

Results of automatic monitoring for nitrogen dioxide (NO₂) at 93 Thoroughfare, Woodbridge: Annual Mean and 1-hour Mean

Year	Valid Data Capture %	Annual Mean NO ₂ Concentration (µg/m ³)	Number of Hourly Means > 200µg/m ³
2005	98.7%	42	0
2006	96.3%	44	0
2007	98.4%	46	2
2008	98.9%	45	2
2009	96.1%	45	1
2010	96.8%	45	0
2011	93.0%	42	0
2012	97.8%	44	1
2013	97.3%	42	0
2014	85.3%	39	0
2015	96.3%	35	5
2016	99.6%	37	0
2017	99.1%	37	0
2018	96.0%	33	0
2019	70.57%	31* (34 = annual mean recorded with 70.57% data capture)	(122µg/m ³) #
2020	99.32%	25	0
2021	95.98%	25	0
2022	99.59%	23	0
2023	99.41%	21	0

* Data has been ‘annualised’ to provide the annual mean - technical guidance (LAQM.TG(16)) provided by the Department for Environment, Food and Rural Affairs (Defra) advises data from any sites with less than 75% data capture over a calendar year should be annualised. The reason for annualisation is that the concentration varies throughout the year, and the instrument may have been operational for a period of above or below average concentrations. Box 7.9 in LAQM.TG(16) <https://laqm.defra.gov.uk/technical-guidance/> provides the methodology for undertaking this calculation.

Technical Guidance LAQM.TG(16) advises that the number of exceedances of the 1-hour objective should only be reported where data capture is more than 85% of a full year. If data capture is less than 85%, or monitoring is for less than a full year, local authorities should instead report the 99.8th percentile for 1-hour NO₂. If the 99.8th percentile is greater than 200µg/m³ this means that if there had been 100% data capture there would have been greater than 18 exceedances of 200µg/m³ in the calendar year. If it is less than 200µg/m³ the 1-hour objective will not have been exceeded.

N.B Please note that during 2020-21 the COVID-19 lockdowns had an impact to reduce traffic flows across the country. This will, in turn, have led to a reduction in vehicle emissions of NO₂ and therefore recorded NO₂ concentrations within the district. Please use caution when interpreting the data.

Details for the nitrogen dioxide automatic monitoring site located at 93 Thoroughfare, Woodbridge

Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Inlet Height (m)	Pollutants Monitored	In Air Quality Management Area?	Monitoring Technique	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m)	Does this Location Represent Worst-Case Exposure?
Woodbridge Junction	Roadside	X 627596	Y 249261	2.6	Nitrogen dioxide (NO ₂)	Yes	ozone chemi-luminescence	Yes (0m)	1.2m	Yes