

Permit Number: EPR/BU5453IY
Operator: AGC Chemicals Europe Limited
Facility: AGC Chemicals Europe, Hillhouse

Form Number: Air 1 / 2017: Particulate matter

Form Number: Air 2 / 2017: Total Organic Carbon (TOC)

Form Number: Air 3 / 2017: Hydrogen Chloride

Form Number: Air 4 / 2017: Hydrogen Fluoride

Form Number: Air 5 / 2017: Carbon Monoxide

Form Number: Air 6 / 2017: Oxides of Nitrogen

Form Number: Air 9 / 2017: Sulphur Dioxide

During Q2 the Thermal Oxidiser was predominantly online with liquid and gaseous waste stream from the Waste Acid Stack (WAS) and Low Boiler Stack (LBS).
From the 15/04/24 to 20/04/24 (6days) the Thermal Oxidiser was offline due to zero production on site during this period. During the period 25/05/2024 to 07/05/2024 (14 days) the Thermal Oxidiser was offline for maintenance.

There were the following exceedances during Q2 which were reported to the Environment Agency on 23/07/2024:

- 11/05/2024 exceedance for HF (1/2 hour and daily average)
- 17/06/2024 exceedance for dust (1/2 hour average). No daily average exceedance.
- 24/06/2024 (non-reportable day) exceedance for dust (1/2 hour average). No daily average exceedance.

See CEMS data below for quarterly reporting on Form Numbers identified above.

Thermal Treatment Plant 2024 Q2 periodic monitoring was undertaken from 20-22nd May 2024.

Signed*: [REDACTED] [REDACTED]

Date: 26/07/2024

(*authorised to sign as representative of AGC Chemicals Europe Limited)

Reporting of Continuously Monitored Emissions to Air for NO_x, Emission Point A14 - TTP for Apr, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

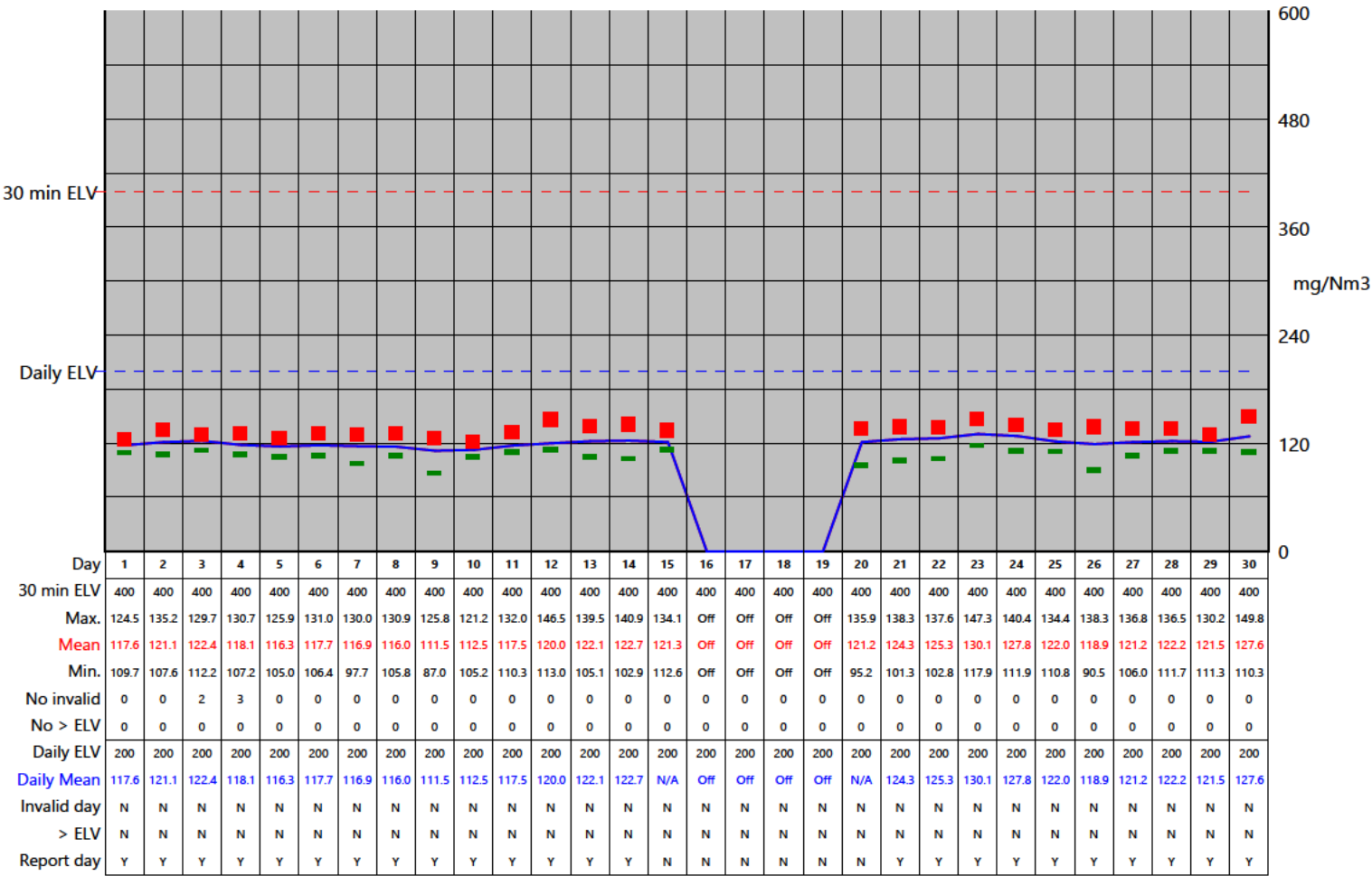
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 135.1
No. of valid averages = 1189

Month summary	
30 min ELV	
Monthly max.	149.8
Monthly mean	120.6
Monthly min.	87.0
Total invalid	5
Sum > ELV	0
Daily ELV	
Monthly max	130.1
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

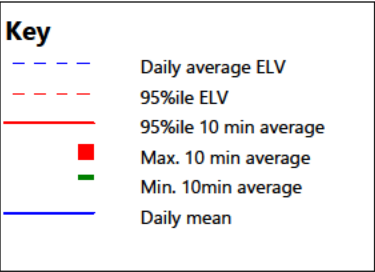
Signature

Authorised Representative

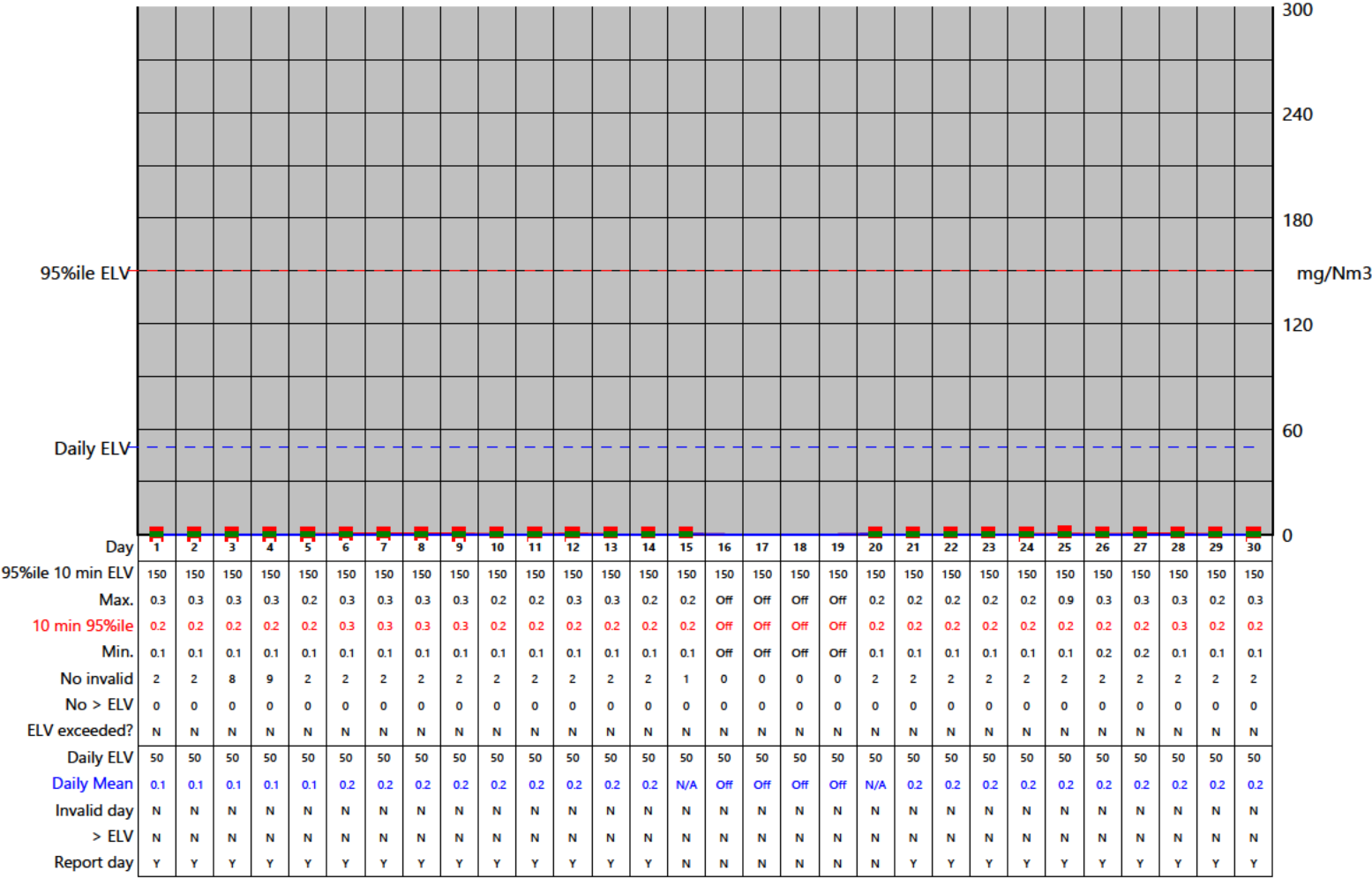
Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for CO, Emission Point A14 - TTP for Apr, 2024



Month summary	
10 minute data	
Monthly max.	0.9
Monthly mean	0.2
Monthly min.	0.1
Total invalid	64
Sum > ELV	0
Total %ile exceed.	0
Daily ELV	
Monthly max	0.2
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for SO₂ , Emission Point A14 - TTP for Apr, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

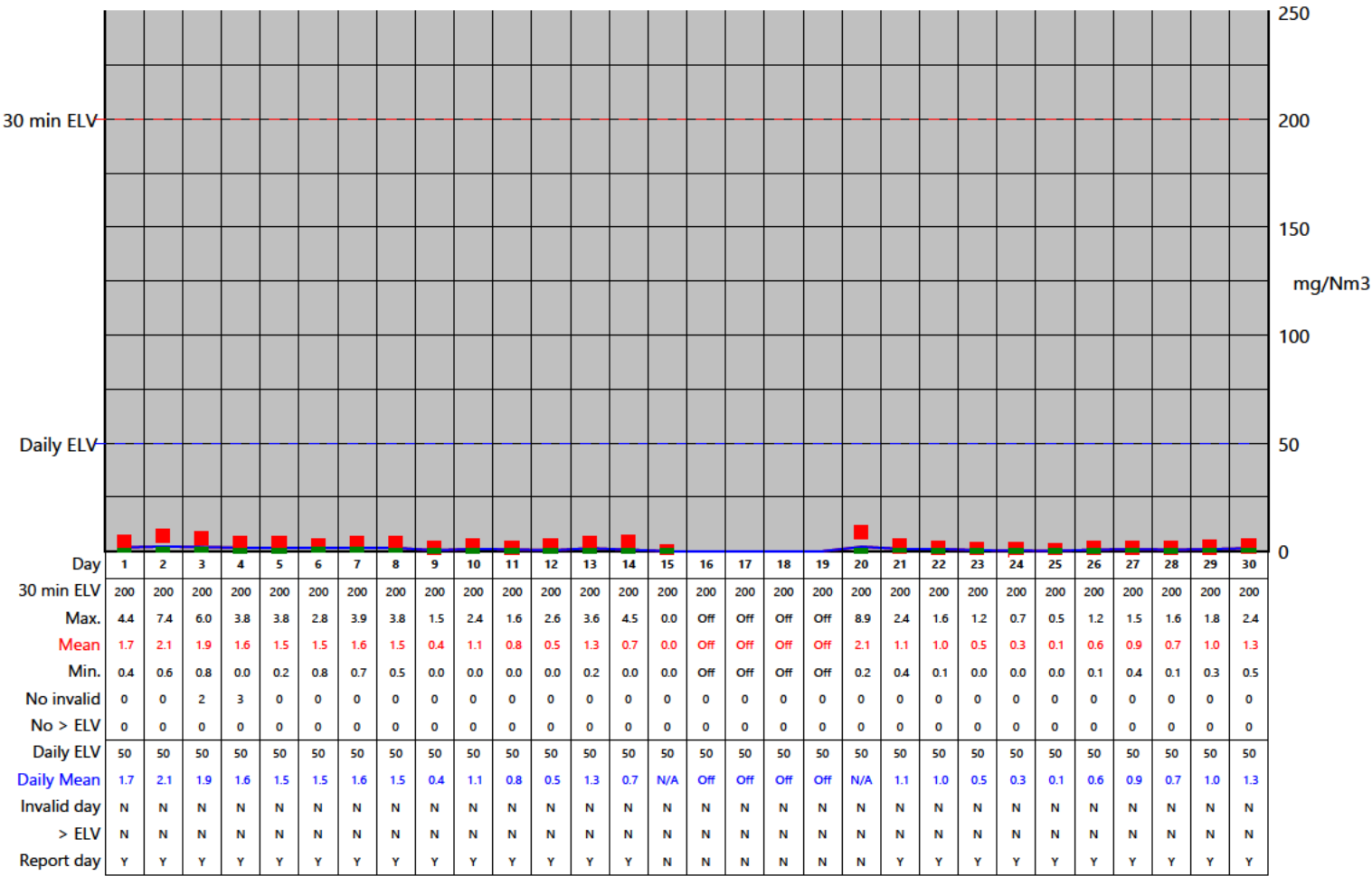
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 2.7
No. of valid averages = 1189

Month summary	
30 min ELV	
Monthly max.	8.9
Monthly mean	1.1
Monthly min.	0.0
Total invalid	5
Sum > ELV	0
Daily ELV	
Monthly max	2.1
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HCl, Emission Point A14 - TTP for Apr, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

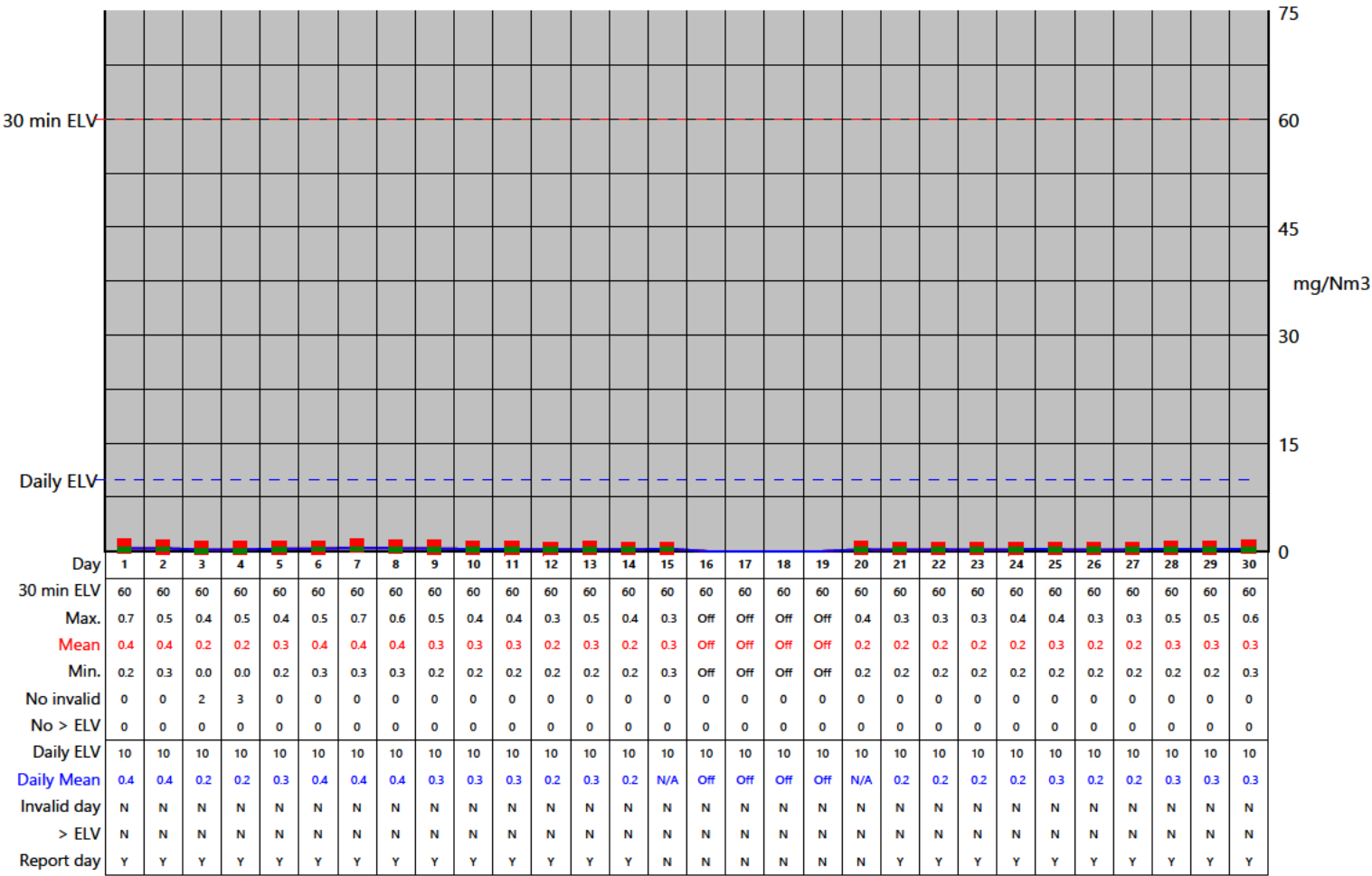
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.5
No. of valid averages = 1189

Month summary	
30 min ELV	
Monthly max.	0.7
Monthly mean	0.3
Monthly min.	0.0
Total invalid	5
Sum > ELV	0
Daily ELV	
Monthly max	0.4
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for TOC, Emission Point A14 - TTP for Apr, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

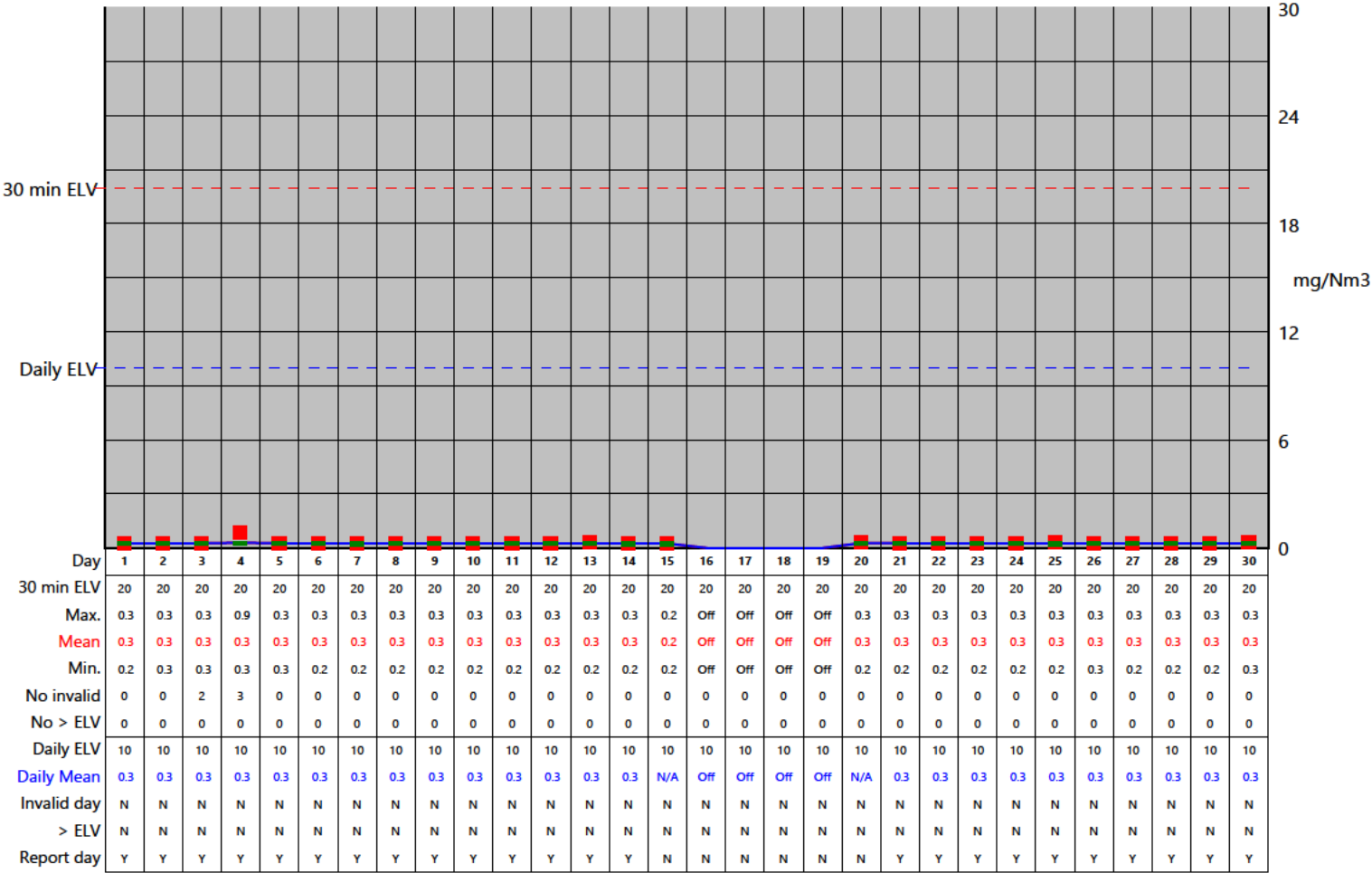
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.3
No. of valid averages = 1189

Month summary	
30 min ELV	
Monthly max.	0.9
Monthly mean	0.3
Monthly min.	0.2
Total invalid	5
Sum > ELV	0
Daily ELV	
Monthly max	0.3
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HF, Emission Point A14 - TTP for Apr, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

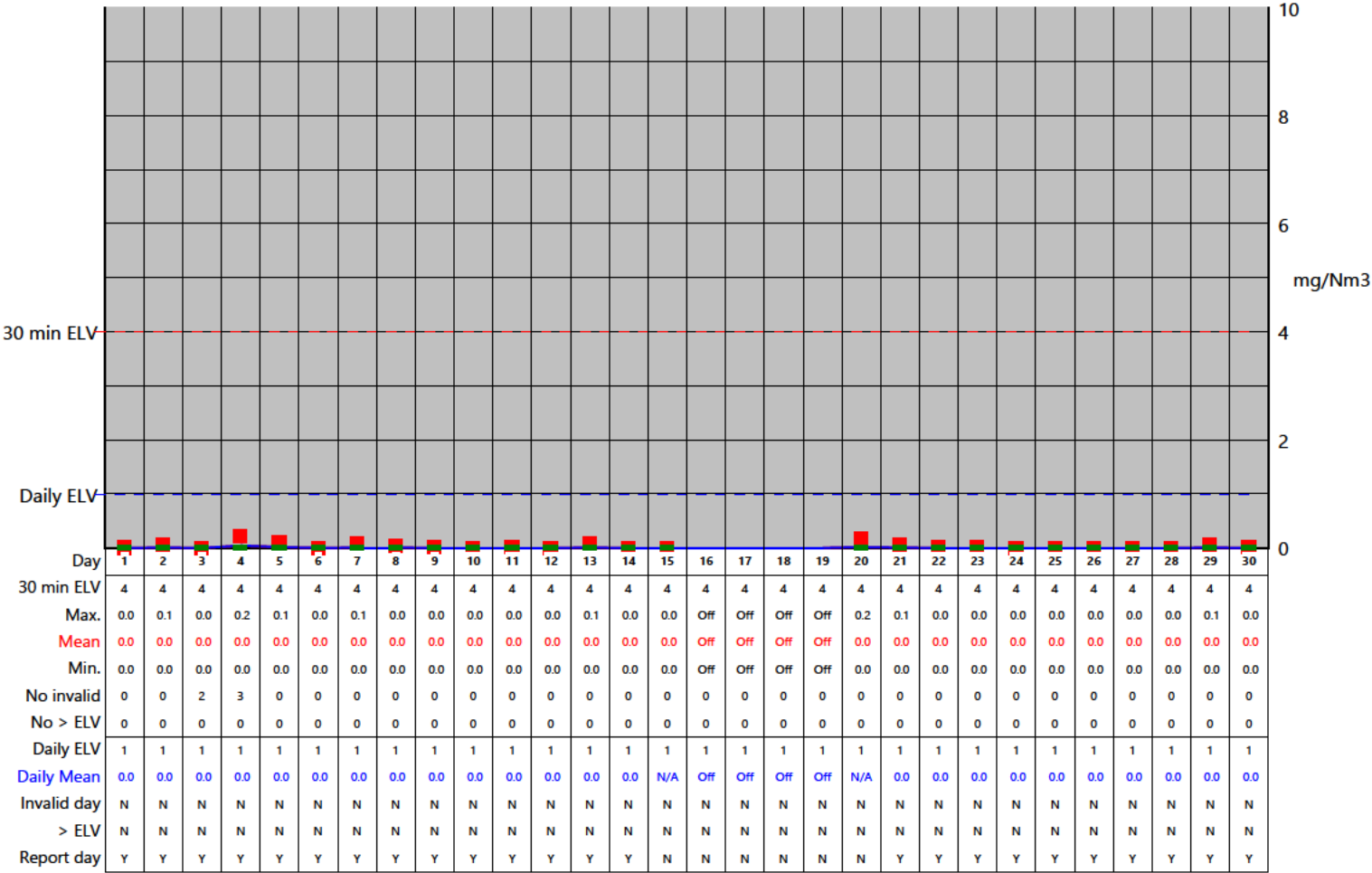
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.0
No. of valid averages = 1189

Month summary	
30 min ELV	
Monthly max.	0.2
Monthly mean	0.0
Monthly min.	0.0
Total invalid	5
Sum > ELV	0
Daily ELV	
Monthly max	0.0
No. invalid days	0
No. > ELV	0
No. report days	24



Data is as processed without repairs.

Signature

Authorised Representative

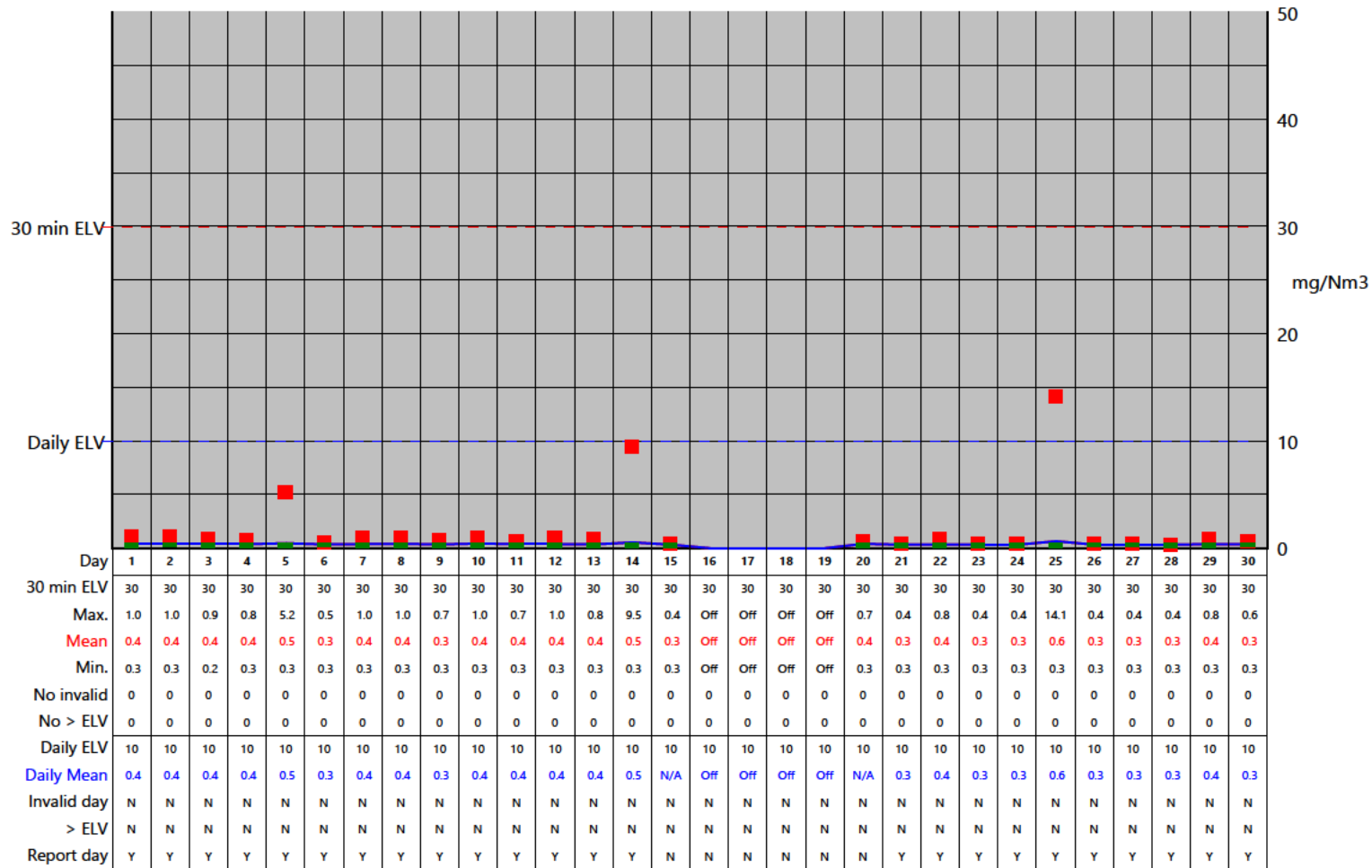
Date

26/07/2024

Key

- Daily average ELV
- 30 min. average ELV
- Mean 30 min. average
- Max. 30 min average
- Min. 30 min average
- Daily mean

Month summary	
30 min ELV	
Monthly max.	14.1
Monthly mean	0.4
Monthly min.	0.2
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	0.6
No. invalid days	0
No. > ELV	0
No. report days	24



Signature

Date

26/07/2024



Reporting of Continuously Monitored Emissions to Air for NO_x, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

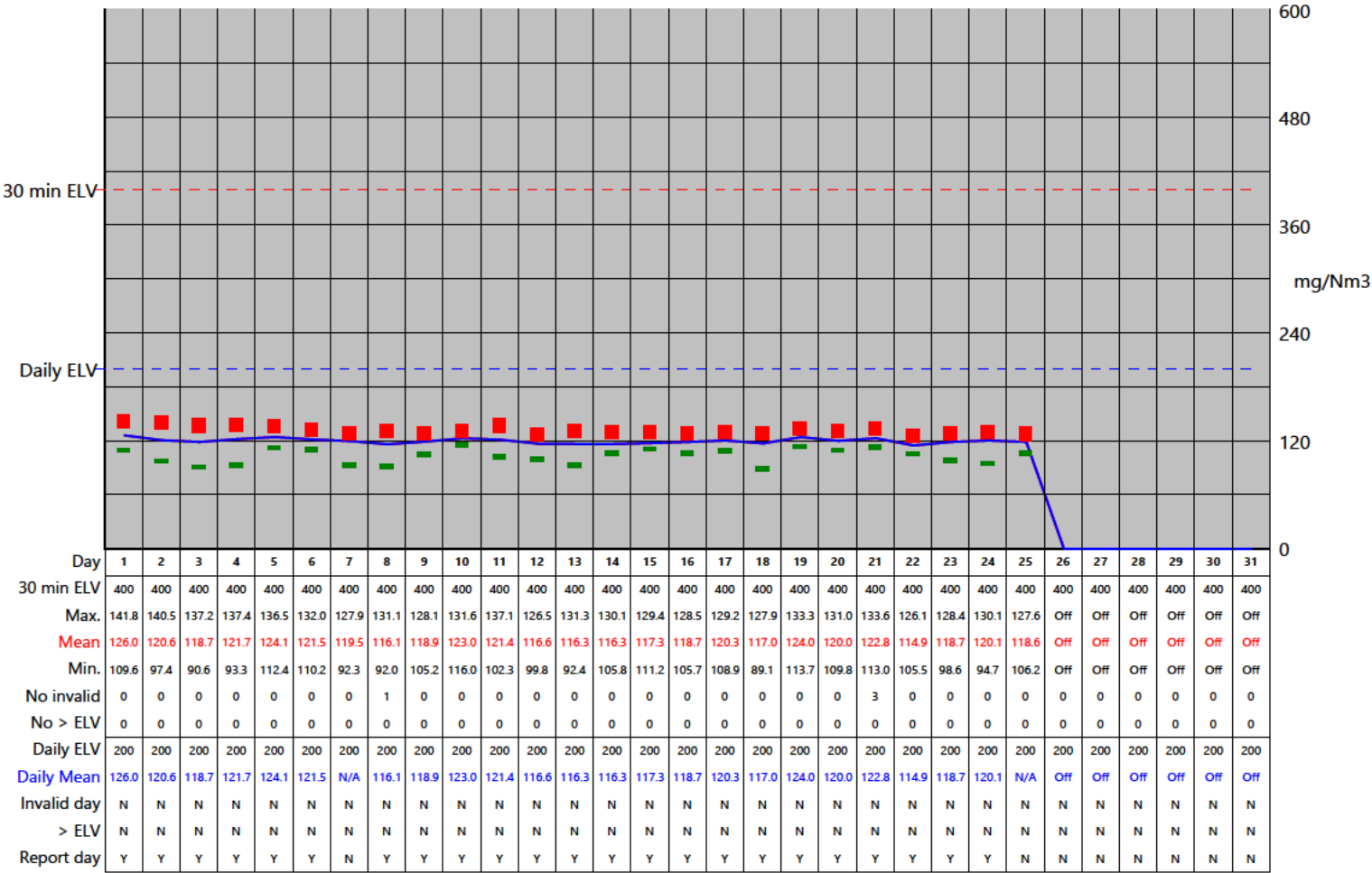
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 131.3
No. of valid averages = 1158

Month summary	
30 min ELV	
Monthly max.	141.8
Monthly mean	119.7
Monthly min.	89.1
Total invalid	4
Sum > ELV	0
Daily ELV	
Monthly max	126.0
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for CO, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

95%ile ELV

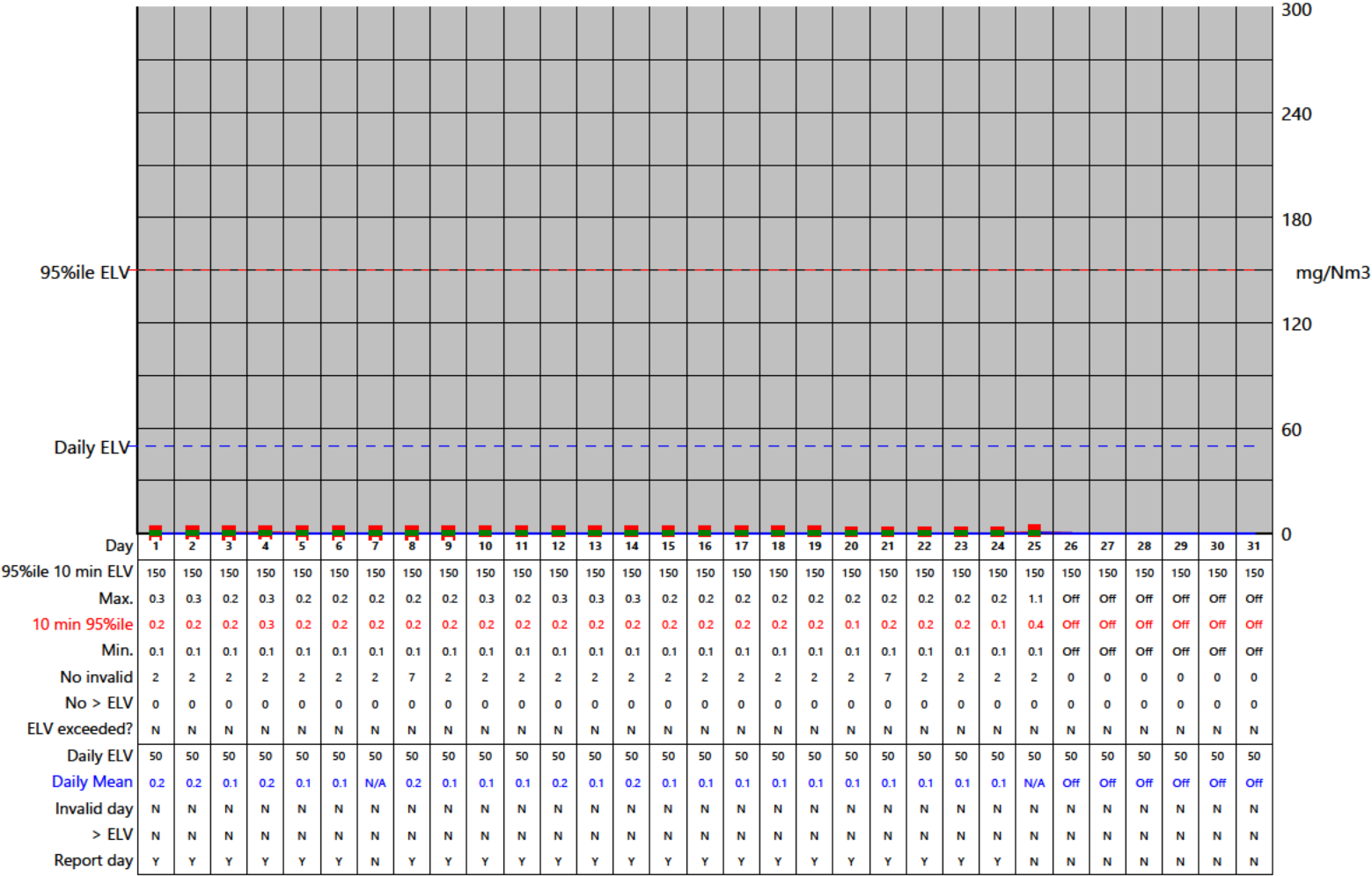
95%ile 10 min average

Max. 10 min average

Min. 10min average

Daily mean

Month summary	
10 minute data	
Monthly max.	1.1
Monthly mean	0.1
Monthly min.	0.1
Total invalid	60
Sum > ELV	0
Total %ile exceed.	0
Daily ELV	
Monthly max	0.2
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for SO₂, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

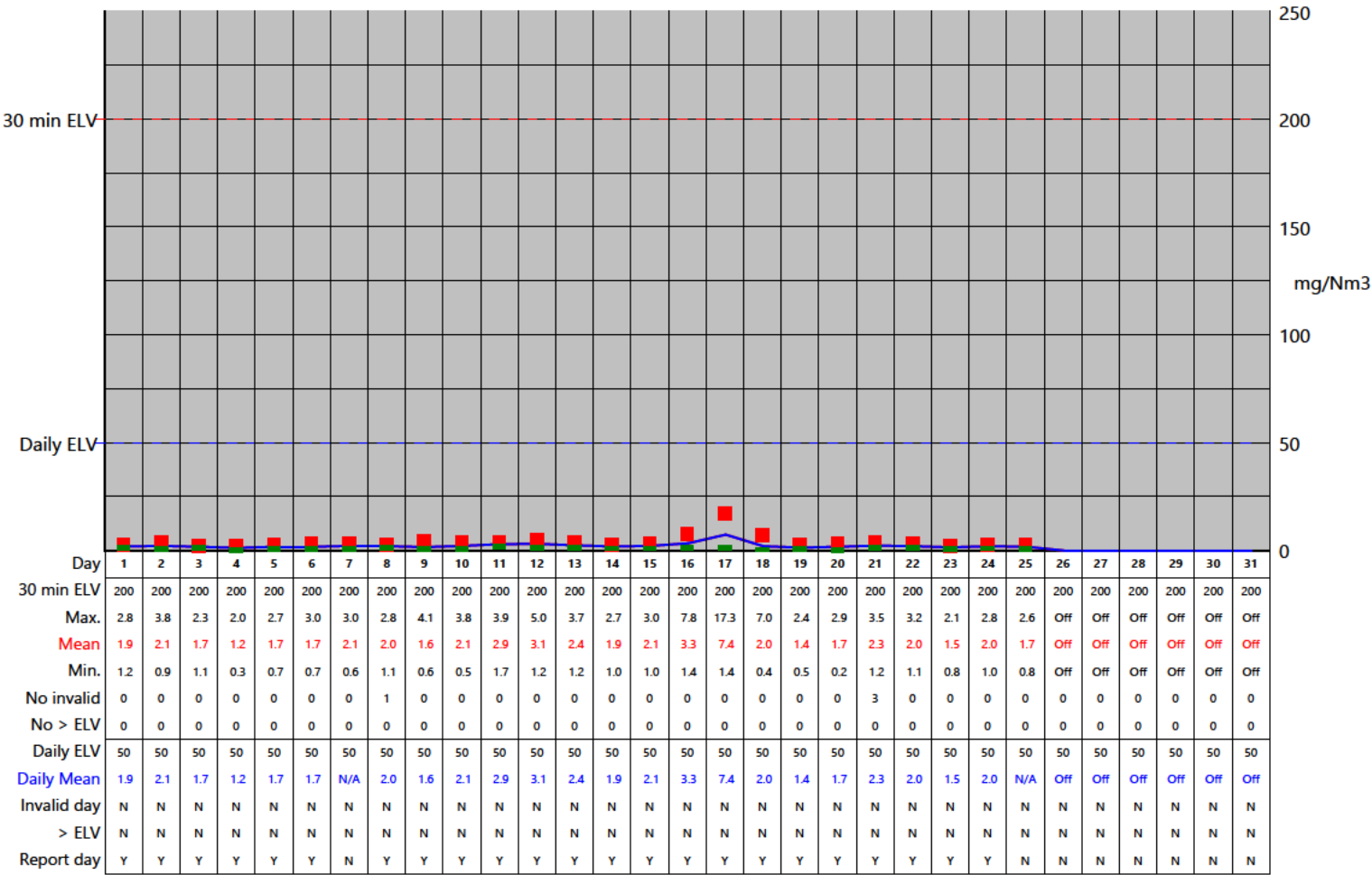
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 4.9
No. of valid averages = 1158

Month summary	
30 min ELV	
Monthly max.	17.3
Monthly mean	2.2
Monthly min.	0.2
Total invalid	4
Sum > ELV	0
Daily ELV	
Monthly max	7.4
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HCl, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

Max. 30 min average

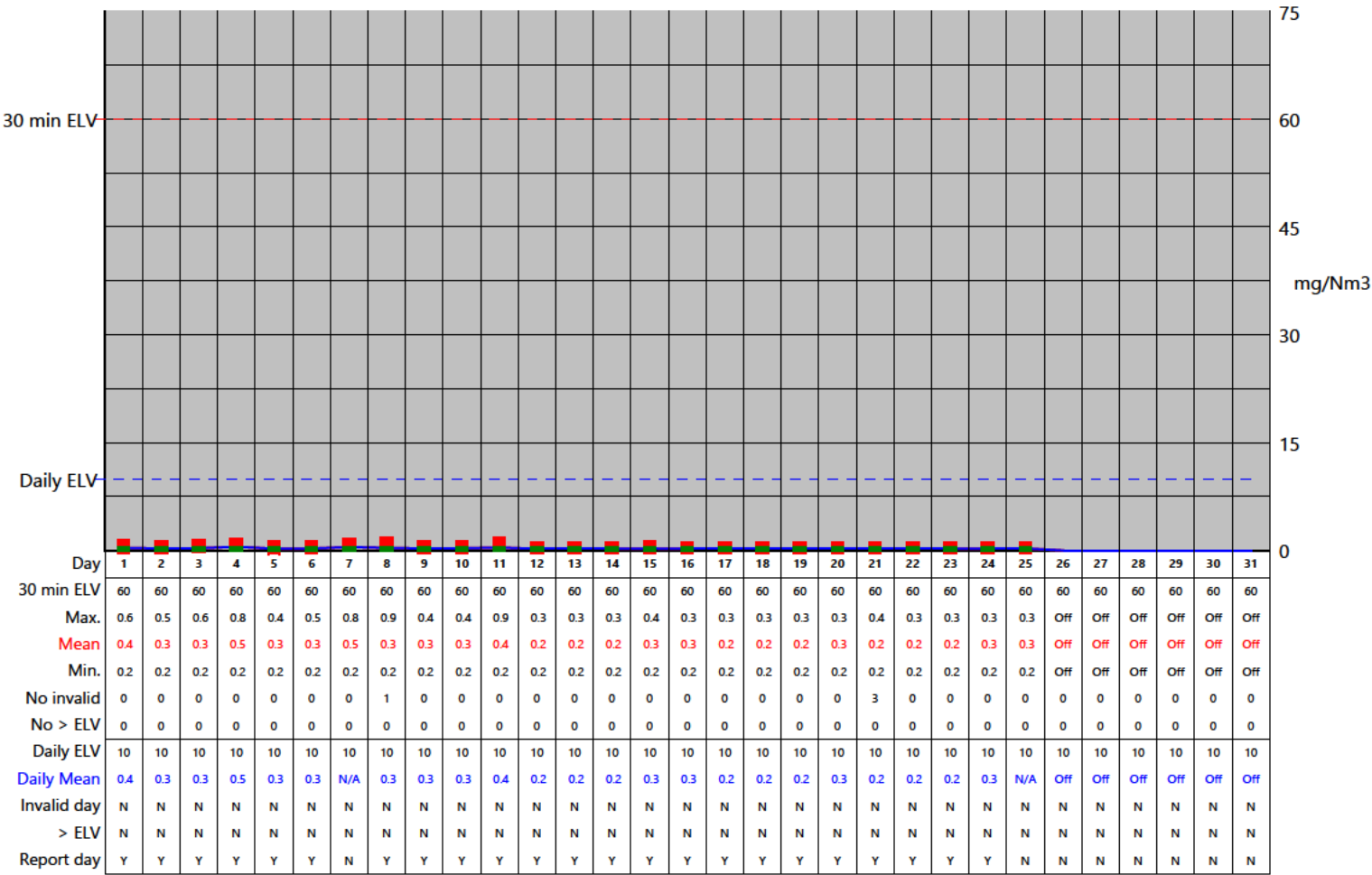
Min. 30 min average

Daily mean

95th Percentile = 0.5

No. of valid averages = 1158

Month summary	
30 min ELV	
Monthly max.	0.9
Monthly mean	0.3
Monthly min.	0.2
Total invalid	4
Sum > ELV	0
Daily ELV	
Monthly max	0.5
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for TOC, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

Max. 30 min average

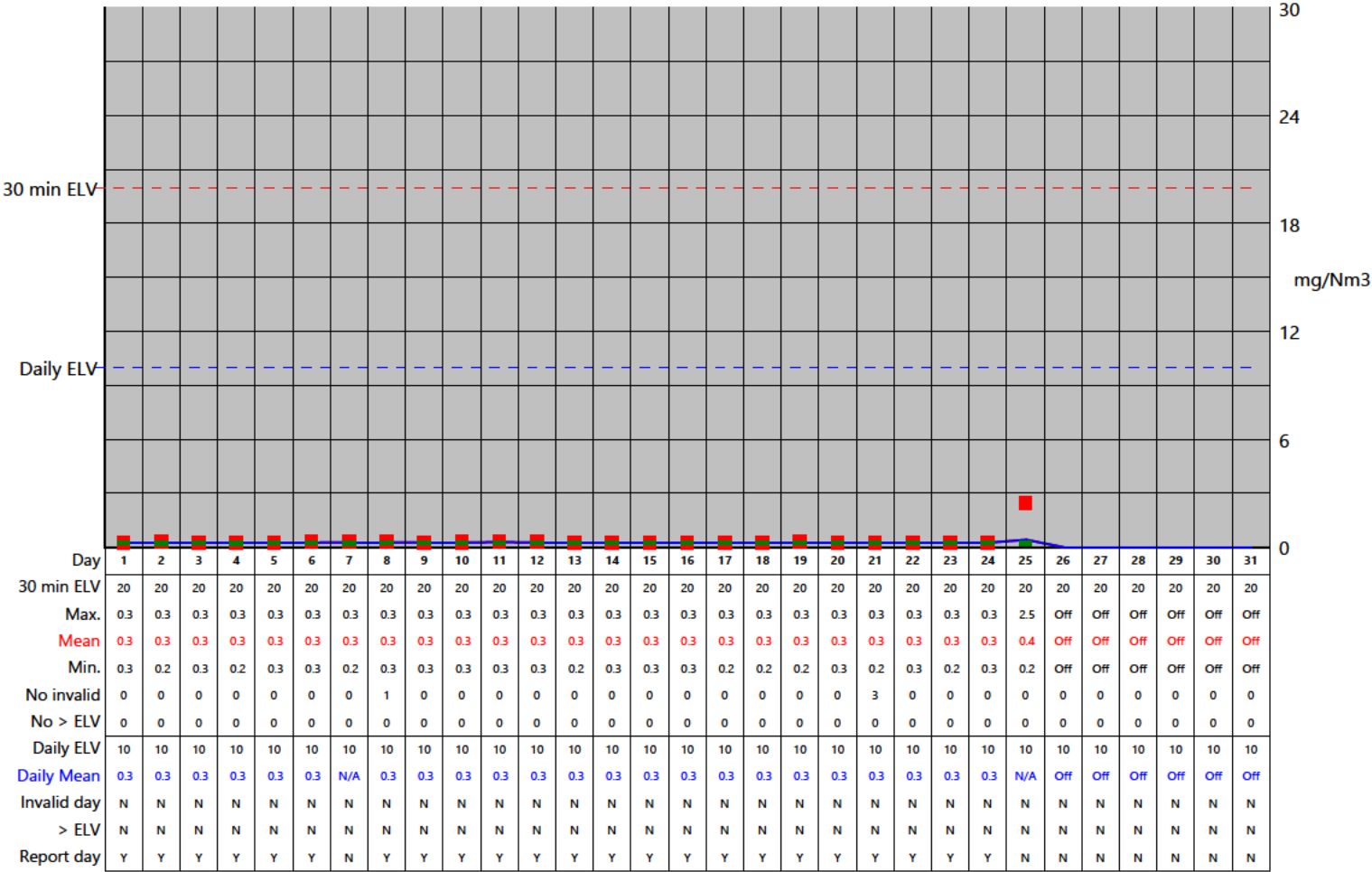
Min. 30 min average

Daily mean

95th Percentile = 0.3

No. of valid averages = 1158

Month summary	
30 min ELV	
Monthly max.	2.5
Monthly mean	0.3
Monthly min.	0.2
Total invalid	4
Sum > ELV	0
Daily ELV	
Monthly max	0.3
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HF, Emission Point A14 - TTP for May, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

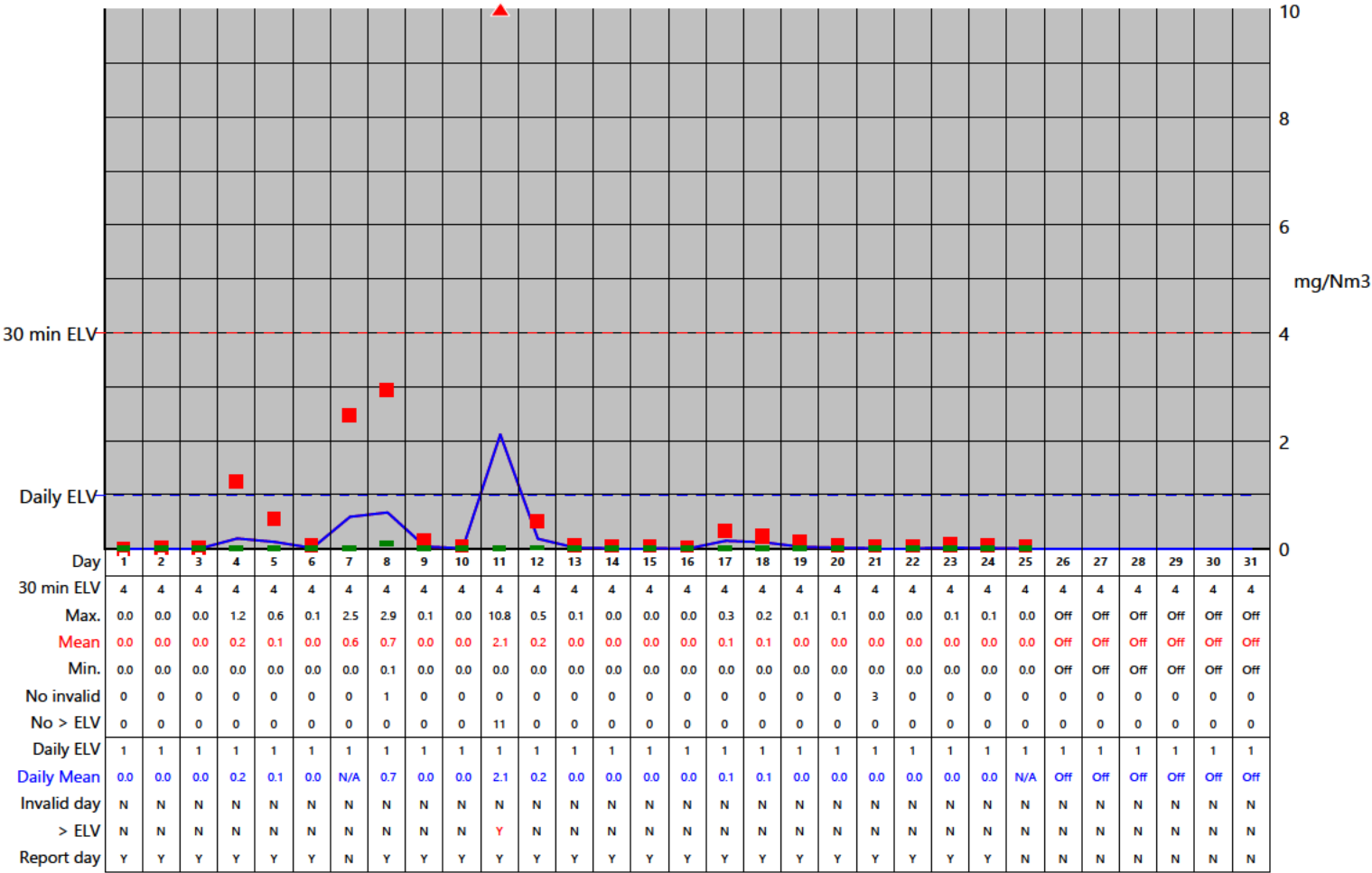
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.5
No. of valid averages = 1158

Month summary	
30 min ELV	
Monthly max.	10.8
Monthly mean	0.2
Monthly min.	0.0
Total invalid	4
Sum > ELV	11
Daily ELV	
Monthly max	2.1
No. invalid days	0
No. > ELV	1
No. report days	23



Data is as processed without repairs.

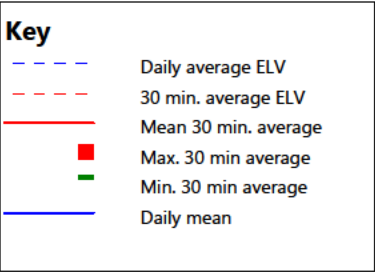
Signature

Authorised Representative

Date

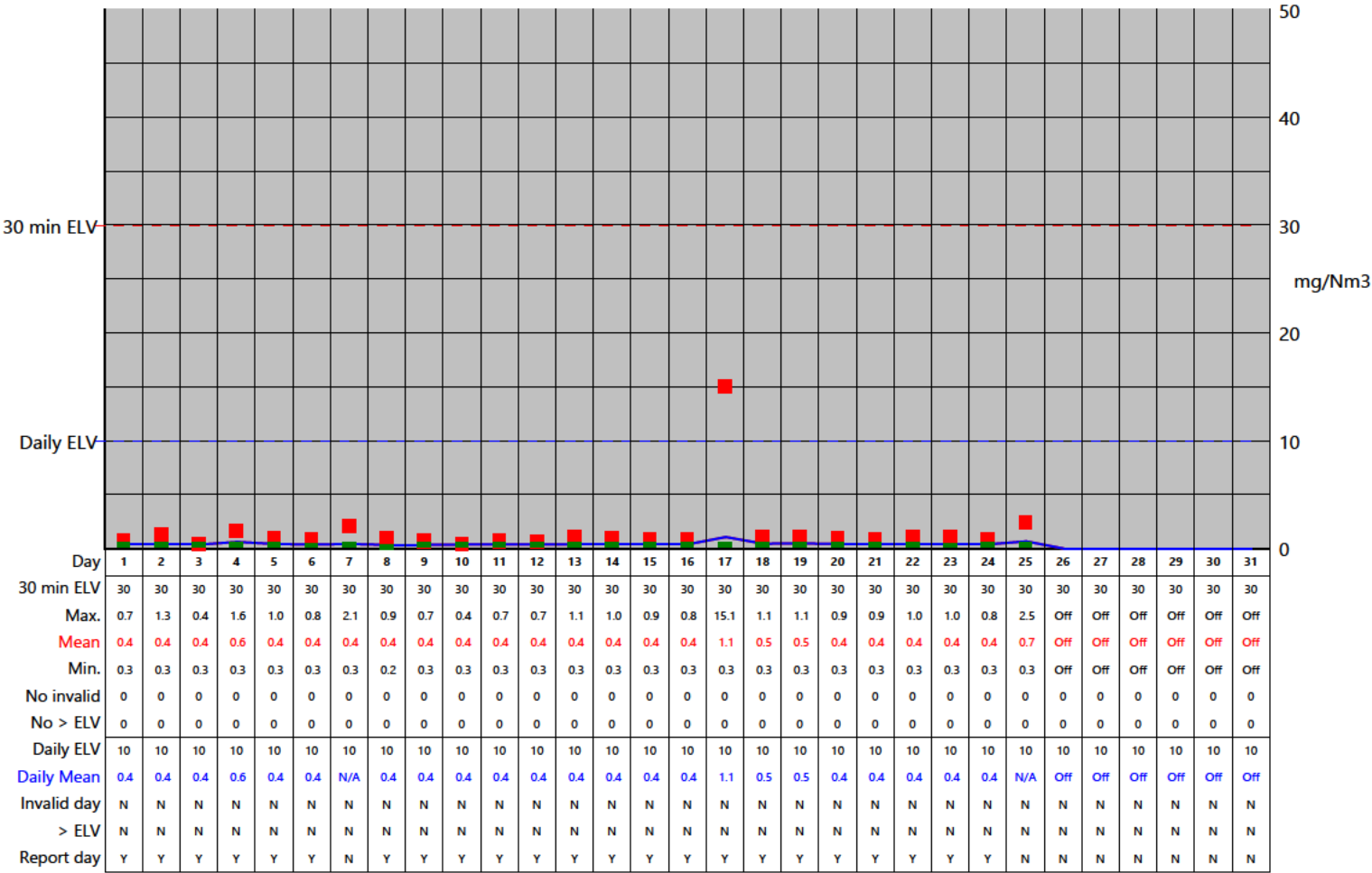
26/07/2024

Reporting of Continuously Monitored Emissions to Air for Dust, Emission Point A14 - TTP for May, 2024



95th Percentile = 0.9
No. of valid averages = 1162

Month summary	
30 min ELV	
Monthly max.	15.1
Monthly mean	0.4
Monthly min.	0.2
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	1.1
No. invalid days	0
No. > ELV	0
No. report days	23



Data is as processed without repairs.

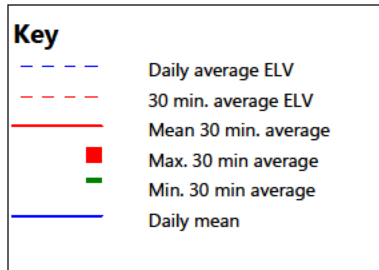
Signature

Authorised Representative

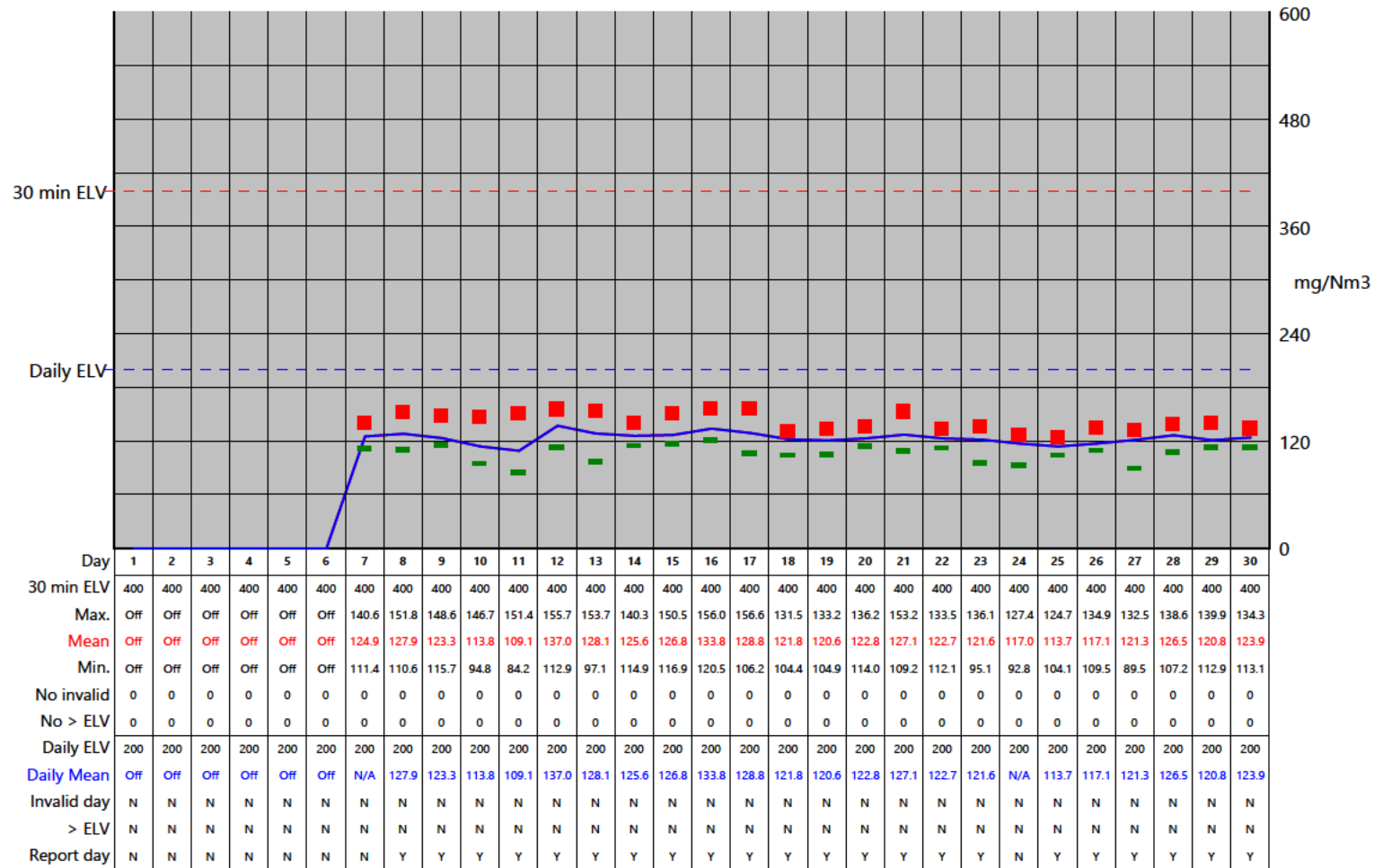
Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for NO_x, Emission Point A14 - TTP for Jun, 2024



95th Percentile = 141.6
No. of valid averages = 1109



Month summary	
30 min ELV	
Monthly max.	156.6
Monthly mean	123.2
Monthly min.	84.2
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	137.0
No. invalid days	0
No. > ELV	0
No. report days	22

Data is as processed without repairs.

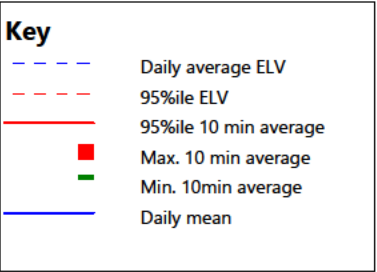
Signature

Authorised Representative

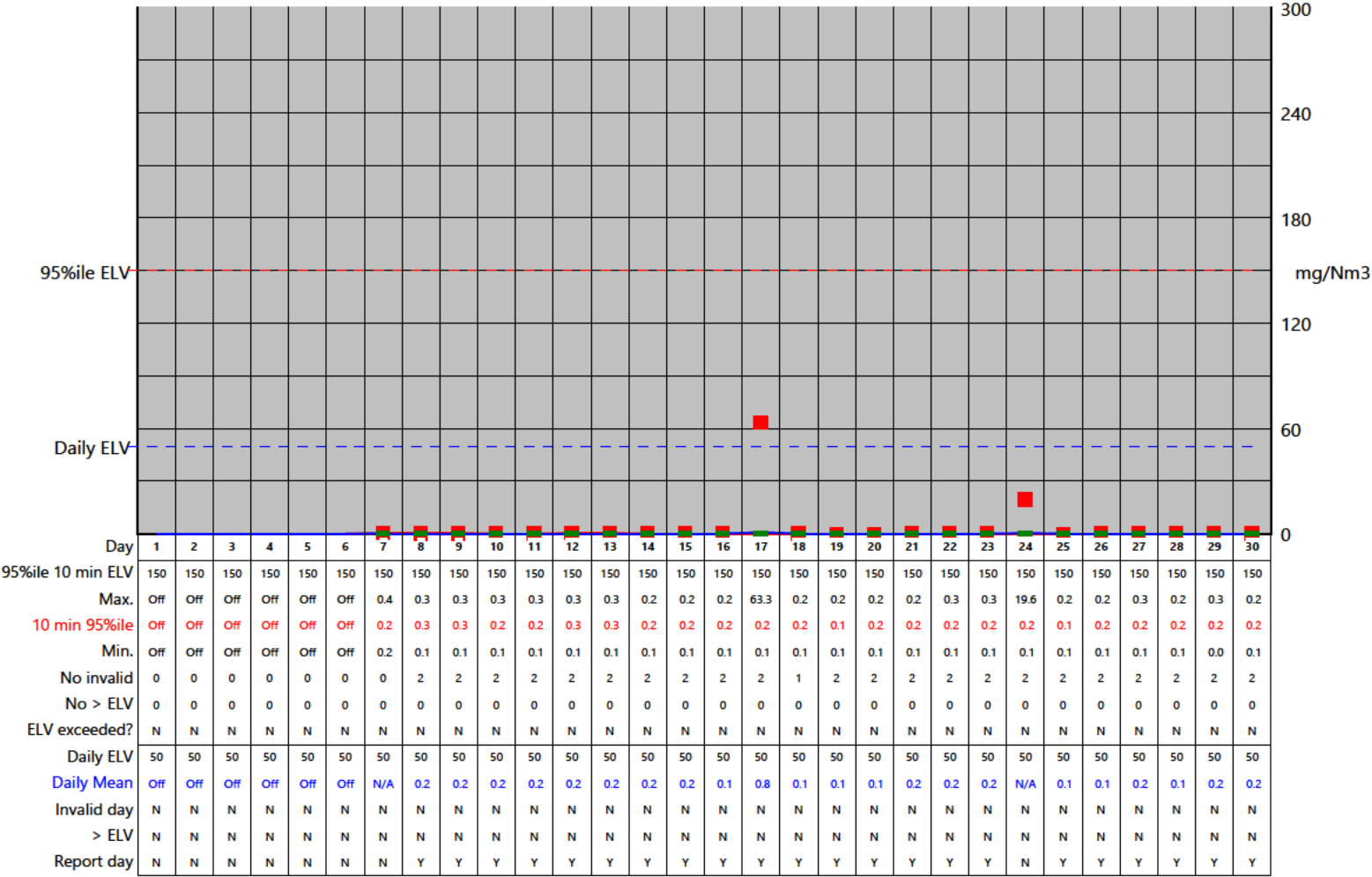
Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for CO, Emission Point A14 - TTP for Jun, 2024



Month summary	
10 minute data	
Monthly max.	63.3
Monthly mean	0.2
Monthly min.	0.0
Total invalid	45
Sum > ELV	0
Total %ile exceed.	0
Daily ELV	
Monthly max	0.8
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for SO₂ , Emission Point A14 - TTP for Jun, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

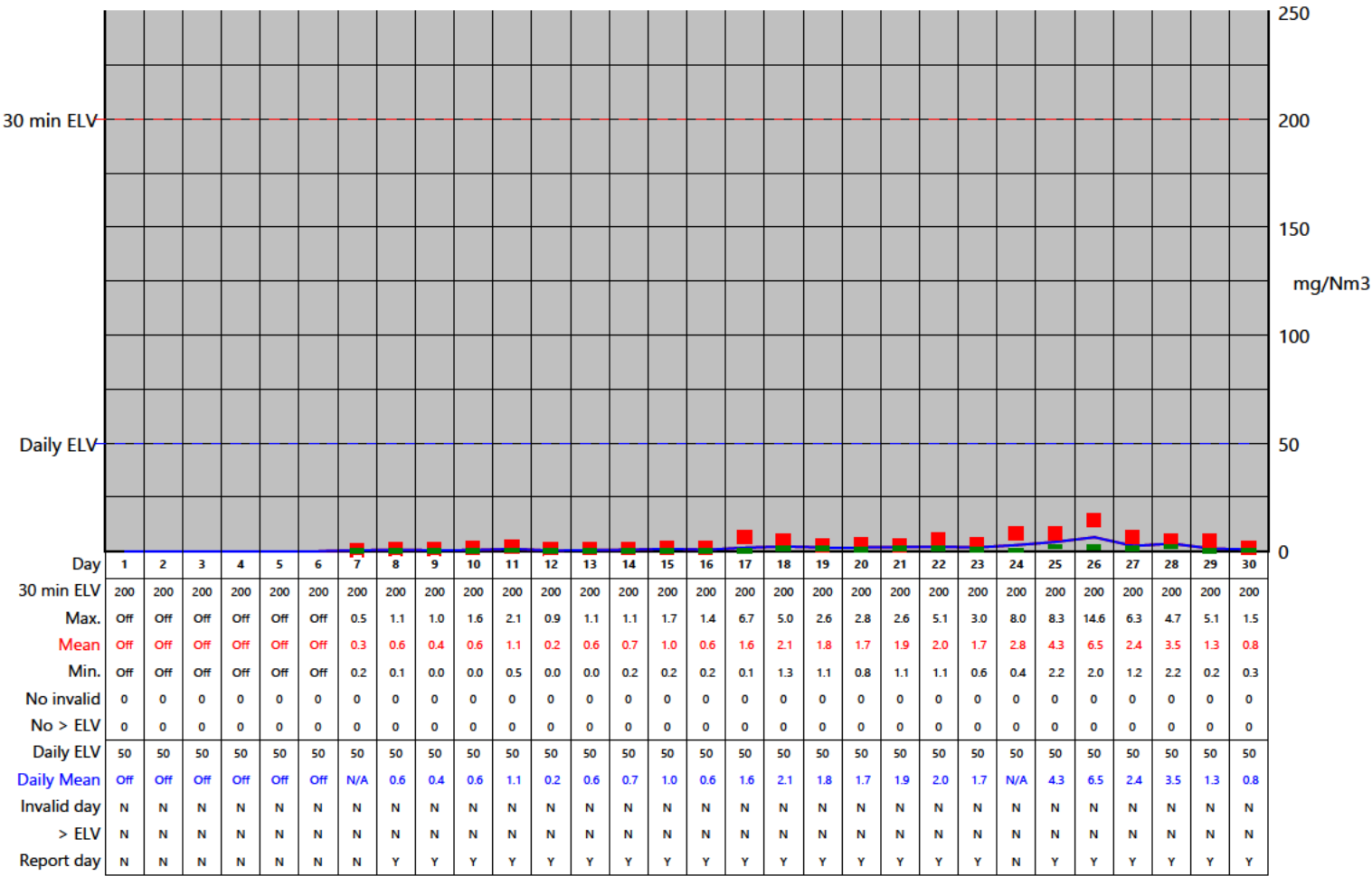
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 5.0
No. of valid averages = 1109

Month summary	
30 min ELV	
Monthly max.	14.6
Monthly mean	1.7
Monthly min.	0.0
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	6.5
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HCl, Emission Point A14 - TTP for Jun, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

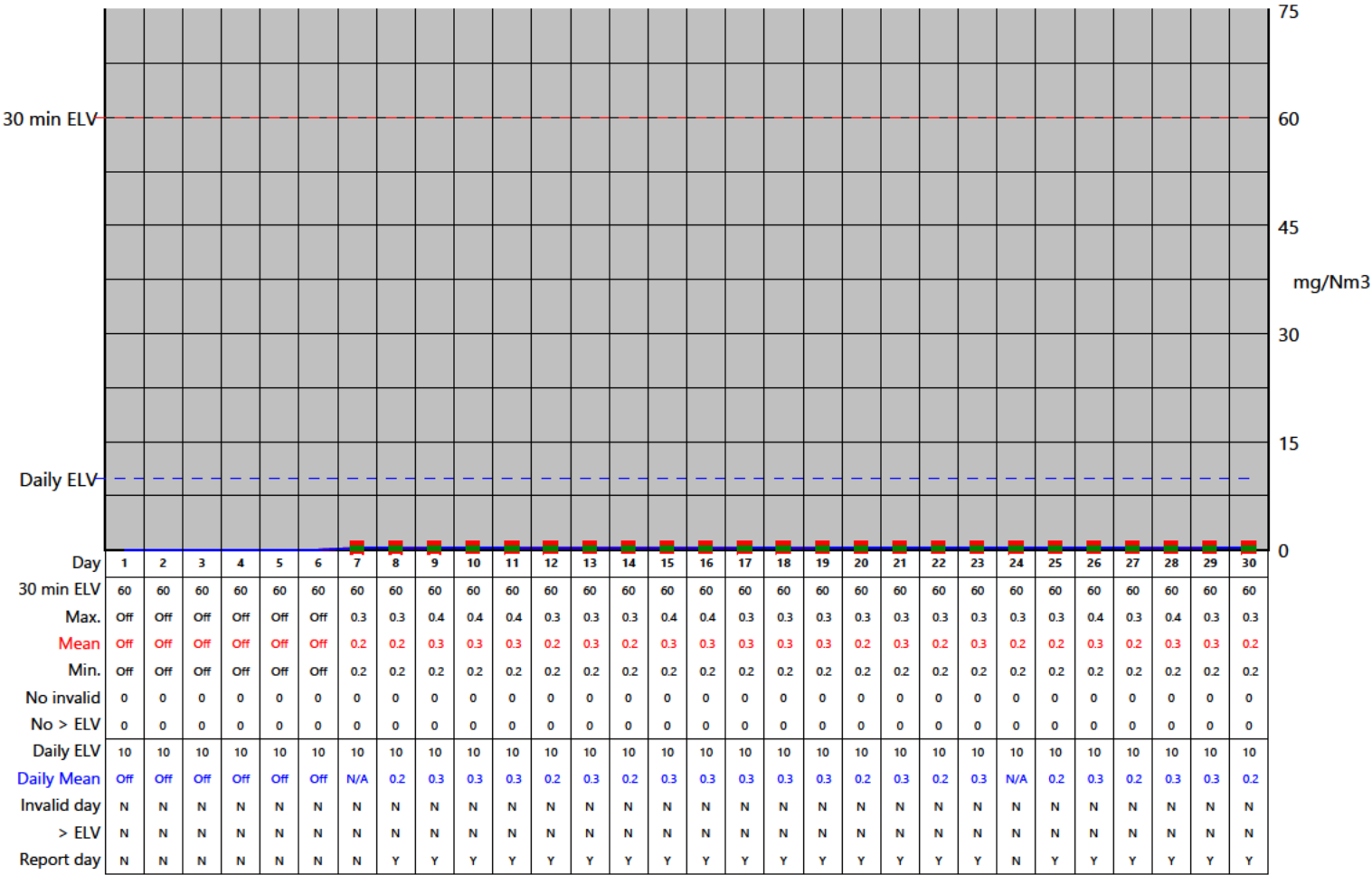
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.3
No. of valid averages = 1109

Month summary	
30 min ELV	
Monthly max.	0.4
Monthly mean	0.3
Monthly min.	0.2
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	0.3
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for TOC, Emission Point A14 - TTP for Jun, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

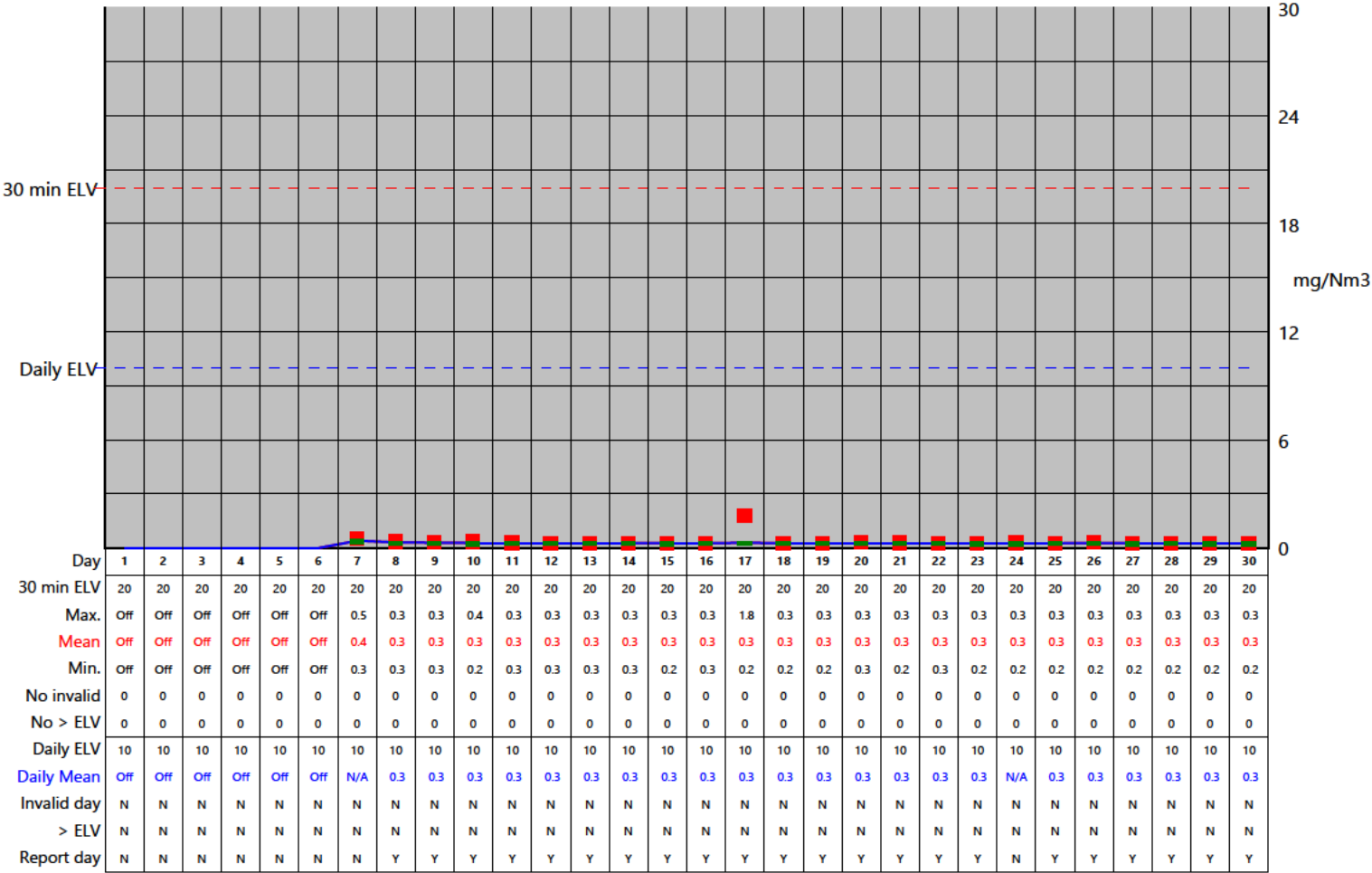
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.3
No. of valid averages = 1109

Month summary	
30 min ELV	
Monthly max.	1.8
Monthly mean	0.3
Monthly min.	0.2
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	0.3
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for HF, Emission Point A14 - TTP for Jun, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

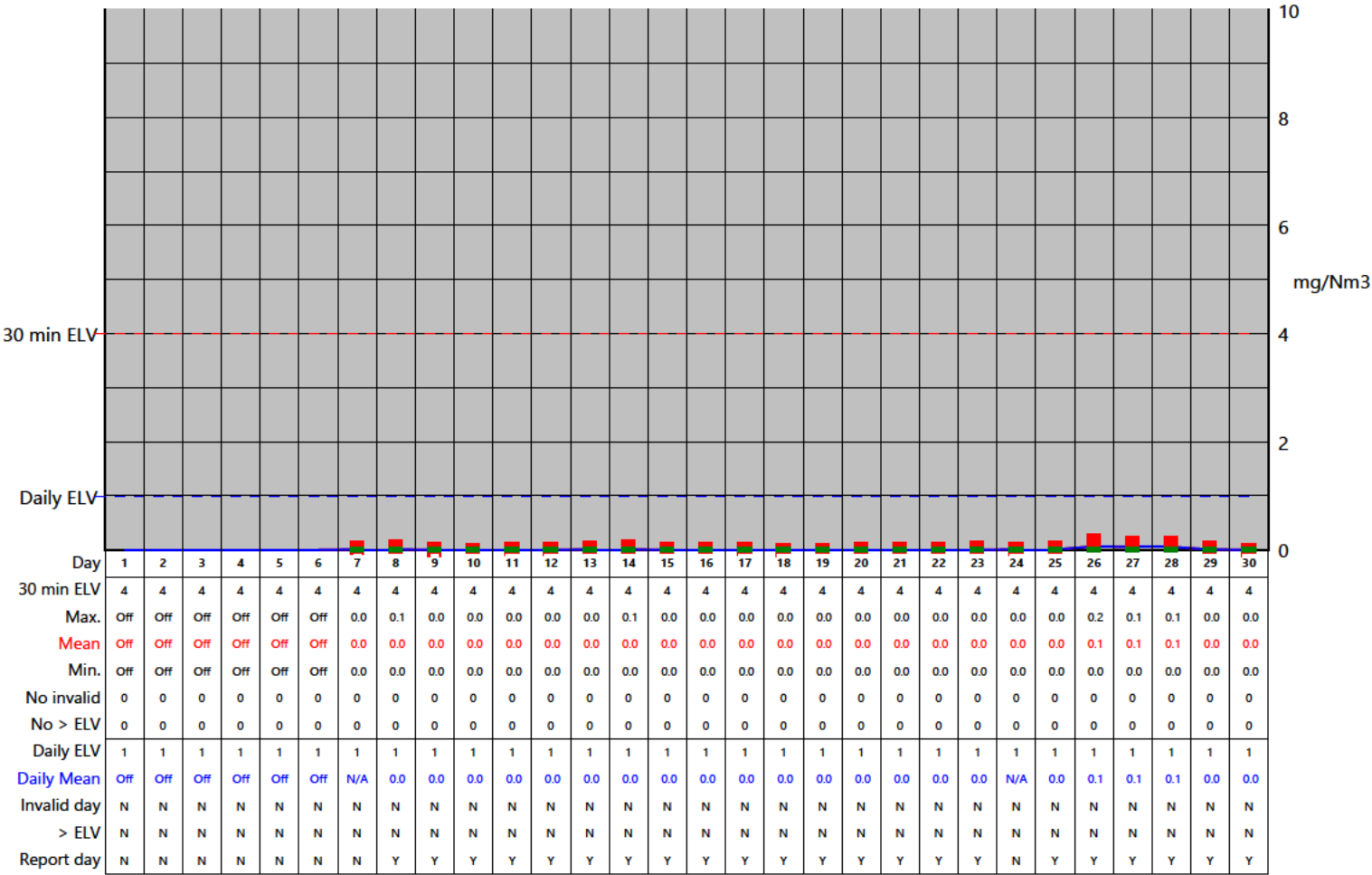
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.1
No. of valid averages = 1109

Month summary	
30 min ELV	
Monthly max.	0.2
Monthly mean	0.0
Monthly min.	0.0
Total invalid	0
Sum > ELV	0
Daily ELV	
Monthly max	0.1
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024

Reporting of Continuously Monitored Emissions to Air for Dust, Emission Point A14 - TTP for Jun, 2024

Key

Daily average ELV

30 min. average ELV

Mean 30 min. average

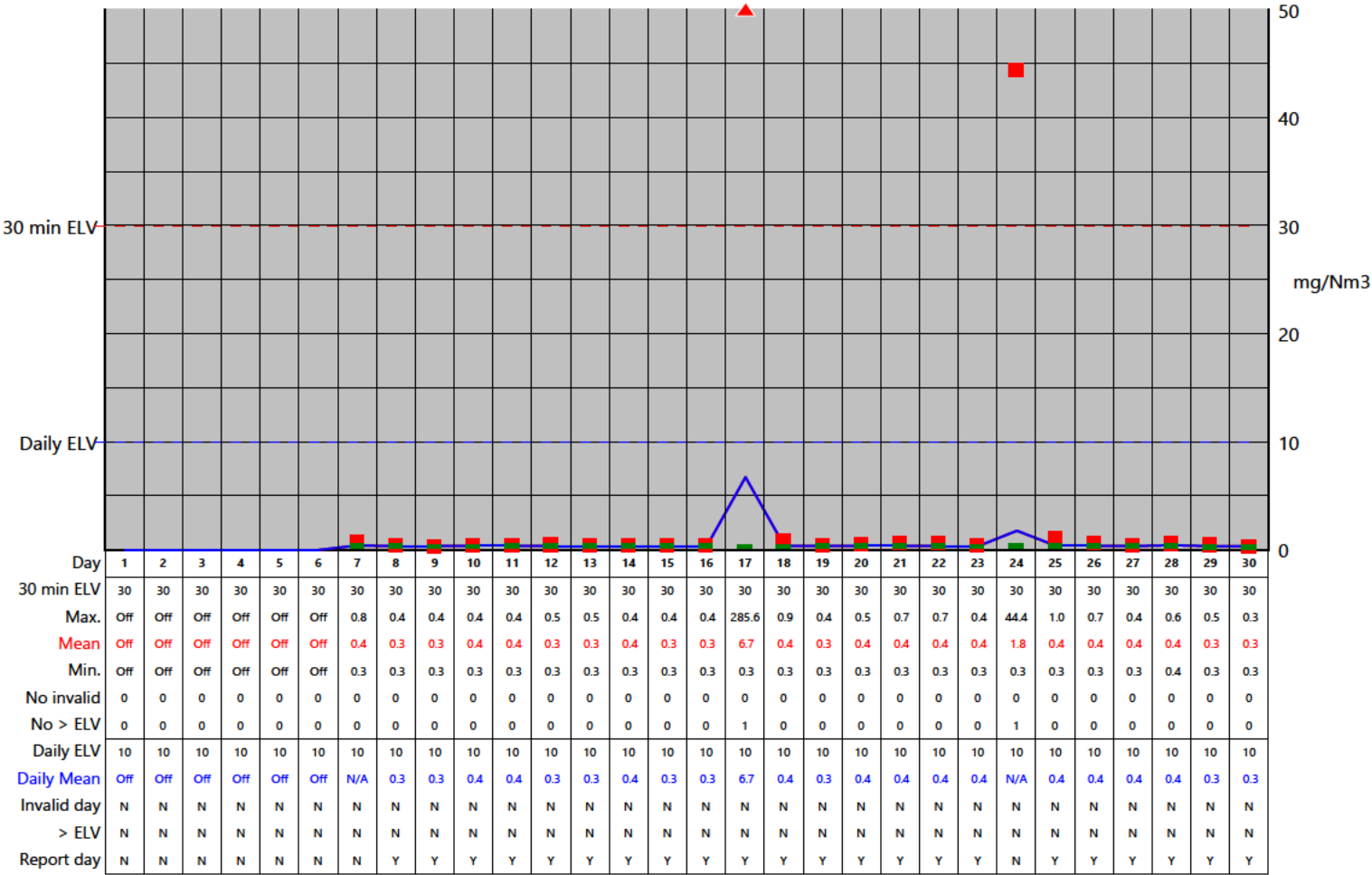
Max. 30 min average

Min. 30 min average

Daily mean

95th Percentile = 0.4
No. of valid averages = 1109

Month summary	
30 min ELV	
Monthly max.	285.6
Monthly mean	0.7
Monthly min.	0.3
Total invalid	0
Sum > ELV	2
Daily ELV	
Monthly max	6.7
No. invalid days	0
No. > ELV	0
No. report days	22



Data is as processed without repairs.

Signature

Authorised Representative

Date

26/07/2024



Permit Number: EPR/BU5453IY
 Operator: AGC Chemicals Europe Limited
 Facility: AGC Chemicals Europe, Hillhouse

Form Number: Air 7 / 2017

A14 - Reporting of periodically monitored emissions to air for the period from ...April 2024... to ...May 2024...

Emission Point	Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [2]	Uncertainty [3]	Comments
A14	Total Organic Carbon	No limit applies	Tonnes annually		Calculation	-		To be calculated at end of 2024, note, calculated as 630g for 2023. CEMS annual mass release data is not released to this resolution.
A14	Sulphur dioxide	100 mg/m ³	Periodic over minimum 1-hour period	<0.022 mg/m ³	BS EN 14791	20/05/2024 10:13-11:13	0.0014 mg/m ³	
A14	Cadmium & thallium and their compounds (total)	0.05 mg/m ³	Periodic over minimum 30 minute, maximum 8 hour period	<0.00093 mg/m ³	BS EN 14385	20/05/2024 11:34-12:34	0.00015 mg/m ³	
A14	Mercury and its compounds	0.05 mg/m ³	Periodic over minimum 30 minute, maximum 8 hour period	<0.00035 mg/m ³	BS EN 13211	20/05/2024 12:43-13:43	0.000082 mg/m ³	
A14	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m ³	Periodic over minimum 30 minute, maximum 8 hour period	0.013 mg/m ³	BS EN 14385	20/05/2024 11:34-12:34	0.0027 mg/m ³	
A14	Dioxins / Furans (I-TEQ)	0.1 ng/m ³	Periodic over minimum 6 hour, maximum 8 hour period	0.0023 ng/m ³	BS EN 1948 Parts 1, 2 and 3	21/05/2024 09:09-15:09	0.00047 ng/m ³	
A14	Dioxins / furans (WHO-TEQ Humans / Mammals)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0020 ng/m ³	BS EN 1948 Parts 1, 2 and 3	21/05/2024 09:09-15:09	0.00041 ng/m ³	
A14	Dioxins / furans (WHO-TEQ Fish)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0025 ng/m ³	BS EN 1948 Parts 1, 2 and 3	21/05/2024 09:09-15:09	0.00051 ng/m ³	
A14	Dioxins / furans (WHO-TEQ Birds)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0052 ng/m ³	BS EN 1948 Parts 1, 2 and 3	21/05/2024 09:09-15:09	0.0011 ng/m ³	
A14	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0019 ng/m ³	BS EN/TS 1948-4	21/05/2024 09:09-15:09	0.00039 ng/m ³	
A14	Dioxin-like PCBs (WHO-TEQ Fish)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0024 ng/m ³	BS EN/TS 1948-4	21/05/2024 09:09-15:09	0.00050 ng/m ³	
A14	Dioxin-like PCBs (WHO-TEQ Birds)	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	0.0052 ng/m ³	BS EN/TS 1948-4	21/05/2024 09:09-15:09	0.0011 ng/m ³	

Emission Point	Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [2]	Uncertainty [3]	Comments
A14	Specific individual poly-cyclic aromatic hydrocarbons (PAHs)							
A14	Total	No limit applies	Periodic over minimum 6 hour, maximum 8 hour period	< 0.13 µg/m ³	BS ISO 11338 Parts 1 and 2	22/05/2024 09:26-15:26	0.0277 µg/m ³	
A14	Anthanthrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Benzo[a]anthracene	No limit applies		0.0023 µg/m ³		22/05/2024 09:26-15:26	0.0005 µg/m ³	
A14	Benzo[b]fluoranthene	No limit applies		0.0029 µg/m ³		22/05/2024 09:26-15:26	0.0006 µg/m ³	
A14	Benzo[k]fluoranthene	No limit applies		<0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Benzo[b]naptho(2,1-d)thiophene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Benzo[c]phenanthrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Benzo[ghi]perylene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Benzo[a]pyrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Cholanthrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Chrysene	No limit applies		0.0050 µg/m ³		22/05/2024 09:26-15:26	0.0010 µg/m ³	
A14	Cyclopenta(c,d)pyrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Dibenzo[ah]anthracene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Dibenzo[a,i]pyrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Fluoranthene	No limit applies		0.050 µg/m ³		22/05/2024 09:26-15:26	0.0103 µg/m ³	
A14	Indo[1,2,3-cd]pyrene	No limit applies		< 0.0014 µg/m ³		22/05/2024 09:26-15:26	0.0003 µg/m ³	
A14	Naphthalene	No limit applies		0.058 µg/m ³		22/05/2024 09:26-15:26	0.0120 µg/m ³	

- [1] For dioxins and dioxin-like PCBs, the result are to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum
- [2] The date and time of the sample that produced the result is given.
- [3] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed*: [REDACTED]

Date: 26/07/ [REDACTED]

(*authorised to sign as representative of AGC Chemicals Europe Limited)