	July/August	2024	11.0
1-Hexanol, 2-ethyl-	LAL1	July/August	2024	12.0
Benzaldehyde**	LAL1	July/August	2024	8.7
Benzyl alcohol	LAL1	July/August	2024	8.2
1-Butanol	LAL1	July/August	2024	5.5
Nonanal**	LAL1	July/August	2024	7.6
Benzoic acid	LAL3	July/August	2024	30.0
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL3	July/August	2024	82.0

Nonanal**	LAL3	July/August	2024	12.0
Acetophenone**	LAL3	July/August	2024	3.9
Phenylmaleic anhydride	LAL3	July/August	2024	5.2
Benzaldehyde**	LAL3	July/August	2024	3.1
Pentacosane	LAL3	July/August	2024	7.1
Nonanoic acid	LAL3	July/August	2024	3.1
2-Phenacyl-quinoxaline	LAL3	July/August	2024	4.4
Silanediol, dimethyl-	LAL3	July/August	2024	1.6
Benzoic acid	LAL5	July/August	2024	23.0
Benzaldehyde**	LAL5	July/August	2024	4.2
Phenylmaleic anhydride	LAL5	July/August	2024	5.9
Acetophenone**	LAL5	July/August	2024	4.0
Pentacosane	LAL5	July/August	2024	8.2
2-Phenacyl-quinoxaline	LAL5	July/August	2024	4.1
Silanediol, dimethyl-	LAL5	July/August	2024	1.2
Benzoylformic acid	LAL5	July/August	2024	1.7
Acetic acid	LAL5	July/August	2024	0.6
Benzoic acid	LAL6	July/August	2024	23.0
Docosane	LAL6	July/August	2024	18.0
Acetophenone**	LAL6	July/August	2024	4.0
Phenylmaleic anhydride	LAL6	July/August	2024	5.4
Eicosane	LAL6	July/August	2024	9.0
Benzaldehyde**	LAL6	July/August	2024	3.1
Pentacosane	LAL6	July/August	2024	8.9
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL6	July/August	2024	8.2
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	July/August	2024	129.0
Benzoic acid	LAL8	July/August	2024	20.0
Docosane	LAL8	July/August	2024	22.0
Nonanal**	LAL8	July/August	2024	7.9
Benzaldehyde**	LAL8	July/August	2024	2.8
Acetophenone**	LAL8	July/August	2024	2.7
Phenylmaleic anhydride	LAL8	July/August	2024	3.8
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL9	July/August	2024	63.0
Benzoic acid	LAL9	July/August	2024	13.0
Docosane	LAL9	July/August	2024	16.0
Benzaldehyde**	LAL9	July/August	2024	2.2
Acetophenone**	LAL9	July/August	2024	2.0
Phenylmaleic anhydride	LAL9	July/August	2024	3.0
Cyclotrisiloxane, hexamethyl-	LAL9	July/August	2024	2.7
1-Hexanol, 2-ethyl-	LAL9	July/August	2024	1.5
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL10	July/August	2024	31.0
Hexanedioic acid, bis(2-ethylhexyl) ester	LAL10	July/August	2024	8.0
Isopropyl myristate	LAL10	July/August	2024	2.4
Toluene	LAL10	July/August	2024	0.7
m/p-Xylene	LAL10	July/August	2024	0.6
Pentane, 2-methyl-	LAL10	July/August	2024	0.5

Benzoic acid	LAL2	August/September	2024	10.6
Nonanal**	LAL2	August/September	2024	3.7
Acetophenone**	LAL2	August/September	2024	1.8
Benzaldehyde**	LAL2	August/September	2024	1.5
Phenylmaleic anhydride	LAL2	August/September	2024	2.1
Pentacosane	LAL2	August/September	2024	4.1
Nonanoic acid	LAL2	August/September	2024	1.6
Benzene	LAL2	August/September	2024	0.6
Cyclotrisiloxane, hexamethyl-	LAL2	August/September	2024	1.5
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL3	August/September	2024	38.5
Benzoic acid	LAL3	August/September	2024	9.6
Tetracosane	LAL3	August/September	2024	13.1
Docosane	LAL3	August/September	2024	10.6
Phenylmaleic anhydride	LAL3	August/September	2024	2.6
Benzaldehyde**	LAL3	August/September	2024	1.2
Acetophenone**	LAL3	August/September	2024	1.4
Nonanal**	LAL3	August/September	2024	1.1
Cyclotrisiloxane, hexamethyl-	LAL3	August/September	2024	1.4
Acetic acid, butyl ester	LAL1	August/September	2024	12.9
Benzoic acid	LAL1	August/September	2024	8.0
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL1	August/September	2024	10.8
Nonanal**	LAL1	August/September	2024	3.7
Benzaldehyde**	LAL1	August/September	2024	2.2
1-Hexanol, 2-ethyl-	LAL1	August/September	2024	1.6
Nonanoic acid	LAL1	August/September	2024	1.6
Phenylmaleic anhydride	LAL1	August/September	2024	1.7
Acetophenone**	LAL1	August/September	2024	1.1
Benzoic acid	LAL5	August/September	2024	11.3
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL5	August/September	2024	17.6
Phenylmaleic anhydride	LAL5	August/September	2024	2.6
Benzaldehyde**	LAL5	August/September	2024	1.5
Acetophenone**	LAL5	August/September	2024	1.4
2-Phenacyl-quinoxaline	LAL5	August/September	2024	2.3
Cyclotrisiloxane, hexamethyl-	LAL5	August/September	2024	1.6
Benzoylformic acid	LAL5	August/September	2024	0.9
Acetic acid	LAL5	August/September	2024	0.4
Benzoic acid	LAL6	August/September	2024	16.3
Phenylmaleic anhydride	LAL6	August/September	2024	4.1
Acetophenone**	LAL6	August/September	2024	1.8
Benzaldehyde**	LAL6	August/September	2024	1.6
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL6	August/September	2024	5.2
1-Hexanol, 2-ethyl-	LAL6	August/September	2024	1.5
Benzoylformic acid	LAL6	August/September	2024	1.1
Acetic acid	LAL6	August/September	2024	0.4
Phenylglyoxal	LAL6	August/September	2024	0.8
5-Hydroxymethylfurfural	LAL8	August/September	2024	17.3

Benzoic acid	LAL8	August/September	2024	14.7
1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-	LAL8	August/September	2024	11.1
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL8	August/September	2024	16.7
Phenylmaleic anhydride	LAL8	August/September	2024	2.7
Tetracosane	LAL8	August/September	2024	5.1
Benzaldehyde**	LAL8	August/September	2024	1.5
Acetic acid	LAL8	August/September	2024	0.8
Furfural	LAL8	August/September	2024	1.3
Benzoic acid	LAL9	August/September	2024	15.8
Phenylmaleic anhydride	LAL9	August/September	2024	3.4
Diethyl Phthalate	LAL9	August/September	2024	3.8
2-Phenacyl-quinoxaline	LAL9	August/September	2024	3.9
Benzaldehyde**	LAL9	August/September	2024	1.5
Acetophenone**	LAL9	August/September	2024	1.4
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL9	August/September	2024	4.4
Nonanal**	LAL9	August/September	2024	1.2
Benzoic acid	LAL10	August/September	2024	11.5
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	LAL10	August/September	2024	20.2
Phenylmaleic anhydride	LAL10	August/September	2024	3.0
Benzaldehyde**	LAL10	August/September	2024	1.5
Acetophenone**	LAL10	August/September	2024	1.5
Cyclotrisiloxane, hexamethyl-	LAL10	August/September	2024	2.0
Benzoylformic acid	LAL10	August/September	2024	0.9
Acetic acid	LAL10	August/September	2024	0.3

B.2 PCBs data

Site	Reporting Month	Year	Species	ug/m3 result
LAL1 - Springfield farm	August	2023	PCB BZ#81	0.0000035
LAL1 - Springfield farm	August	2023	PCB BZ#77	0.0000315
LAL1 - Springfield farm	August	2023	PCB BZ#123	0.0000047
LAL1 - Springfield farm	August	2023	PCB BZ#118	0.0000689
LAL1 - Springfield farm	August	2023	PCB BZ#114	0.0000047
LAL1 - Springfield farm	August	2023	PCB BZ#105	0.0000280
LAL1 - Springfield farm	August	2023	PCB BZ#126	0.0000035
LAL1 - Springfield farm	August	2023	PCB BZ#167	0.0000012
LAL1 - Springfield farm	August	2023	PCB BZ#156	0.0000023

LAL1 - Springfield farm	August	2023	PCB BZ#157	0.0000012
LAL1 - Springfield farm	August	2023	PCB BZ#169	0.0000012
LAL1 - Springfield farm	August	2023	PCB BZ#189	0.0000012
LAL1 - Springfield farm	September	2023	PCB BZ#81	0.0000220
LAL1 - Springfield farm	September	2023	PCB BZ#77	0.0002438
LAL1 - Springfield farm	September	2023	PCB BZ#123	0.0001378
LAL1 - Springfield farm	September	2023	PCB BZ#118	0.0022193
LAL1 - Springfield farm	September	2023	PCB BZ#114	0.0000565
LAL1 - Springfield farm	September	2023	PCB BZ#105	0.0006447
LAL1 - Springfield farm	September	2023	PCB BZ#126	0.0000193
LAL1 - Springfield farm	September	2023	PCB BZ#167	0.0002562
LAL1 - Springfield farm	September	2023	PCB BZ#156	0.0001102
LAL1 - Springfield farm	September	2023	PCB BZ#157	0.0000248
LAL1 - Springfield farm	September	2023	PCB BZ#169	0.0000014
LAL1 - Springfield farm	September	2023	PCB BZ#189	0.0000124
LAL1 - Springfield farm	October	2023	PCB BZ#81	0.0000108
LAL1 - Springfield farm	October	2023	PCB BZ#77	0.0001097
LAL1 - Springfield farm	October	2023	PCB BZ#123	0.0000398
LAL1 - Springfield farm	October	2023	PCB BZ#118	0.0008593
LAL1 - Springfield farm	October	2023	PCB BZ#114	0.0000205
LAL1 - Springfield farm	October	2023	PCB BZ#105	0.0002326
LAL1 - Springfield farm	October	2023	PCB BZ#126	0.0000108
LAL1 - Springfield farm	October	2023	PCB BZ#167	0.0000241
LAL1 - Springfield farm	October	2023	PCB BZ#156	0.0000494
LAL1 - Springfield farm	October	2023	PCB BZ#157	0.0000108
LAL1 - Springfield farm	October	2023	PCB BZ#169	0.0000072
LAL1 - Springfield farm	October	2023	PCB BZ#189	0.0000060
LAL1 - Springfield farm	November	2023	PCB BZ#81	0.0000030
LAL1 - Springfield farm	November	2023	PCB BZ#77	0.0000030
LAL1 - Springfield farm	November	2023	PCB BZ#123	0.0000061

LAL1 - Springfield farm	November	2023	PCB BZ#118	0.0002371
LAL1 - Springfield farm	November	2023	PCB BZ#114	0.0000015
LAL1 - Springfield farm	November	2023	PCB BZ#105	0.0000790
LAL1 - Springfield farm	November	2023	PCB BZ#126	0.0000015
LAL1 - Springfield farm	November	2023	PCB BZ#167	0.0000046
LAL1 - Springfield farm	November	2023	PCB BZ#156	0.0000106
LAL1 - Springfield farm	November	2023	PCB BZ#157	0.0000015
LAL1 - Springfield farm	November	2023	PCB BZ#169	0.0000015
LAL1 - Springfield farm	November	2023	PCB BZ#189	0.0000015
LAL1 - Springfield farm	December	2023	PCB BZ#81	0.0000026
LAL1 - Springfield farm	December	2023	PCB BZ#77	0.0002107
LAL1 - Springfield farm	December	2023	PCB BZ#123	0.0000845
LAL1 - Springfield farm	December	2023	PCB BZ#118	0.0007726
LAL1 - Springfield farm	December	2023	PCB BZ#114	0.0000208
LAL1 - Springfield farm	December	2023	PCB BZ#105	0.0002458
LAL1 - Springfield farm	December	2023	PCB BZ#126	0.0000429
LAL1 - Springfield farm	December	2023	PCB BZ#167	0.0000208
LAL1 - Springfield farm	December	2023	PCB BZ#156	0.0000377
LAL1 - Springfield farm	December	2023	PCB BZ#157	0.0000078
LAL1 - Springfield farm	December	2023	PCB BZ#169	0.0000130
LAL1 - Springfield farm	December	2023	PCB BZ#189	0.0000026
LAL1 - Springfield farm	January	2024	PCB BZ#81	0.0000110
LAL1 - Springfield farm	January	2024	PCB BZ#77	0.0001060
LAL1 - Springfield farm	January	2024	PCB BZ#123	0.0000190
LAL1 - Springfield farm	January	2024	PCB BZ#118	0.0004980
LAL1 - Springfield farm	January	2024	PCB BZ#114	0.0000190
LAL1 - Springfield farm	January	2024	PCB BZ#105	0.0001720
LAL1 - Springfield farm	January	2024	PCB BZ#126	0.0000110
LAL1 - Springfield farm	January	2024	PCB BZ#167	0.0000240
LAL1 - Springfield farm	January	2024	PCB BZ#156	0.0000420

LAL1 - Springfield farm	January	2024	PCB BZ#157	0.0000090
LAL1 - Springfield farm	January	2024	PCB BZ#169	0.0000020
LAL1 - Springfield farm	January	2024	PCB BZ#189	0.0000060
LAL1 - Springfield farm	February	2024	PCB BZ#81	0.0000060
LAL1 - Springfield farm	February	2024	PCB BZ#77	0.0000820
LAL1 - Springfield farm	February	2024	PCB BZ#123	0.0000210
LAL1 - Springfield farm	February	2024	PCB BZ#118	0.0005030
LAL1 - Springfield farm	February	2024	PCB BZ#114	0.0000140
LAL1 - Springfield farm	February	2024	PCB BZ#105	0.0001530
LAL1 - Springfield farm	February	2024	PCB BZ#126	0.0000020
LAL1 - Springfield farm	February	2024	PCB BZ#167	0.0000150
LAL1 - Springfield farm	February	2024	PCB BZ#156	0.0000250
LAL1 - Springfield farm	February	2024	PCB BZ#157	0.0000070
LAL1 - Springfield farm	February	2024	PCB BZ#169	0.0000020
LAL1 - Springfield farm	February	2024	PCB BZ#189	0.0000040
LAL1 - Springfield farm	March	2024	PCB BZ#81	0.0000080
LAL1 - Springfield farm	March	2024	PCB BZ#77	0.0001150
LAL1 - Springfield farm	March	2024	PCB BZ#123	0.0000150
LAL1 - Springfield farm	March	2024	PCB BZ#118	0.0004340
LAL1 - Springfield farm	March	2024	PCB BZ#114	0.0000080
LAL1 - Springfield farm	March	2024	PCB BZ#105	0.0001580
LAL1 - Springfield farm	March	2024	PCB BZ#126	0.0000080
LAL1 - Springfield farm	March	2024	PCB BZ#167	0.0000170
LAL1 - Springfield farm	March	2024	PCB BZ#156	0.0000240
LAL1 - Springfield farm	March	2024	PCB BZ#157	0.0000060
LAL1 - Springfield farm	March	2024	PCB BZ#169	0.0000020
LAL1 - Springfield farm	March	2024	PCB BZ#189	0.0000020
LAL1 - Springfield farm	April	2024	PCB BZ#81	0.0000060
LAL1 - Springfield farm	April	2024	PCB BZ#77	0.0001150
LAL1 - Springfield farm	April	2024	PCB BZ#123	0.0000180

LAL1 - Springfield farm	April	2024	PCB BZ#118	0.0004410
LAL1 - Springfield farm	April	2024	PCB BZ#114	0.0000100
LAL1 - Springfield farm	April	2024	PCB BZ#105	0.0001670
LAL1 - Springfield farm	April	2024	PCB BZ#126	0.0000040
LAL1 - Springfield farm	April	2024	PCB BZ#167	0.0000040
LAL1 - Springfield farm	April	2024	PCB BZ#156	0.0000250
LAL1 - Springfield farm	April	2024	PCB BZ#157	0.0000040
LAL1 - Springfield farm	April	2024	PCB BZ#169	0.0000010
LAL1 - Springfield farm	April	2024	PCB BZ#189	0.0000010
LAL1 - Springfield farm	May / June	2024	PCB BZ#81	0.0000010
LAL1 - Springfield farm	May / June	2024	PCB BZ#77	0.0001170
LAL1 - Springfield farm	May / June	2024	PCB BZ#123	0.0000310
LAL1 - Springfield farm	May / June	2024	PCB BZ#118	0.0007070
LAL1 - Springfield farm	May / June	2024	PCB BZ#114	0.0000180
LAL1 - Springfield farm	May / June	2024	PCB BZ#105	0.0002250
LAL1 - Springfield farm	May / June	2024	PCB BZ#126	0.0000120
LAL1 - Springfield farm	May / June	2024	PCB BZ#167	0.0000010
LAL1 - Springfield farm	May / June	2024	PCB BZ#156	0.0000470
LAL1 - Springfield farm	May / June	2024	PCB BZ#157	0.0000120
LAL1 - Springfield farm	May / June	2024	PCB BZ#169	0.0000010
LAL1 - Springfield farm	May / June	2024	PCB BZ#189	0.0000050
LAL1 - Springfield farm	June / July	2024	PCB BZ#81	0.0000160
LAL1 - Springfield farm	June / July	2024	PCB BZ#77	0.0001650
LAL1 - Springfield farm	June / July	2024	PCB BZ#123	0.0000660
LAL1 - Springfield farm	June / July	2024	PCB BZ#118	0.0011740
LAL1 - Springfield farm	June / July	2024	PCB BZ#114	0.0000330
LAL1 - Springfield farm	June / July	2024	PCB BZ#105	0.0003700
LAL1 - Springfield farm	June / July	2024	PCB BZ#126	0.0000150
LAL1 - Springfield farm	June / July	2024	PCB BZ#167	0.0000400
LAL1 - Springfield farm	June / July	2024	PCB BZ#156	0.0000610

LAL1 - Springfield farm	June / July	2024	PCB BZ#157	0.0000160
LAL1 - Springfield farm	June / July	2024	PCB BZ#169	0.0000050
LAL1 - Springfield farm	June / July	2024	PCB BZ#189	0.0000150
LAL1 - Springfield farm	July / August	2024	PCB BZ#81	0.0000420
LAL1 - Springfield farm	July / August	2024	PCB BZ#77	0.0002540
LAL1 - Springfield farm	July / August	2024	PCB BZ#123	0.0001250
LAL1 - Springfield farm	July / August	2024	PCB BZ#118	0.0016630
LAL1 - Springfield farm	July / August	2024	PCB BZ#114	0.0000470
LAL1 - Springfield farm	July / August	2024	PCB BZ#105	0.0005040
LAL1 - Springfield farm	July / August	2024	PCB BZ#126	0.0000580
LAL1 - Springfield farm	July / August	2024	PCB BZ#167	0.0000650
LAL1 - Springfield farm	July / August	2024	PCB BZ#156	0.0001000
LAL1 - Springfield farm	July / August	2024	PCB BZ#157	0.0000260
LAL1 - Springfield farm	July / August	2024	PCB BZ#169	0.0000020
LAL1 - Springfield farm	July / August	2024	PCB BZ#189	0.0000220
LAL1 - Springfield farm	August / September	2024	PCB BZ#81	0.0000180
LAL1 - Springfield farm	August / September	2024	PCB BZ#77	0.0001290
LAL1 - Springfield farm	August / September	2024	PCB BZ#123	0.0000450
LAL1 - Springfield farm	August / September	2024	PCB BZ#118	0.0008190
LAL1 - Springfield farm	August / September	2024	PCB BZ#114	0.0000290
LAL1 - Springfield farm	August / September	2024	PCB BZ#105	0.0002330
LAL1 - Springfield farm	August / September	2024	PCB BZ#126	0.0000020
LAL1 - Springfield farm	August / September	2024	PCB BZ#167	0.0000330
LAL1 - Springfield farm	August / September	2024	PCB BZ#156	0.0000520
LAL1 - Springfield farm	August / September	2024	PCB BZ#157	0.0000110
LAL1 - Springfield farm	August / September	2024	PCB BZ#169	0.0000040
LAL1 - Springfield farm	August / September	2024	PCB BZ#189	0.0000100
LAL2 - Golf course	September	2023	PCB BZ#81	0.0000176
LAL2 - Golf course	September	2023	PCB BZ#77	0.0002392
LAL2 - Golf course	September	2023	PCB BZ#123	0.0000881

LAL2 - Golf course	September	2023	PCB BZ#118	0.0026240
LAL2 - Golf course	September	2023	PCB BZ#114	0.0000579
LAL2 - Golf course	September	2023	PCB BZ#105	0.0008285
LAL2 - Golf course	September	2023	PCB BZ#126	0.0000126
LAL2 - Golf course	September	2023	PCB BZ#167	0.0003626
LAL2 - Golf course	September	2023	PCB BZ#156	0.0001586
LAL2 - Golf course	September	2023	PCB BZ#157	0.0000302
LAL2 - Golf course	September	2023	PCB BZ#169	0.0000025
LAL2 - Golf course	September	2023	PCB BZ#189	0.0000076
LAL2 - Golf course	October	2023	PCB BZ#81	0.0000089
LAL2 - Golf course	October	2023	PCB BZ#77	0.0000343
LAL2 - Golf course	October	2023	PCB BZ#123	0.0000191
LAL2 - Golf course	October	2023	PCB BZ#118	0.0003379
LAL2 - Golf course	October	2023	PCB BZ#114	0.0000089
LAL2 - Golf course	October	2023	PCB BZ#105	0.0000978
LAL2 - Golf course	October	2023	PCB BZ#126	0.0000064
LAL2 - Golf course	October	2023	PCB BZ#167	0.0000533
LAL2 - Golf course	October	2023	PCB BZ#156	0.0000191
LAL2 - Golf course	October	2023	PCB BZ#157	0.0000038
LAL2 - Golf course	October	2023	PCB BZ#169	0.0000013
LAL2 - Golf course	October	2023	PCB BZ#189	0.0000025
LAL2 - Golf course	November	2023	PCB BZ#81	0.0000048
LAL2 - Golf course	November	2023	PCB BZ#77	0.0000679
LAL2 - Golf course	November	2023	PCB BZ#123	0.0000194
LAL2 - Golf course	November	2023	PCB BZ#118	0.0003554
LAL2 - Golf course	November	2023	PCB BZ#114	0.0000113
LAL2 - Golf course	November	2023	PCB BZ#105	0.0001228
LAL2 - Golf course	November	2023	PCB BZ#126	0.0000032
LAL2 - Golf course	November	2023	PCB BZ#167	0.0000485
LAL2 - Golf course	November	2023	PCB BZ#156	0.0000162

LAL2 - Golf course	November	2023	PCB BZ#157	0.0000016
LAL2 - Golf course	November	2023	PCB BZ#169	0.0000016
LAL2 - Golf course	November	2023	PCB BZ#189	0.0000016
LAL2 - Golf course	December	2023	PCB BZ#81	0.0000085
LAL2 - Golf course	December	2023	PCB BZ#77	0.0001991
LAL2 - Golf course	December	2023	PCB BZ#123	0.0001172
LAL2 - Golf course	December	2023	PCB BZ#118	0.0008036
LAL2 - Golf course	December	2023	PCB BZ#114	0.0000169
LAL2 - Golf course	December	2023	PCB BZ#105	0.0002514
LAL2 - Golf course	December	2023	PCB BZ#126	0.0000071
LAL2 - Golf course	December	2023	PCB BZ#167	0.0000254
LAL2 - Golf course	December	2023	PCB BZ#156	0.0000593
LAL2 - Golf course	December	2023	PCB BZ#157	0.0000155
LAL2 - Golf course	December	2023	PCB BZ#169	0.0000010
LAL2 - Golf course	December	2023	PCB BZ#189	0.0000113
LAL2 - Golf course	January	2024	PCB BZ#81	0.0000091
LAL2 - Golf course	January	2024	PCB BZ#77	0.0000660
LAL2 - Golf course	January	2024	PCB BZ#123	0.0000116
LAL2 - Golf course	January	2024	PCB BZ#118	0.0003766
LAL2 - Golf course	January	2024	PCB BZ#114	0.0000181
LAL2 - Golf course	January	2024	PCB BZ#105	0.0001359
LAL2 - Golf course	January	2024	PCB BZ#126	0.0000104
LAL2 - Golf course	January	2024	PCB BZ#167	0.0000155
LAL2 - Golf course	January	2024	PCB BZ#156	0.0000285
LAL2 - Golf course	January	2024	PCB BZ#157	0.0000065
LAL2 - Golf course	January	2024	PCB BZ#169	0.0000013
LAL2 - Golf course	January	2024	PCB BZ#189	0.0000052
LAL2 - Golf course	February	2024	PCB BZ#81	0.0000014
LAL2 - Golf course	February	2024	PCB BZ#77	0.0000501
LAL2 - Golf course	February	2024	PCB BZ#123	0.0000097

LAL2 - Golf course	February	2024	PCB BZ#118	0.0004064
LAL2 - Golf course	February	2024	PCB BZ#114	0.0000097
LAL2 - Golf course	February	2024	PCB BZ#105	0.0001239
LAL2 - Golf course	February	2024	PCB BZ#126	0.0000014
LAL2 - Golf course	February	2024	PCB BZ#167	0.0041757
LAL2 - Golf course	February	2024	PCB BZ#156	0.0000223
LAL2 - Golf course	February	2024	PCB BZ#157	0.0000056
LAL2 - Golf course	February	2024	PCB BZ#169	0.0000014
LAL2 - Golf course	February	2024	PCB BZ#189	0.0000028
LAL2 - Golf course	March	2024	PCB BZ#81	0.0000015
LAL2 - Golf course	March	2024	PCB BZ#77	0.0000742
LAL2 - Golf course	March	2024	PCB BZ#123	0.0000186
LAL2 - Golf course	March	2024	PCB BZ#118	0.0003417
LAL2 - Golf course	March	2024	PCB BZ#114	0.0000108
LAL2 - Golf course	March	2024	PCB BZ#105	0.0001221
LAL2 - Golf course	March	2024	PCB BZ#126	0.0000062
LAL2 - Golf course	March	2024	PCB BZ#167	0.0000062
LAL2 - Golf course	March	2024	PCB BZ#156	0.0000247
LAL2 - Golf course	March	2024	PCB BZ#157	0.0000031
LAL2 - Golf course	March	2024	PCB BZ#169	0.0000015
LAL2 - Golf course	March	2024	PCB BZ#189	0.0000015
LAL2 - Golf course	April	2024	PCB BZ#81	0.0000044
LAL2 - Golf course	April	2024	PCB BZ#77	0.0000826
LAL2 - Golf course	April	2024	PCB BZ#123	0.0000118
LAL2 - Golf course	April	2024	PCB BZ#118	0.0003748
LAL2 - Golf course	April	2024	PCB BZ#114	0.0000118
LAL2 - Golf course	April	2024	PCB BZ#105	0.0001608
LAL2 - Golf course	April	2024	PCB BZ#126	0.0000059
LAL2 - Golf course	April	2024	PCB BZ#167	0.0000148
LAL2 - Golf course	April	2024	PCB BZ#156	0.0000177

LAL2 - Golf course	April	2024	PCB BZ#157	0.0000030
LAL2 - Golf course	April	2024	PCB BZ#169	0.0000015
LAL2 - Golf course	April	2024	PCB BZ#189	0.0000015
LAL2 - Golf course	May / June	2024	PCB BZ#81	0.0000389
LAL2 - Golf course	May / June	2024	PCB BZ#77	0.0001122
LAL2 - Golf course	May / June	2024	PCB BZ#123	0.0000234
LAL2 - Golf course	May / June	2024	PCB BZ#118	0.0004611
LAL2 - Golf course	May / June	2024	PCB BZ#114	0.0000249
LAL2 - Golf course	May / June	2024	PCB BZ#105	0.0001636
LAL2 - Golf course	May / June	2024	PCB BZ#126	0.0000187
LAL2 - Golf course	May / June	2024	PCB BZ#167	0.0000202
LAL2 - Golf course	May / June	2024	PCB BZ#156	0.0000452
LAL2 - Golf course	May / June	2024	PCB BZ#157	0.0000109
LAL2 - Golf course	May / June	2024	PCB BZ#169	0.0000031
LAL2 - Golf course	May / June	2024	PCB BZ#189	0.0000047
LAL2 - Golf course	June / July	2024	PCB BZ#81	0.0000186
LAL2 - Golf course	June / July	2024	PCB BZ#77	0.0001272
LAL2 - Golf course	June / July	2024	PCB BZ#123	0.0000016
LAL2 - Golf course	June / July	2024	PCB BZ#118	0.0007244
LAL2 - Golf course	June / July	2024	PCB BZ#114	0.0000016
LAL2 - Golf course	June / July	2024	PCB BZ#105	0.0002544
LAL2 - Golf course	June / July	2024	PCB BZ#126	0.0000124
LAL2 - Golf course	June / July	2024	PCB BZ#167	0.0000016
LAL2 - Golf course	June / July	2024	PCB BZ#156	0.0000543
LAL2 - Golf course	June / July	2024	PCB BZ#157	0.0000155
LAL2 - Golf course	June / July	2024	PCB BZ#169	0.0000031
LAL2 - Golf course	June / July	2024	PCB BZ#189	0.0000047
LAL2 - Golf course	July / August	2024	PCB BZ#81	0.0001681
LAL2 - Golf course	July / August	2024	PCB BZ#77	0.0006740
LAL2 - Golf course	July / August	2024	PCB BZ#123	0.0001028

LAL2 - Golf course	July / August	2024	PCB BZ#118	0.0053083
LAL2 - Golf course	July / August	2024	PCB BZ#114	0.0001695
LAL2 - Golf course	July / August	2024	PCB BZ#105	0.0018760
LAL2 - Golf course	July / August	2024	PCB BZ#126	0.0002279
LAL2 - Golf course	July / August	2024	PCB BZ#167	0.0003224
LAL2 - Golf course	July / August	2024	PCB BZ#156	0.0006086
LAL2 - Golf course	July / August	2024	PCB BZ#157	0.0001890
LAL2 - Golf course	July / August	2024	PCB BZ#169	0.0000264
LAL2 - Golf course	July / August	2024	PCB BZ#189	0.0001070
LAL2 - Golf course	August / September	2024	PCB BZ#81	0.0000302
LAL2 - Golf course	August / September	2024	PCB BZ#77	0.0001449
LAL2 - Golf course	August / September	2024	PCB BZ#123	0.0000031
LAL2 - Golf course	August / September	2024	PCB BZ#118	0.0007936
LAL2 - Golf course	August / September	2024	PCB BZ#114	0.0000302
LAL2 - Golf course	August / September	2024	PCB BZ#105	0.0002532
LAL2 - Golf course	August / September	2024	PCB BZ#126	0.0000378
LAL2 - Golf course	August / September	2024	PCB BZ#167	0.0000328
LAL2 - Golf course	August / September	2024	PCB BZ#156	0.0000630
LAL2 - Golf course	August / September	2024	PCB BZ#157	0.0000202
LAL2 - Golf course	August / September	2024	PCB BZ#169	0.0000013
LAL2 - Golf course	August / September	2024	PCB BZ#189	0.0000151

B.3 Metals data

Site	Reporting Month	Year	Species	ug/m3 result
LAL1 - Springfield farm	June	2023	Lead	0
LAL1 - Springfield farm	June	2023	Mercury	0.0034396
LAL1 - Springfield farm	July	2023	Lead	0.0000222
LAL1 - Springfield farm	July	2023	Mercury	0.0021271
LAL1 - Springfield farm	August	2023	Lead	0.0011883
LAL1 - Springfield farm	August	2023	Mercury	0.0028519
LAL1 - Springfield farm	September	2023	Lead	0.0016860

LAL1 - Springfield farm	September	2023	Mercury	0.0057326
LAL1 - Springfield farm	October	2023	Lead	0.0010392
LAL1 - Springfield farm	October	2023	Mercury	0.0010392
LAL1 - Springfield farm	November	2023	Lead	0.0067408
LAL1 - Springfield farm	November	2023	Mercury	0.0037449
LAL1 - Springfield farm	December	2023	Lead	0.0026943
LAL1 - Springfield farm	December	2023	Mercury	0.0013471
LAL1 - Springfield farm	January	2024	Lead	0.0013917
LAL1 - Springfield farm	January	2024	Mercury	0.0013917
LAL1 - Springfield farm	February	2024	Lead	0.0064475
LAL1 - Springfield farm	February	2024	Mercury	0.0064475
LAL1 - Springfield farm	March	2024	Lead	0.0074452
LAL1 - Springfield farm	March	2024	Mercury	0.0074452
LAL1 - Springfield farm	April	2024	Lead	0.0067533
LAL1 - Springfield farm	April	2024	Mercury	0.0067533
LAL1 - Springfield farm	May /June	2024	Lead	0.0013700
LAL1 - Springfield farm	May / June	2024	Mercury	0.0013700
LAL1 - Springfield farm	June / July	2024	Lead	0.0011382
LAL1 - Springfield farm	June / July	2024	Mercury	0.0011382
LAL1 - Springfield farm	July / August	2024	Lead	0.0011242
LAL1 - Springfield farm	July / August	2024	Mercury	0.0011242
LAL1 - Springfield farm	August / September	2024	Lead	0.0021572
LAL1 - Springfield farm	August / September	2024	Mercury	0.0021572
LAL2 - Golf course	September	2023	Lead	0.0022831
LAL2 - Golf course	September	2023	Mercury	0.0052511
LAL2 - Golf course	October	2023	Lead	Error
LAL2 - Golf course	October	2023	Mercury	Error
LAL2 - Golf course	November	2023	Lead	0.0053840
LAL2 - Golf course	November	2023	Mercury	0.0019229
LAL2 - Golf course	December	2023	Lead	0.0017774
LAL2 - Golf course	December	2023	Mercury	0.0013672
LAL2 - Golf course	January	2024	Lead	0.0013684
LAL2 - Golf course	January	2024	Mercury	0.0013684
LAL2 - Golf course	February	2024	Lead	0.0066209
LAL2 - Golf course	February	2024	Mercury	0.0066209
LAL2 - Golf course	March	2024	Lead	0.0081789
LAL2 - Golf course	March	2024	Mercury	0.0081789
LAL2 - Golf course	April	2024	Lead	0.0072348
LAL2 - Golf course	April	2024	Mercury	0.0072348
LAL2 - Golf course	May /June	2024	Lead	0.0008791
LAL2 - Golf course	May / June	2024	Mercury	0.0008791
LAL2 - Golf course	June / July	2024	Lead	0.0011577

LAL2 - Golf course	June / July	2024	Mercury	0.0011577
LAL2 - Golf course	July / August	2024	Lead	0.0025891
LAL2 - Golf course	July / August	2024	Mercury	0.0025891
LAL2 - Golf course	August / September	2024	Lead	0.0014284
LAL2 - Golf course	August / September	2024	Mercury	0.0014284

B.4 PAH data

Site	Reporting Month	Year	Species	ug/m3 result
LAL1 - Springfield farm	June	2023	Naphthalene	0.00564286
LAL1 - Springfield farm	June	2023	Acenaphthylene	0.00564286
LAL1 - Springfield farm	June	2023	Acenaphthene	0.00564286
LAL1 - Springfield farm	June	2023	Fluorene	0.00564286
LAL1 - Springfield farm	June	2023	Phenanthrene	0.00564286
LAL1 - Springfield farm	June	2023	Anthracene	0.00564286
LAL1 - Springfield farm	June	2023	Fluoranthene	0.01049571
LAL1 - Springfield farm	June	2023	Pyrene	0.00981857
LAL1 - Springfield farm	June	2023	Benzo(a)Anthracene	0.00564286
LAL1 - Springfield farm	June	2023	Chrysene	0.00767429
LAL1 - Springfield farm	June	2023	Benzo(b)Fluoranthene	0.01128571
LAL1 - Springfield farm	June	2023	Benzo(k)Fluoranthene	0.00564286
LAL1 - Springfield farm	June	2023	Benxo(a)Pyrene	0.00767429
LAL1 - Springfield farm	June	2023	Ideno(123-cd)Pyrene	0.00711000
LAL1 - Springfield farm	June	2023	Dibenzo(ah)Anthracene	0.00564286
LAL1 - Springfield farm	June	2023	Benxo(ghi)Anthracene	0.01128571
LAL1 - Springfield farm	July	2023	Naphthalene	0.00583689
LAL1 - Springfield farm	July	2023	Acenaphthylene	0.00583689
LAL1 - Springfield farm	July	2023	Acenaphthene	0.00583689
LAL1 - Springfield farm	July	2023	Fluorene	0.00583689

LAL1 - Springfield farm	July	2023	Phenanthrene	0.00595363
LAL1 - Springfield farm	July	2023	Anthracene	0.00583689
LAL1 - Springfield farm	July	2023	Fluoranthene	0.01056823
LAL1 - Springfield farm	July	2023	Pyrene	0.00936439
LAL1 - Springfield farm	July	2023	Benzo(a)Anthracene	0.00583689
LAL1 - Springfield farm	July	2023	Chrysene	0.00583689
LAL1 - Springfield farm	July	2023	Benzo(b)Fluoranthene	0.00583689
LAL1 - Springfield farm	July	2023	Benzo(k)Fluoranthene	0.00583689
LAL1 - Springfield farm	July	2023	Benxo(a)Pyrene	0.00583689
LAL1 - Springfield farm	July	2023	Ideno(123-cd)Pyrene	0.00583689
LAL1 - Springfield farm	July	2023	Dibenzo(ah)Anthracene	0.00583689
LAL1 - Springfield farm	July	2023	Benxo(ghi)Anthracene	0.00583689
LAL1 - Springfield farm	August	2023	Naphthalene	0.00583689
LAL1 - Springfield farm	August	2023	Acenaphthylene	0.00583689
LAL1 - Springfield farm	August	2023	Acenaphthene	0.00583689
LAL1 - Springfield farm	August	2023	Fluorene	0.00583689
LAL1 - Springfield farm	August	2023	Phenanthrene	0.00817165
LAL1 - Springfield farm	August	2023	Anthracene	0.00583689
LAL1 - Springfield farm	August	2023	Fluoranthene	0.01634330
LAL1 - Springfield farm	August	2023	Pyrene	0.01400855
LAL1 - Springfield farm	August	2023	Benzo(a)Anthracene	0.02334758
LAL1 - Springfield farm	August	2023	Chrysene	0.04085826
LAL1 - Springfield farm	August	2023	Benzo(b)Fluoranthene	0.08755341
LAL1 - Springfield farm	August	2023	Benzo(k)Fluoranthene	0.03151923
LAL1 - Springfield farm	August	2023	Benxo(a)Pyrene	0.02801709
LAL1 - Springfield farm	August	2023	Ideno(123-cd)Pyrene	0.04202564
LAL1 - Springfield farm	August	2023	Dibenzo(ah)Anthracene	0.00583689
LAL1 - Springfield farm	August	2023	Benxo(ghi)Anthracene	0.06187107
LAL1 - Springfield farm	September	2023	Naphthalene	0.00688791
LAL1 - Springfield farm	September	2023	Acenaphthylene	0.00688791

LAL1 - Springfield farm	September	2023	Acenaphthene	0.00688791
LAL1 - Springfield farm	September	2023	Fluorene	0.00688791
LAL1 - Springfield farm	September	2023	Phenanthrene	0.01377581
LAL1 - Springfield farm	September	2023	Anthracene	0.00688791
LAL1 - Springfield farm	September	2023	Fluoranthene	0.02341888
LAL1 - Springfield farm	September	2023	Pyrene	0.01928614
LAL1 - Springfield farm	September	2023	Benzo(a)Anthracene	0.00826549
LAL1 - Springfield farm	September	2023	Chrysene	0.01928614
LAL1 - Springfield farm	September	2023	Benzo(b)Fluoranthene	0.02755162
LAL1 - Springfield farm	September	2023	Benzo(k)Fluoranthene	0.01239823
LAL1 - Springfield farm	September	2023	Benxo(a)Pyrene	0.01239823
LAL1 - Springfield farm	September	2023	Ideno(123-cd)Pyrene	0.01239823
LAL1 - Springfield farm	September	2023	Dibenzo(ah)Anthracene	0.00688791
LAL1 - Springfield farm	September	2023	Benxo(ghi)Anthracene	0.02204130
LAL1 - Springfield farm	October	2023	Naphthalene	0.00602620
LAL1 - Springfield farm	October	2023	Acenaphthylene	0.00602620
LAL1 - Springfield farm	October	2023	Acenaphthene	0.00602620
LAL1 - Springfield farm	October	2023	Fluorene	0.00602620
LAL1 - Springfield farm	October	2023	Phenanthrene	0.01325764
LAL1 - Springfield farm	October	2023	Anthracene	0.00602620
LAL1 - Springfield farm	October	2023	Fluoranthene	0.02531005
LAL1 - Springfield farm	October	2023	Pyrene	0.02410481
LAL1 - Springfield farm	October	2023	Benzo(a)Anthracene	0.01325764
LAL1 - Springfield farm	October	2023	Chrysene	0.03133625
LAL1 - Springfield farm	October	2023	Benzo(b)Fluoranthene	0.07713538
LAL1 - Springfield farm	October	2023	Benzo(k)Fluoranthene	0.03013101
LAL1 - Springfield farm	October	2023	Benxo(a)Pyrene	0.02651529
LAL1 - Springfield farm	October	2023	Ideno(123-cd)Pyrene	0.05544106
LAL1 - Springfield farm	October	2023	Dibenzo(ah)Anthracene	0.00602620
LAL1 - Springfield farm	October	2023	Benxo(ghi)Anthracene	0.06387774

LAL1 - Springfield farm	November	2023	Naphthalene	0.00602620
LAL1 - Springfield farm	November	2023	Acenaphthylene	0.00602620
LAL1 - Springfield farm	November	2023	Acenaphthene	0.00602620
LAL1 - Springfield farm	November	2023	Fluorene	0.00602620
LAL1 - Springfield farm	November	2023	Phenanthrene	0.01446288
LAL1 - Springfield farm	November	2023	Anthracene	0.00602620
LAL1 - Springfield farm	November	2023	Fluoranthene	0.03013101
LAL1 - Springfield farm	November	2023	Pyrene	0.03133625
LAL1 - Springfield farm	November	2023	Benzo(a)Anthracene	0.03374673
LAL1 - Springfield farm	November	2023	Chrysene	0.06146726
LAL1 - Springfield farm	November	2023	Benzo(b)Fluoranthene	0.12052404
LAL1 - Springfield farm	November	2023	Benzo(k)Fluoranthene	0.05544106
LAL1 - Springfield farm	November	2023	Benxo(a)Pyrene	0.05544106
LAL1 - Springfield farm	November	2023	Ideno(123-cd)Pyrene	0.08677731
LAL1 - Springfield farm	November	2023	Dibenzo(ah)Anthracene	0.00602620
LAL1 - Springfield farm	November	2023	Benxo(ghi)Anthracene	0.12052404
LAL1 - Springfield farm	December	2023	Naphthalene	0.00650339
LAL1 - Springfield farm	December	2023	Acenaphthylene	0.00650339
LAL1 - Springfield farm	December	2023	Acenaphthene	0.00650339
LAL1 - Springfield farm	December	2023	Fluorene	0.00650339
LAL1 - Springfield farm	December	2023	Phenanthrene	0.00910474
LAL1 - Springfield farm	December	2023	Anthracene	0.00650339
LAL1 - Springfield farm	December	2023	Fluoranthene	0.01951016
LAL1 - Springfield farm	December	2023	Pyrene	0.02081084
LAL1 - Springfield farm	December	2023	Benzo(a)Anthracene	0.01170610
LAL1 - Springfield farm	December	2023	Chrysene	0.02341220
LAL1 - Springfield farm	December	2023	Benzo(b)Fluoranthene	0.05462846
LAL1 - Springfield farm	December	2023	Benzo(k)Fluoranthene	0.02211152
LAL1 - Springfield farm	December	2023	Benxo(a)Pyrene	0.02341220
LAL1 - Springfield farm	December	2023	Ideno(123-cd)Pyrene	0.03121626

LAL1 - Springfield farm	December	2023	Dibenzo(ah)Anthracene	0.00650339
LAL1 - Springfield farm	December	2023	Benxo(ghi)Anthracene	0.05202711
LAL1 - Springfield farm	January	2024	Naphthalene	0.00622789
LAL1 - Springfield farm	January	2024	Acenaphthylene	0.00622789
LAL1 - Springfield farm	January	2024	Acenaphthene	0.00622789
LAL1 - Springfield farm	January	2024	Fluorene	0.01121020
LAL1 - Springfield farm	January	2024	Phenanthrene	0.03487619
LAL1 - Springfield farm	January	2024	Anthracene	0.00871905
LAL1 - Springfield farm	January	2024	Fluoranthene	0.06103333
LAL1 - Springfield farm	January	2024	Pyrene	0.05978775
LAL1 - Springfield farm	January	2024	Benzo(a)Anthracene	0.14946938
LAL1 - Springfield farm	January	2024	Chrysene	0.22420408
LAL1 - Springfield farm	January	2024	Benzo(b)Fluoranthene	0.49823128
LAL1 - Springfield farm	January	2024	Benzo(k)Fluoranthene	0.13701360
LAL1 - Springfield farm	January	2024	Benxo(a)Pyrene	0.14946938
LAL1 - Springfield farm	January	2024	Ideno(123-cd)Pyrene	0.19929251
LAL1 - Springfield farm	January	2024	Dibenzo(ah)Anthracene	0.06726122
LAL1 - Springfield farm	January	2024	Benxo(ghi)Anthracene	0.31139455
LAL1 - Springfield farm	February	2024	Naphthalene	0.00622960
LAL1 - Springfield farm	February	2024	Acenaphthylene	0.00622960
LAL1 - Springfield farm	February	2024	Acenaphthene	0.00622960
LAL1 - Springfield farm	February	2024	Fluorene	0.00622960
LAL1 - Springfield farm	February	2024	Phenanthrene	0.00996736
LAL1 - Springfield farm	February	2024	Anthracene	0.00747552
LAL1 - Springfield farm	February	2024	Fluoranthene	0.02367247
LAL1 - Springfield farm	February	2024	Pyrene	0.02367247
LAL1 - Springfield farm	February	2024	Benzo(a)Anthracene	0.02118063
LAL1 - Springfield farm	February	2024	Chrysene	0.03613167
LAL1 - Springfield farm	February	2024	Benzo(b)Fluoranthene	0.10839501
LAL1 - Springfield farm	February	2024	Benzo(k)Fluoranthene	0.03239391

LAL1 - Springfield farm	February	2024	Benxo(a)Pyrene	0.02491839
LAL1 - Springfield farm	February	2024	Ideno(123-cd)Pyrene	0.03613167
LAL1 - Springfield farm	February	2024	Dibenzo(ah)Anthracene	0.01245920
LAL1 - Springfield farm	February	2024	Benxo(ghi)Anthracene	0.05232862
LAL1 - Springfield farm	March	2024	Naphthalene	0.00759100
LAL1 - Springfield farm	March	2024	Acenaphthylene	0.00759100
LAL1 - Springfield farm	March	2024	Acenaphthene	0.00759100
LAL1 - Springfield farm	March	2024	Fluorene	0.00759100
LAL1 - Springfield farm	March	2024	Phenanthrene	0.02277300
LAL1 - Springfield farm	March	2024	Anthracene	0.00759100
LAL1 - Springfield farm	March	2024	Fluoranthene	0.04099100
LAL1 - Springfield farm	March	2024	Pyrene	0.03643700
LAL1 - Springfield farm	March	2024	Benzo(a)Anthracene	0.02429100
LAL1 - Springfield farm	March	2024	Chrysene	0.03643700
LAL1 - Springfield farm	March	2024	Benzo(b)Fluoranthene	0.08957300
LAL1 - Springfield farm	March	2024	Benzo(k)Fluoranthene	0.03036400
LAL1 - Springfield farm	March	2024	Benxo(a)Pyrene	0.03036400
LAL1 - Springfield farm	March	2024	Ideno(123-cd)Pyrene	0.03036400
LAL1 - Springfield farm	March	2024	Dibenzo(ah)Anthracene	0.03491800
LAL1 - Springfield farm	March	2024	Benxo(ghi)Anthracene	0.00910900
LAL1 - Springfield farm	April	2024	Naphthalene	0.00700280
LAL1 - Springfield farm	April	2024	Acenaphthylene	0.00700280
LAL1 - Springfield farm	April	2024	Acenaphthene	0.00700280
LAL1 - Springfield farm	April	2024	Fluorene	0.00700280
LAL1 - Springfield farm	April	2024	Phenanthrene	0.00700280
LAL1 - Springfield farm	April	2024	Anthracene	0.00700280
LAL1 - Springfield farm	April	2024	Fluoranthene	0.01120448
LAL1 - Springfield farm	April	2024	Pyrene	0.01120448
LAL1 - Springfield farm	April	2024	Benzo(a)Anthracene	0.00700280
LAL1 - Springfield farm	April	2024	Chrysene	0.01120448

LAL1 - Springfield farm	April	2024	Benzo(b)Fluoranthene	0.02941177
LAL1 - Springfield farm	April	2024	Benzo(k)Fluoranthene	0.00980392
LAL1 - Springfield farm	April	2024	Benxo(a)Pyrene	0.00980392
LAL1 - Springfield farm	April	2024	Ideno(123-cd)Pyrene	0.01120448
LAL1 - Springfield farm	April	2024	Dibenzo(ah)Anthracene	0.00700280
LAL1 - Springfield farm	April	2024	Benxo(ghi)Anthracene	0.01540616
LAL1 - Springfield farm	May /June	2024	Naphthalene	0.00412807
LAL1 - Springfield farm	May /June	2024	Acenaphthylene	0.00412807
LAL1 - Springfield farm	May /June	2024	Acenaphthene	0.00412807
LAL1 - Springfield farm	May /June	2024	Fluorene	0.00412807
LAL1 - Springfield farm	May /June	2024	Phenanthrene	0.00412807
LAL1 - Springfield farm	May /June	2024	Anthracene	0.00412807
LAL1 - Springfield farm	May /June	2024	Fluoranthene	0.00743053
LAL1 - Springfield farm	May /June	2024	Pyrene	0.00660491
LAL1 - Springfield farm	May /June	2024	Benzo(a)Anthracene	0.00412807
LAL1 - Springfield farm	May /June	2024	Chrysene	0.00577930
LAL1 - Springfield farm	May /June	2024	Benzo(b)Fluoranthene	0.01403544
LAL1 - Springfield farm	May /June	2024	Benzo(k)Fluoranthene	0.00495368
LAL1 - Springfield farm	May /June	2024	Benxo(a)Pyrene	0.00495368
LAL1 - Springfield farm	May /June	2024	Ideno(123-cd)Pyrene	0.00495368
LAL1 - Springfield farm	May /June	2024	Dibenzo(ah)Anthracene	0.00412807
LAL1 - Springfield farm	May /June	2024	Benxo(ghi)Anthracene	0.00743053
LAL1 - Springfield farm	June / July	2024	Naphthalene	0.00543650
LAL1 - Springfield farm	June / July	2024	Acenaphthylene	0.00543650
LAL1 - Springfield farm	June / July	2024	Acenaphthene	0.00543650
LAL1 - Springfield farm	June / July	2024	Fluorene	0.00543650
LAL1 - Springfield farm	June / July	2024	Phenanthrene	0.00543650
LAL1 - Springfield farm	June / July	2024	Anthracene	0.00543650
LAL1 - Springfield farm	June / July	2024	Fluoranthene	0.00761110
LAL1 - Springfield farm	June / July	2024	Pyrene	0.00761110

LAL1 - Springfield farm	June / July	2024	Benzo(a)Anthracene	0.00543650
LAL1 - Springfield farm	June / July	2024	Chrysene	0.00543650
LAL1 - Springfield farm	June / July	2024	Benzo(b)Fluoranthene	0.02283328
LAL1 - Springfield farm	June / July	2024	Benzo(k)Fluoranthene	0.00652380
LAL1 - Springfield farm	June / July	2024	Benxo(a)Pyrene	0.00652380
LAL1 - Springfield farm	June / July	2024	Ideno(123-cd)Pyrene	0.00978569
LAL1 - Springfield farm	June / July	2024	Dibenzo(ah)Anthracene	0.00543650
LAL1 - Springfield farm	June / July	2024	Benxo(ghi)Anthracene	0.01304759
LAL1 - Springfield farm	July / August	2024	Naphthalene	0.00547166
LAL1 - Springfield farm	July / August	2024	Acenaphthylene	0.00547166
LAL1 - Springfield farm	July / August	2024	Acenaphthene	0.00547166
LAL1 - Springfield farm	July / August	2024	Fluorene	0.00547166
LAL1 - Springfield farm	July / August	2024	Phenanthrene	0.00547166
LAL1 - Springfield farm	July / August	2024	Anthracene	0.00547166
LAL1 - Springfield farm	July / August	2024	Fluoranthene	0.01313198
LAL1 - Springfield farm	July / August	2024	Pyrene	0.00875465
LAL1 - Springfield farm	July / August	2024	Benzo(a)Anthracene	0.00547166
LAL1 - Springfield farm	July / August	2024	Chrysene	0.00875465
LAL1 - Springfield farm	July / August	2024	Benzo(b)Fluoranthene	0.01969797
LAL1 - Springfield farm	July / August	2024	Benzo(k)Fluoranthene	0.00547166
LAL1 - Springfield farm	July / August	2024	Benxo(a)Pyrene	0.00547166
LAL1 - Springfield farm	July / August	2024	Ideno(123-cd)Pyrene	0.01641497
LAL1 - Springfield farm	July / August	2024	Dibenzo(ah)Anthracene	0.00547166
LAL1 - Springfield farm	July / August	2024	Benxo(ghi)Anthracene	0.02626395
LAL1 - Springfield farm	August / September	2024	Naphthalene	0.00499211
LAL1 - Springfield farm	August / September	2024	Acenaphthylene	0.00499211
LAL1 - Springfield farm	August / September	2024	Acenaphthene	0.00499211
LAL1 - Springfield farm	August / September	2024	Fluorene	0.00499211
LAL1 - Springfield farm	August / September	2024	Phenanthrene	0.00998423
LAL1 - Springfield farm	August / September	2024	Anthracene	0.00499211

LAL1 - Springfield farm	August / September	2024	Fluoranthene	0.01897003
LAL1 - Springfield farm	August / September	2024	Pyrene	0.01397792
LAL1 - Springfield farm	August / September	2024	Benzo(a)Anthracene	0.00499211
LAL1 - Springfield farm	August / September	2024	Chrysene	0.01297949
LAL1 - Springfield farm	August / September	2024	Benzo(b)Fluoranthene	0.03194952
LAL1 - Springfield farm	August / September	2024	Benzo(k)Fluoranthene	0.00698896
LAL1 - Springfield farm	August / September	2024	Benxo(a)Pyrene	0.00998423
LAL1 - Springfield farm	August / September	2024	Ideno(123-cd)Pyrene	0.01597476
LAL2 - Golf course	September	2023	Naphthalene	0.00499211
LAL2 - Golf course	September	2023	Acenaphthylene	0.02995268
LAL2 - Golf course	September	2023	Acenaphthene	0.01259097
LAL2 - Golf course	September	2023	Fluorene	0.01259097
LAL2 - Golf course	September	2023	Phenanthrene	0.01510916
LAL2 - Golf course	September	2023	Anthracene	0.01259097
LAL2 - Golf course	September	2023	Fluoranthene	0.03021833
LAL2 - Golf course	September	2023	Pyrene	0.02518194
LAL2 - Golf course	September	2023	Benzo(a)Anthracene	0.01259097
LAL2 - Golf course	September	2023	Chrysene	0.02518194
LAL2 - Golf course	September	2023	Benzo(b)Fluoranthene	0.03777291
LAL2 - Golf course	September	2023	Benzo(k)Fluoranthene	0.01510916
LAL2 - Golf course	September	2023	Benxo(a)Pyrene	0.01510916
LAL2 - Golf course	September	2023	Ideno(123-cd)Pyrene	0.01510916
LAL2 - Golf course	September	2023	Dibenzo(ah)Anthracene	0.01259097
LAL2 - Golf course	September	2023	Benxo(ghi)Anthracene	0.02770013
LAL2 - Golf course	October	2023	Naphthalene	0.00635066
LAL2 - Golf course	October	2023	Acenaphthylene	0.00635066
LAL2 - Golf course	October	2023	Acenaphthene	0.00635066
LAL2 - Golf course	October	2023	Fluorene	0.00635066
LAL2 - Golf course	October	2023	Phenanthrene	0.00635066
LAL2 - Golf course	October	2023	Anthracene	0.00635066

LAL2 - Golf course	October	2023	Fluoranthene	0.01016105
LAL2 - Golf course	October	2023	Pyrene	0.01016105
LAL2 - Golf course	October	2023	Benzo(a)Anthracene	0.00635066
LAL2 - Golf course	October	2023	Chrysene	0.01143118
LAL2 - Golf course	October	2023	Benzo(b)Fluoranthene	0.02667276
LAL2 - Golf course	October	2023	Benzo(k)Fluoranthene	0.01016105
LAL2 - Golf course	October	2023	Benxo(a)Pyrene	0.00889092
LAL2 - Golf course	October	2023	Ideno(123-cd)Pyrene	0.02159224
LAL2 - Golf course	October	2023	Dibenzo(ah)Anthracene	0.00635066
LAL2 - Golf course	October	2023	Benxo(ghi)Anthracene	0.02413250
LAL2 - Golf course	November	2023	Naphthalene	0.00635066
LAL2 - Golf course	November	2023	Acenaphthylene	0.00635066
LAL2 - Golf course	November	2023	Acenaphthene	0.00635066
LAL2 - Golf course	November	2023	Fluorene	0.00635066
LAL2 - Golf course	November	2023	Phenanthrene	0.01143118
LAL2 - Golf course	November	2023	Anthracene	0.00635066
LAL2 - Golf course	November	2023	Fluoranthene	0.02667276
LAL2 - Golf course	November	2023	Pyrene	0.03048316
LAL2 - Golf course	November	2023	Benzo(a)Anthracene	0.02667276
LAL2 - Golf course	November	2023	Chrysene	0.05207540
LAL2 - Golf course	November	2023	Benzo(b)Fluoranthene	0.09144947
LAL2 - Golf course	November	2023	Benzo(k)Fluoranthene	0.03175329
LAL2 - Golf course	November	2023	Benxo(a)Pyrene	0.04445461
LAL2 - Golf course	November	2023	Ideno(123-cd)Pyrene	0.04953513
LAL2 - Golf course	November	2023	Dibenzo(ah)Anthracene	0.00635066
LAL2 - Golf course	November	2023	Benxo(ghi)Anthracene	0.06858711
LAL2 - Golf course	December	2023	Naphthalene	0.00706145
LAL2 - Golf course	December	2023	Acenaphthylene	0.00706145
LAL2 - Golf course	December	2023	Acenaphthene	0.00706145
LAL2 - Golf course	December	2023	Fluorene	0.00706145

LAL2 - Golf course	December	2023	Phenanthrene	0.01271061
LAL2 - Golf course	December	2023	Anthracene	0.00706145
LAL2 - Golf course	December	2023	Fluoranthene	0.02542122
LAL2 - Golf course	December	2023	Pyrene	0.02683351
LAL2 - Golf course	December	2023	Benzo(a)Anthracene	0.01412290
LAL2 - Golf course	December	2023	Chrysene	0.02118435
LAL2 - Golf course	December	2023	Benzo(b)Fluoranthene	0.06637762
LAL2 - Golf course	December	2023	Benzo(k)Fluoranthene	0.02965808
LAL2 - Golf course	December	2023	Benxo(a)Pyrene	0.02400893
LAL2 - Golf course	December	2023	Ideno(123-cd)Pyrene	0.04236869
LAL2 - Golf course	December	2023	Dibenzo(ah)Anthracene	0.00706145
LAL2 - Golf course	December	2023	Benxo(ghi)Anthracene	0.07202678
LAL2 - Golf course	January	2024	Naphthalene	0.00647107
LAL2 - Golf course	January	2024	Acenaphthylene	0.00647107
LAL2 - Golf course	January	2024	Acenaphthene	0.00647107
LAL2 - Golf course	January	2024	Fluorene	0.00776528
LAL2 - Golf course	January	2024	Phenanthrene	0.02717849
LAL2 - Golf course	January	2024	Anthracene	0.00647107
LAL2 - Golf course	January	2024	Fluoranthene	0.05694540
LAL2 - Golf course	January	2024	Pyrene	0.05565118
LAL2 - Golf course	January	2024	Benzo(a)Anthracene	0.06082804
LAL2 - Golf course	January	2024	Chrysene	0.09059495
LAL2 - Golf course	January	2024	Benzo(b)Fluoranthene	0.24590058
LAL2 - Golf course	January	2024	Benzo(k)Fluoranthene	0.05823961
LAL2 - Golf course	January	2024	Benxo(a)Pyrene	0.08282967
LAL2 - Golf course	January	2024	Ideno(123-cd)Pyrene	0.07894703
LAL2 - Golf course	January	2024	Dibenzo(ah)Anthracene	0.03235534
LAL2 - Golf course	January	2024	Benxo(ghi)Anthracene	0.11906765
LAL2 - Golf course	February	2024	Naphthalene	0.00695943
LAL2 - Golf course	February	2024	Acenaphthylene	0.00695943

LAL2 - Golf course	February	2024	Acenaphthene	0.00695943
LAL2 - Golf course	February	2024	Fluorene	0.00695943
LAL2 - Golf course	February	2024	Phenanthrene	0.00974320
LAL2 - Golf course	February	2024	Anthracene	0.00695943
LAL2 - Golf course	February	2024	Fluoranthene	0.02783771
LAL2 - Golf course	February	2024	Pyrene	0.02922959
LAL2 - Golf course	February	2024	Benzo(a)Anthracene	0.02366205
LAL2 - Golf course	February	2024	Chrysene	0.03758090
LAL2 - Golf course	February	2024	Benzo(b)Fluoranthene	0.11135083
LAL2 - Golf course	February	2024	Benzo(k)Fluoranthene	0.04175656
LAL2 - Golf course	February	2024	Benxo(a)Pyrene	0.02783771
LAL2 - Golf course	February	2024	Ideno(123-cd)Pyrene	0.04314845
LAL2 - Golf course	February	2024	Dibenzo(ah)Anthracene	0.01948639
LAL2 - Golf course	February	2024	Benxo(ghi)Anthracene	0.06124295
LAL2 - Golf course	March	2024	Naphthalene	0.00773013
LAL2 - Golf course	March	2024	Acenaphthylene	0.00773013
LAL2 - Golf course	March	2024	Acenaphthene	0.00773013
LAL2 - Golf course	March	2024	Fluorene	0.00773013
LAL2 - Golf course	March	2024	Phenanthrene	0.02164435
LAL2 - Golf course	March	2024	Anthracene	0.00773013
LAL2 - Golf course	March	2024	Fluoranthene	0.04174268
LAL2 - Golf course	March	2024	Pyrene	0.03555858
LAL2 - Golf course	March	2024	Benzo(a)Anthracene	0.01855230
LAL2 - Golf course	March	2024	Chrysene	0.03710460
LAL2 - Golf course	March	2024	Benzo(b)Fluoranthene	0.10203766
LAL2 - Golf course	March	2024	Benzo(k)Fluoranthene	0.03092050
LAL2 - Golf course	March	2024	Benxo(a)Pyrene	0.03246653
LAL2 - Golf course	March	2024	Ideno(123-cd)Pyrene	0.03710460
LAL2 - Golf course	March	2024	Dibenzo(ah)Anthracene	0.01236820
LAL2 - Golf course	March	2024	Benxo(ghi)Anthracene	0.04947281

LAL2 - Golf course	April	2024	Naphthalene	0.00737746
LAL2 - Golf course	April	2024	Acenaphthylene	0.00737746
LAL2 - Golf course	April	2024	Acenaphthene	0.00737746
LAL2 - Golf course	April	2024	Fluorene	0.00737746
LAL2 - Golf course	April	2024	Phenanthrene	0.00737746
LAL2 - Golf course	April	2024	Anthracene	0.00737746
LAL2 - Golf course	April	2024	Fluoranthene	0.01180394
LAL2 - Golf course	April	2024	Pyrene	0.01180394
LAL2 - Golf course	April	2024	Benzo(a)Anthracene	0.00737746
LAL2 - Golf course	April	2024	Chrysene	0.01032845
LAL2 - Golf course	April	2024	Benzo(b)Fluoranthene	0.01475492
LAL2 - Golf course	April	2024	Benzo(k)Fluoranthene	0.00885295
LAL2 - Golf course	April	2024	Benxo(a)Pyrene	0.00885295
LAL2 - Golf course	April	2024	Ideno(123-cd)Pyrene	0.00737746
LAL2 - Golf course	April	2024	Dibenzo(ah)Anthracene	0.00737746
LAL2 - Golf course	April	2024	Benxo(ghi)Anthracene	0.00885295
LAL2 - Golf course	May /June	2024	Naphthalene	0.00778816
LAL2 - Golf course	May /June	2024	Acenaphthylene	0.00778816
LAL2 - Golf course	May /June	2024	Acenaphthene	0.00778816
LAL2 - Golf course	May /June	2024	Fluorene	0.00778816
LAL2 - Golf course	May /June	2024	Phenanthrene	0.00778816
LAL2 - Golf course	May /June	2024	Anthracene	0.00778816
LAL2 - Golf course	May /June	2024	Fluoranthene	0.00934579
LAL2 - Golf course	May /June	2024	Pyrene	0.00934579
LAL2 - Golf course	May /June	2024	Benzo(a)Anthracene	0.00778816
LAL2 - Golf course	May /June	2024	Chrysene	0.00778816
LAL2 - Golf course	May /June	2024	Benzo(b)Fluoranthene	0.02336449
LAL2 - Golf course	May /June	2024	Benzo(k)Fluoranthene	0.00934579
LAL2 - Golf course	May /June	2024	Benxo(a)Pyrene	0.00778816
LAL2 - Golf course	May /June	2024	Ideno(123-cd)Pyrene	0.00778816

LAL2 - Golf course	May /June	2024	Dibenzo(ah)Anthracene	0.00778816
LAL2 - Golf course	May /June	2024	Benxo(ghi)Anthracene	0.01246106
LAL2 - Golf course	June / July	2024	Naphthalene	0.00775579
LAL2 - Golf course	June / July	2024	Acenaphthylene	0.00775579
LAL2 - Golf course	June / July	2024	Acenaphthene	0.00775579
LAL2 - Golf course	June / July	2024	Fluorene	0.00775579
LAL2 - Golf course	June / July	2024	Phenanthrene	0.00775579
LAL2 - Golf course	June / July	2024	Anthracene	0.00775579
LAL2 - Golf course	June / July	2024	Fluoranthene	0.00930694
LAL2 - Golf course	June / July	2024	Pyrene	0.00930694
LAL2 - Golf course	June / July	2024	Benzo(a)Anthracene	0.00775579
LAL2 - Golf course	June / July	2024	Chrysene	0.01396041
LAL2 - Golf course	June / July	2024	Benzo(b)Fluoranthene	0.02481852
LAL2 - Golf course	June / July	2024	Benzo(k)Fluoranthene	0.01085810
LAL2 - Golf course	June / July	2024	Benxo(a)Pyrene	0.00930694
LAL2 - Golf course	June / July	2024	Ideno(123-cd)Pyrene	0.00930694
LAL2 - Golf course	June / July	2024	Dibenzo(ah)Anthracene	0.00775579
LAL2 - Golf course	June / July	2024	Benxo(ghi)Anthracene	0.01396041
LAL2 - Golf course	July / August	2024	Naphthalene	0.00694802
LAL2 - Golf course	July / August	2024	Acenaphthylene	0.00694802
LAL2 - Golf course	July / August	2024	Acenaphthene	0.00694802
LAL2 - Golf course	July / August	2024	Fluorene	0.00694802
LAL2 - Golf course	July / August	2024	Phenanthrene	0.00833762
LAL2 - Golf course	July / August	2024	Anthracene	0.00694802
LAL2 - Golf course	July / August	2024	Fluoranthene	0.01945444
LAL2 - Golf course	July / August	2024	Pyrene	0.01667524
LAL2 - Golf course	July / August	2024	Benzo(a)Anthracene	0.00972722
LAL2 - Golf course	July / August	2024	Chrysene	0.02223365
LAL2 - Golf course	July / August	2024	Benzo(b)Fluoranthene	0.08476578
LAL2 - Golf course	July / August	2024	Benzo(k)Fluoranthene	0.01528563

LAL2 - Golf course	July / August	2024	Benxo(a)Pyrene	0.00694802
LAL2 - Golf course	July / August	2024	Ideno(123-cd)Pyrene	0.05280491
LAL2 - Golf course	July / August	2024	Dibenzo(ah)Anthracene	0.00694802
LAL2 - Golf course	July / August	2024	Benxo(ghi)Anthracene	0.12367467
LAL2 - Golf course	August / September	2024	Naphthalene	0.00629858
LAL2 - Golf course	August / September	2024	Acenaphthylene	0.00629858
LAL2 - Golf course	August / September	2024	Acenaphthene	0.00629858
LAL2 - Golf course	August / September	2024	Fluorene	0.00629858
LAL2 - Golf course	August / September	2024	Phenanthrene	0.01007772
LAL2 - Golf course	August / September	2024	Anthracene	0.00629858
LAL2 - Golf course	August / September	2024	Fluoranthene	0.02267488
LAL2 - Golf course	August / September	2024	Pyrene	0.01637630
LAL2 - Golf course	August / September	2024	Benzo(a)Anthracene	0.00629858
LAL2 - Golf course	August / September	2024	Chrysene	0.01889573
LAL2 - Golf course	August / September	2024	Benzo(b)Fluoranthene	0.05164834
LAL2 - Golf course	August / September	2024	Benzo(k)Fluoranthene	0.00629858
LAL2 - Golf course	August / September	2024	Benxo(a)Pyrene	0.01889573
LAL2 - Golf course	August / September	2024	Ideno(123-cd)Pyrene	0.02645403
LAL2 - Golf course	August / September	2024	Dibenzo(ah)Anthracene	0.00629858
LAL2 - Golf course	August / September	2024	Benxo(ghi)Anthracene	0.04409004