

Air Quality and Dust Monitoring Monthly Report – June 2018

London Borough of Ealing



SKANSKA



Department for Transport

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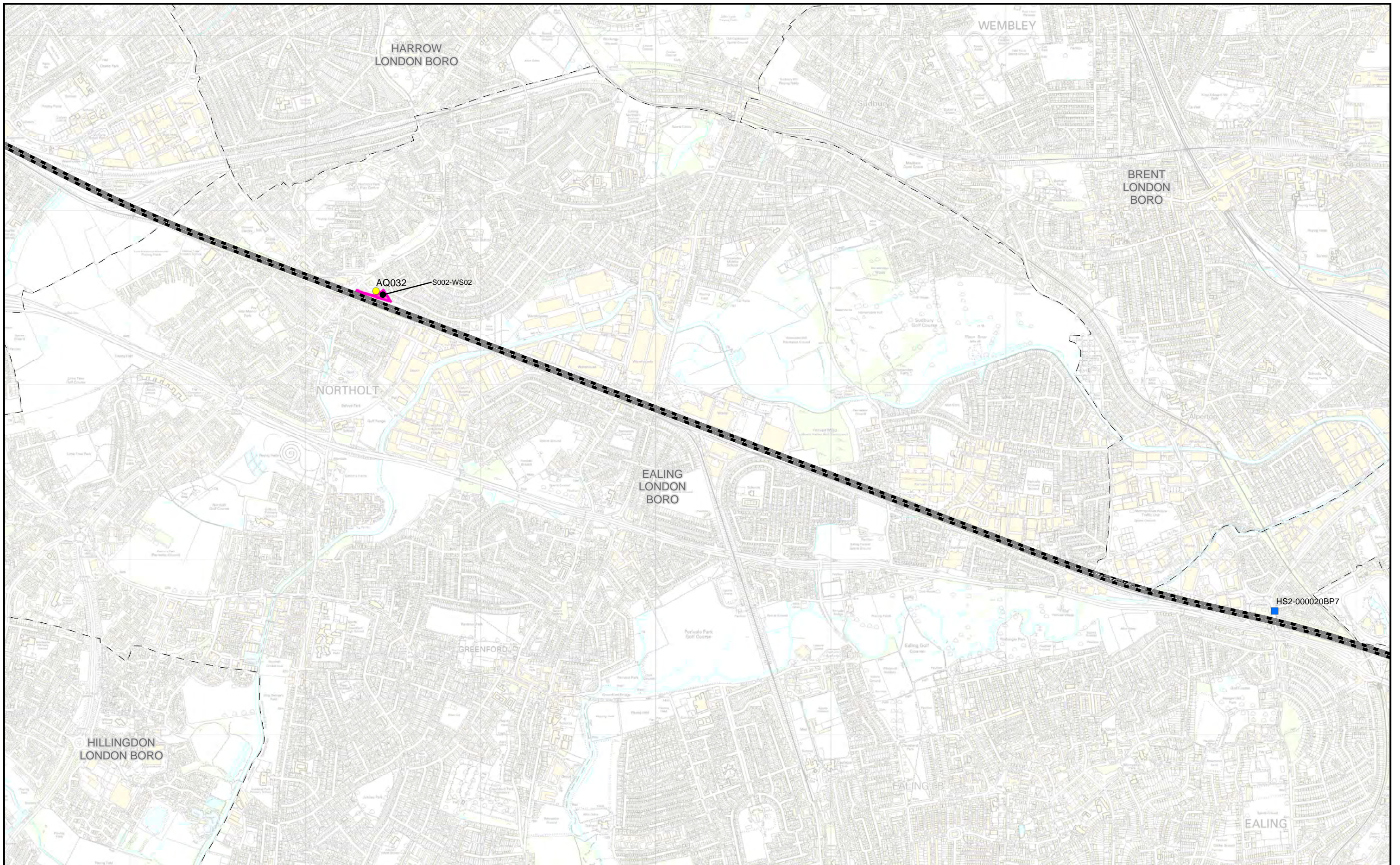
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Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in the London Borough of Ealing (LBE) during May and June 2018 respectively.
- 1.1.2 Figure 1 and Figure 2 in Appendix A indicate the current work sites together with air quality and dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current phase of works commenced within the LBE during April 2018 and are expected to be completed by July 2019. The current worksites, as presented in Appendix A, Figure 1 and Figure 2, include:
- Securing of and pre-demolition surveys of site on Victoria Road, worksite ref. S002-WS01.
 - Securing of and pre-demolition surveys of site on Atlas Road, worksite ref. S001-WS02.
 - Securing of and pre-demolition surveys of site at Willesden Euro Terminal, worksite ref. S001-WS03.
 - Securing of and pre-demolition surveys of site, track and gantry removals at Old Oak Common Depot (located in the London Borough of Hammersmith and Fulham), worksite ref. S004-WS01.
 - Future works site at Mandeville Road Pumping Station, worksite ref. S002-WS02.
- 1.1.5 Six (6) dust monitors were installed around worksites, where pre-demolition works are underway. These sites returned a medium or high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor.
- 1.1.7 There were no exceedances of the dust trigger level recorded during the monitoring period. All results were in line with the expected ranges.
- 1.1.8 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at six (6) locations in May 2018, around highways within the LBE as part of the management of air quality where significant effects may occur as a result of the scheme.

- 1.1.9 Diffusion tube monitoring results were provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.
- 1.1.10 NO₂ monitoring locations and results are presented in Appendix C, Table 2, together with the 2018 running mean.
- 1.1.11 There were no complaints received, relating to dust or air quality, during this monitoring period.

Appendix A – Worksites and Monitoring Locations



Legend

--- District/Borough boundary

--- Route in tunnel

--- Route on surface

--- HS2 Chainage Markers

■ Diffusion tube monitoring location

■ Mandeville Road Pumping Station

● Dust monitoring location

Figure Number

Figure Name
Worksites and Monitoring locations in LBE (sheet 1)

London Borough of Ealing

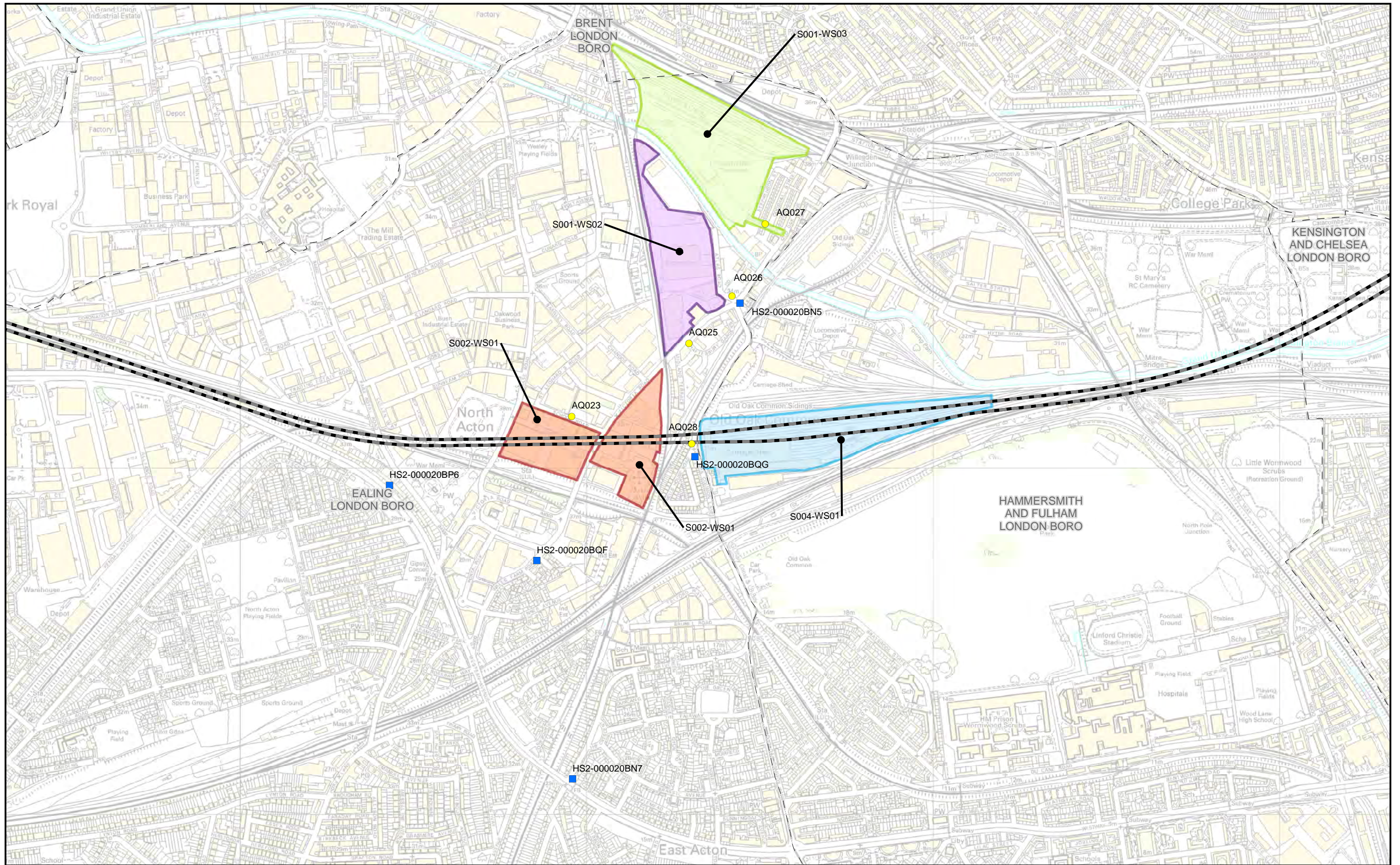
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Scale at A3: 20,000

0 200 400 600 800 Metres

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- Legend**
- Route in tunnel
 - Route on surface
 - Diffusion tube monitoring location
 - Dust monitoring location

- Willesden Euro worksite
- Victoria Road worksite
- Old Oak Common worksite
- Atlas Road worksite

Figure Number
 Figure Name
Worksites and Monitoring locations in LBE
 (sheet 2)

London Borough of Ealing

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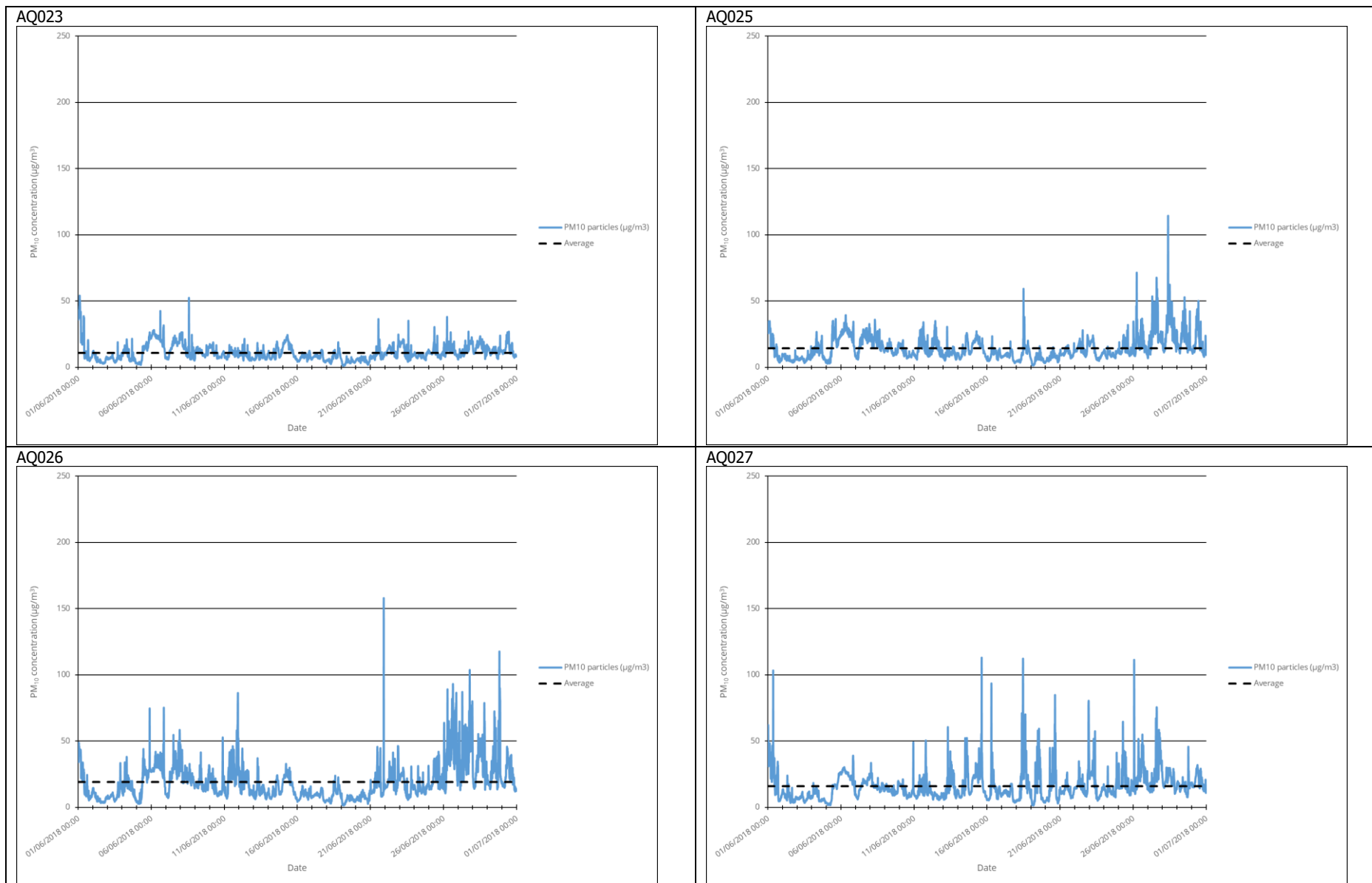
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Appendix B – Dust Monitoring Results

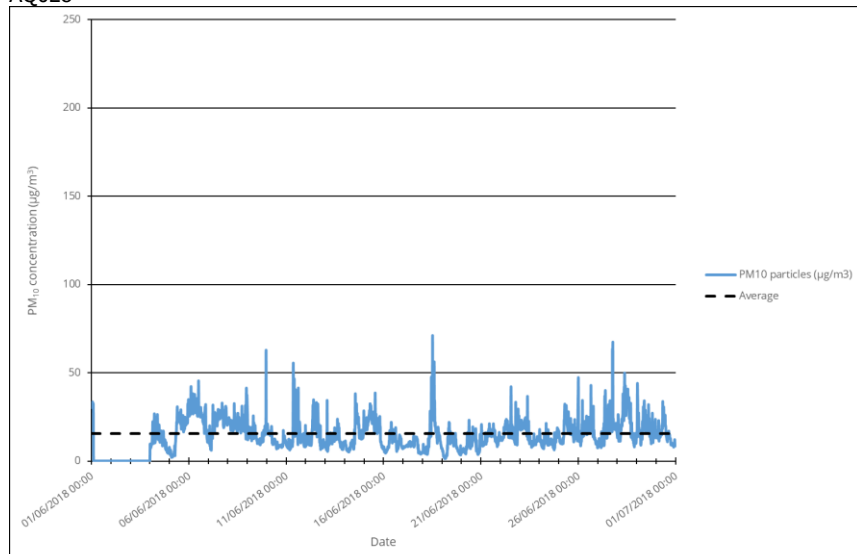
Table 1: Dust monitoring locations and June 2018 Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 15-minute PM ₁₀ concentration (µg/m ³)	Minimum 15-minute PM ₁₀ concentration (µg/m ³)	Maximum 15-minute PM ₁₀ concentration (µg/m ³)	Number of 15-min periods exceeding trigger level of 250 µg/m ³	15-min data capture (%)
AQ023	520957, 182147	School Road	H	Yes	N	10.9	0.9	54.0	0	100.0
AQ025	521296, 182354	Victoria Road	H	Yes	N	14.4	1.3	113.9	0	100.0
AQ026	521428, 182495	Old Oak Lane	H	Yes	N	19.1	1.4	158.0	0	100.0
AQ027	521515, 182705	Stephenson Street	H	Yes	N	16.1	1.4	113.1	0	100.0
AQ028	521309, 182085	Wells House Road	H	Yes	Y	15.7	1.3	71.0	0	90.3
AQ032	513410, 184552	Badminton Close	M	Yes	N	10.5	1.1	44.1	0	100.0

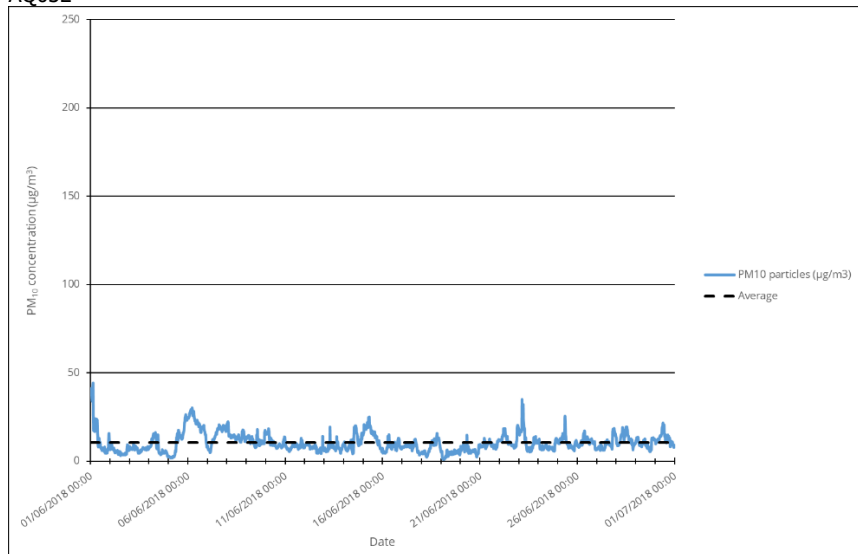
Figure 3: Construction dust 15-minute mean indicative PM₁₀ concentration for dust monitors



AQ028



AQ032



Appendix C – Air Quality Monitoring Results

Table 2: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2018 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2-000020BN5	Sign post on Victoria Road	521443, 182477	57	54	67	51	55								57
HS2-000020BN7	The Approach street sign	520959, 181102	77	57	56	65	52								61
HS2-000020BQF	Conway Drive sign post	520856, 181733	71	63	70	63	60								65
HS2-000020BQG	Lamp post outside No 1. Wells House Road on Old Oak Common Lane	521312, 182033	75	76	57	70	58								67
HS2-000020BP6	Triplicate site next to the Ealing, Western Avenue Acton roadside automatic monitoring station	520430, 181950	58	58	52	54	62								57
HS2-000020BP7	Triplicate site next to the Ealing, Hangar Lane Gyrotory roadside automatic monitoring station	518537, 182708	76	68	63	72	75								71

¹ Note: to aid interpretation and conform with best practice, the monthly measurements in this table are reported rounded to the nearest whole number. The annual mean presented here is calculated based on laboratory data to 4 significant figures, rounded to a whole number, and therefore may differ slightly to a mean derived from averaging the rounded monthly measurements in the table.