



Hamilton Air Monitoring Network - TSP Report

Station : STN29567 /STN29667
Location : Niagara / Land, Hamilton

Sample Matrix : Glass Fibre
Method : ICP/ MS

| Parameter Name | TSP | Cd Cadmium | Cr Chromium | Fe Iron | Cu Copper | Pb Lead | Mn Manganese | Ni Nickel | V Vanadium |
|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Units | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ |
| MDL | 1 | 0.01 | 0.002 | 0.01 | 0.004 | 0.04 | 0.002 | 0.02 | 0.01 |

| Parameter Name | TSP | Cd Cadmium | Cr Chromium | Fe Iron | Cu Copper | Pb Lead | Mn Manganese | Ni Nickel | V Vanadium |
|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Units | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ | µg/m ³ |
| MDL | 1 | 0.01 | 0.002 | 0.01 | 0.004 | 0.04 | 0.002 | 0.02 | 0.01 |

| Date | TSP | Cd | Cr | Fe | Cu | Pb | Mn | Ni | V |
|-----------|-----|--------|-------|------|-------|------|-------|------|-------|
| 06-Jan-23 | 18 | 0.005 | 0.001 | 0.34 | 0.002 | 0.02 | 0.046 | 0.01 | 0.005 |
| 12-Jan-23 | 19 | 0.005 | 0.001 | 0.30 | 0.014 | 0.02 | 0.030 | 0.01 | 0.005 |
| 18-Jan-23 | 15 | 0.005 | 0.001 | 0.63 | 0.002 | 0.02 | 0.128 | 0.01 | 0.005 |
| 24-Jan-23 | 36 | 0.005 | 0.001 | 0.47 | 0.006 | 0.02 | 0.076 | 0.01 | 0.005 |
| 30-Jan-23 | 36 | 0.005 | 0.001 | 0.75 | 0.009 | 0.02 | 0.194 | 0.01 | 0.005 |
| 05-Feb-23 | 6 | 0.005 | 0.002 | 0.98 | 0.044 | 0.02 | 0.026 | 0.01 | 0.005 |
| 11-Feb-23 | 17 | 0.005 | 0.004 | 0.75 | 0.023 | 0.02 | 0.054 | 0.01 | 0.005 |
| 17-Feb-23 | 25 | 0.005 | 0.012 | 2.96 | 0.058 | 0.02 | 0.159 | 0.01 | 0.005 |
| 23-Feb-23 | 20 | 0.005 | 0.002 | 0.37 | 0.022 | 0.02 | 0.024 | 0.01 | 0.005 |
| 01-Mar-23 | 18 | 0.005 | 0.001 | 0.37 | 0.027 | 0.02 | 0.019 | 0.01 | 0.005 |
| 07-Mar-23 | 41 | 0.005 | 0.003 | 1.45 | 0.036 | 0.02 | 0.188 | 0.01 | 0.005 |
| 13-Mar-23 | 22 | 0.005 | 0.002 | 0.26 | 0.029 | 0.02 | 0.098 | 0.01 | 0.005 |
| 19-Mar-23 | 21 | 0.005 | 0.001 | 0.28 | 0.012 | 0.02 | 0.076 | 0.01 | 0.005 |
| 25-Mar-23 | 19 | 0.005 | 0.001 | 0.02 | 0.013 | 0.02 | 0.019 | 0.01 | 0.005 |
| 31-Mar-23 | 27 | 0.005 | 0.001 | 0.40 | 0.038 | 0.02 | 0.037 | 0.01 | 0.005 |
| 06-Apr-23 | 29 | 0.005 | 0.003 | 0.55 | 0.014 | 0.02 | 0.077 | 0.01 | 0.005 |
| 12-Apr-23 | 79 | 0.005 | 0.007 | 1.53 | 0.019 | 0.02 | 0.282 | 0.01 | 0.005 |
| 18-Apr-23 | 15 | 0.005 | 0.002 | 0.46 | 0.015 | 0.02 | 0.095 | 0.01 | 0.005 |
| 24-Apr-23 | 45 | 0.005 | 0.005 | 1.44 | 0.025 | 0.02 | 0.232 | 0.01 | 0.005 |
| 30-Apr-23 | 17 | 0.005 | 0.001 | 0.19 | 0.039 | 0.02 | 0.020 | 0.01 | 0.005 |
| 06-May-23 | 62 | 0.005 | 0.011 | 2.00 | 0.038 | 0.02 | 0.124 | 0.01 | 0.005 |
| 12-May-23 | 106 | 0.005 | 0.010 | 2.04 | 0.036 | 0.02 | 0.237 | 0.01 | 0.005 |
| 18-May-23 | 67 | 0.005 | 0.008 | 1.87 | 0.038 | 0.02 | 0.265 | 0.01 | 0.005 |
| 24-May-23 | 167 | 0.005 | 0.016 | 4.25 | 0.056 | 0.02 | 0.870 | 0.01 | 0.010 |
| 30-May-23 | 124 | 0.005 | 0.012 | 2.88 | 0.041 | 0.02 | 0.377 | 0.01 | 0.009 |
| 05-Jun-23 | 126 | 0.0050 | 0.009 | 2.18 | 0.029 | 0.02 | 0.505 | 0.01 | 0.005 |
| 11-Jun-23 | 74 | 0.0050 | 0.005 | 1.23 | 0.030 | 0.02 | 0.152 | 0.01 | 0.005 |
| 17-Jun-23 | 63 | 0.0050 | 0.009 | 1.04 | 0.027 | 0.02 | 0.155 | 0.01 | 0.005 |
| 23-Jun-23 | 58 | 0.0050 | 0.005 | 1.21 | 0.027 | 0.02 | 0.136 | 0.01 | 0.005 |
| 29-Jun-23 | 93 | 0.0050 | 0.010 | 2.35 | 0.052 | 0.02 | 0.237 | 0.01 | 0.005 |
| - | - | - | - | - | - | - | - | - | - |

| Date | TSP | Cd | Cr | Fe | Cu | Pb | Mn | Ni | V |
|-----------|-----|-------|-------|------|-------|------|-------|------|-------|
| 05-Jul-23 | 46 | 0.005 | 0.004 | 1.67 | 0.059 | 0.02 | 0.091 | 0.01 | 0.005 |
| 11-Jul-23 | 34 | 0.000 | 0.003 | 0.70 | 0.073 | 0.00 | 0.072 | 0.00 | 0.001 |
| 17-Jul-23 | 54 | 0.000 | 0.005 | 1.04 | 0.142 | 0.00 | 0.108 | 0.00 | 0.002 |
| 23-Jul-23 | 49 | 0.000 | 0.004 | 0.97 | 0.005 | 0.00 | 0.102 | 0.00 | 0.002 |
| 29-Jul-23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 04-Aug-23 | 59 | 0.005 | 0.001 | 0.32 | 0.024 | 0.02 | 0.058 | 0.01 | 0.005 |
| 10-Aug-23 | 64 | 0.005 | 0.001 | 0.24 | 0.030 | 0.02 | 0.081 | 0.01 | 0.005 |
| 16-Aug-23 | 49 | 0.005 | 0.003 | 0.96 | 0.076 | 0.02 | 0.069 | 0.01 | 0.005 |
| 22-Aug-23 | 62 | 0.005 | 0.003 | 1.29 | 0.031 | 0.02 | 0.094 | 0.01 | 0.005 |
| 28-Aug-23 | 63 | 0.005 | 0.005 | 1.22 | 0.059 | 0.02 | 0.478 | 0.01 | 0.005 |
| 03-Sep-23 | 39 | 0.005 | 0.003 | 0.55 | 0.072 | 0.02 | 0.079 | 0.01 | 0.005 |
| 09-Sep-23 | 17 | 0.005 | 0.004 | 0.36 | 0.035 | 0.02 | 0.064 | 0.01 | 0.005 |
| 15-Sep-23 | 63 | 0.005 | 0.006 | 1.45 | 0.058 | 0.02 | 0.125 | 0.01 | 0.005 |
| 21-Sep-23 | 86 | 0.005 | 0.012 | 2.38 | 0.089 | 0.02 | 0.794 | 0.01 | 0.006 |
| 27-Sep-23 | 127 | 0.005 | 0.023 | 5.09 | 0.076 | 0.02 | 0.394 | 0.01 | 0.010 |
| 03-Oct-23 | 61 | 0.005 | 0.006 | 1.68 | 0.093 | 0.02 | 0.094 | 0.01 | 0.006 |
| 09-Oct-23 | 17 | 0.005 | 0.001 | 0.25 | 0.083 | 0.02 | 0.021 | 0.01 | 0.005 |
| 15-Oct-23 | 21 | 0.005 | 0.002 | 1.31 | 0.074 | 0.02 | 0.106 | 0.01 | 0.005 |
| 21-Oct-23 | 26 | 0.005 | 0.005 | 0.84 | 0.055 | 0.02 | 0.107 | 0.01 | 0.005 |
| 27-Oct-23 | 25 | 0.005 | 0.001 | 0.36 | 0.058 | 0.02 | 0.031 | 0.01 | 0.005 |
| 02-Nov-23 | 29 | 0.005 | 0.003 | 0.46 | 0.092 | 0.02 | 0.047 | 0.01 | 0.005 |
| 08-Nov-23 | 30 | 0.005 | 0.005 | 0.78 | 0.024 | 0.02 | 0.067 | 0.01 | 0.005 |
| 14-Nov-23 | 41 | 0.005 | 0.004 | 0.65 | 0.072 | 0.02 | 0.244 | 0.01 | 0.005 |
| 20-Nov-23 | 58 | 0.005 | 0.007 | 1.47 | 0.018 | 0.02 | 0.124 | 0.01 | 0.005 |
| 26-Nov-23 | 32 | 0.005 | 0.003 | 0.43 | 0.096 | 0.02 | 0.061 | 0.01 | 0.005 |
| 02-Dec-23 | 14 | 0.005 | 0.001 | 0.24 | 0.015 | 0.02 | 0.036 | 0.01 | 0.005 |
| 08-Dec-23 | 60 | 0.005 | 0.009 | 2.56 | 0.128 | 0.02 | 0.138 | 0.01 | 0.005 |
| 14-Dec-23 | 45 | 0.005 | 0.002 | 0.66 | 0.075 | 0.02 | 0.058 | 0.01 | 0.005 |
| 20-Dec-23 | 79 | 0.005 | 0.013 | 1.61 | 0.056 | 0.02 | 0.445 | 0.01 | 0.007 |
| 26-Dec-23 | 23 | 0.005 | 0.003 | 0.27 | 0.036 | 0.02 | 0.027 | 0.01 | 0.005 |
| - | - | - | - | - | - | - | - | - | - |

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|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Arith Mean | 48 | 0.005 | 0.005 | 1.14 | 0.045 | 0.02 | 0.155 | 0.01 | 0.005 |
| Geo Mean | 39 | 0.004 | 0.003 | 0.79 | 0.033 | 0.02 | 0.099 | 0.01 | 0.005 |
| Max | 167 | 0.005 | 0.023 | 5.09 | 0.142 | 0.02 | 0.870 | 0.01 | 0.010 |
| Min | 6 | 0.000 | 0.001 | 0.02 | 0.002 | 0.00 | 0.019 | 0.00 | 0.001 |
| AAQC | 120 | 0.025 | 0.5 | 25.0 | 50 | 0.5 | 0.4 | 0.2 | 2 |
| No. > AAQC | 4 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| URT | n/a | 0.25 | 5 | n/a | n/a | 2 | 4 | 2 | n/a |
| No. > URT | n/a | 0 | 0 | n/a | n/a | 0 | 0 | 0 | n/a |
| Sampling Dates | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Valid Samples | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| % Valid Data | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

* STN29567 (Niagara & Land) decommissioned on May 12 and recommissioned as STN29667 (Wentworth North) on May 18.
 * Data between January 01 to April 30, 2023 are from STN29567. Data as of May 01 are from STN29667.
 * Given the proximity of STN29567 to STN29667, data from both stations have been used to calculate the total number of exceedances and annual means.