



# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY COMPLIANCE SUMMARY REPORT



Date 7/6/22

Wheel Plant Wheelabrator North Andover  
Unit 1 Unit Unit 1  
Outlet Source Outlet

| Date     | Hour | On-Line Minutes | O2            |        | NOx             |        | SO2             |        |                |        |         | CO     |                 |        | Carbon Feed |        | FF Temp (deg F) |            | Steam KLbs/Hr |            |           |
|----------|------|-----------------|---------------|--------|-----------------|--------|-----------------|--------|----------------|--------|---------|--------|-----------------|--------|-------------|--------|-----------------|------------|---------------|------------|-----------|
|          |      |                 | Out Vol % Dry | Status | Outlet ppm 7%O2 | Status | Outlet ppm 7%O2 | Status | Inlet ppm 7%O2 | Status | Removal | Status | Outlet ppm 7%O2 | Status | 4 Hr Block  | Status | Lbs/Hr Avg.     | 8 Hr Block | 1 Hr Avg.     | 4 Hr Block | 1 Hr Avg. |
| 7/6/2022 | 0    | 60              | 10.0          |        | 172             |        | 15              |        | 50             |        | 71      |        | 4               |        |             | 13     |                 | 309        |               | 166.4      |           |
| 7/6/2022 | 1    | 60              | 10.1          |        | 192             |        | 23              |        | 68             |        | 67      |        | 2               |        |             | 18     |                 | 309        |               | 166.1      |           |
| 7/6/2022 | 2    | 60              | 10.0          |        | 189             |        | 19              |        | 57             |        | 67      |        | 3               |        |             | 18     |                 | 310        |               | 164.6      |           |
| 7/6/2022 | 3    | 60              | 9.9           |        | 189             |        | 14              |        | 39             |        | 64      |        | 3               | 3      |             | 14     |                 | 309        | 309           | 169.0      | 166.5     |
| 7/6/2022 | 4    | 60              | 10.0          |        | 167             |        | 11              |        | 34             |        | 69      |        | 4               |        |             | 14     |                 | 309        |               | 167.0      |           |
| 7/6/2022 | 5    | 60              | 9.8           |        | 192             |        | 13              |        | 42             |        | 68      |        | 3               |        |             | 14     |                 | 310        |               | 168.5      |           |
| 7/6/2022 | 6    | 60              | 10.2          |        | 185             |        | 9               |        | 39             |        | 77      |        | 5               |        |             | 14     |                 | 309        |               | 154.7      |           |
| 7/6/2022 | 7    | 60              | 9.4           |        | 181             |        | 13              |        | 45             |        | 72      |        | 4               | 4      |             | 14     | 15              | 309        | 309           | 166.5      | 164.2     |
| 7/6/2022 | 8    | 60              | 9.8           |        | 187             |        | 14              |        | 39             |        | 64      |        | 5               |        |             | 14     |                 | 309        |               | 165.3      |           |
| 7/6/2022 | 9    | 60              | 9.8           |        | 187             |        | 12              |        | 45             |        | 73      |        | 5               |        |             | 14     |                 | 310        |               | 167.2      |           |
| 7/6/2022 | 10   | 60              | 9.1           |        | 171             |        | 14              |        | 24             |        | 41      |        | 5               |        |             | 14     |                 | 309        |               | 174.6      |           |
| 7/6/2022 | 11   | 60              | 3.1           | IBC    | 90              | IBC    | 37              | IBC    | 39             |        | 4       | IBC    | 157             | IBC    | 5           | 14     |                 | 309        | 309           | 165.7      | 168.2     |
| 7/6/2022 | 12   | 60              | 9.9           |        | 186             |        | 14              |        | 35             |        | 61      |        | 5               |        |             | 14     |                 | 310        |               | 165.6      |           |
| 7/6/2022 | 13   | 60              | 10.1          |        | 196             |        | 14              |        | 35             |        | 60      |        | 4               |        |             | 14     |                 | 309        |               | 164.2      |           |
| 7/6/2022 | 14   | 60              | 10.2          |        | 198             |        | 14              |        | 37             |        | 62      |        | 5               |        |             | 14     |                 | 309        |               | 161.7      |           |
| 7/6/2022 | 15   | 60              | 9.9           |        | 196             |        | 7               |        | 30             |        | 77      |        | 4               | 4      |             | 14     | 14              | 310        | 309           | 164.2      | 163.9     |
| 7/6/2022 | 16   | 60              | 10.1          |        | 196             |        | 5               |        | 28             |        | 84      |        | 4               |        |             | 14     |                 | 309        |               | 161.0      |           |
| 7/6/2022 | 17   | 60              | 9.9           |        | 194             |        | 11              |        | 39             |        | 71      |        | 4               |        |             | 14     |                 | 309        |               | 167.3      |           |
| 7/6/2022 | 18   | 60              | 10.0          |        | 192             |        | 16              |        | 45             |        | 64      |        | 3               |        |             | 14     |                 | 309        |               | 164.5      |           |
| 7/6/2022 | 19   | 60              | 9.9           |        | 191             |        | 10              |        | 41             |        | 75      |        | 3               | 4      |             | 14     |                 | 309        | 309           | 165.4      | 164.5     |
| 7/6/2022 | 20   | 60              | 9.8           |        | 169             |        | 15              |        | 45             |        | 68      |        | 4               |        |             | 14     |                 | 309        |               | 166.0      |           |
| 7/6/2022 | 21   | 60              | 9.9           |        | 188             |        | 8               |        | 41             |        | 79      |        | 3               |        |             | 15     |                 | 309        |               | 167.3      |           |
| 7/6/2022 | 22   | 60              | 9.8           |        | 190             |        | 6               |        | 41             |        | 84      |        | 4               |        |             | 13     |                 | 310        |               | 165.6      |           |
| 7/6/2022 | 23   | 60              | 9.7           |        | 181             |        | 1               |        | 31             |        | 96      |        | 4               | 4      |             | 13     | 14              | 309        | 309           | 162.4      | 165.3     |

|                                     |                           |                              |           |                             |                                 |                                   |                                |                                    |
|-------------------------------------|---------------------------|------------------------------|-----------|-----------------------------|---------------------------------|-----------------------------------|--------------------------------|------------------------------------|
| Average:<br>Geometric Mean Average: | 187                       | 11                           | <b>OR</b> | 73                          | see above                       | see above                         | see above                      | see above                          |
| Limit:                              | ≤ 205<br>24-HR Block Avg. | ≤ 29<br>24-HR Geometric Mean |           | ≥ 75%<br>Removal Efficiency | ≤ 69 ppmc<br>4-HR Block Average | ≤ 12 lb/hr<br>8-HR. Block Average | ≤ 345 °F<br>4-HR Block Average | ≤ 173 klb/hr<br>4-HR Block Average |

**Status Flags**

- I - Invalid
- B - Bad
- C - Calibration
- M - Maintenance
- F - Offline
- P - Purge
- T - Out of Control
- E - Excluded
- ^ - Startup
- \* - Shutdown



# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY COMPLIANCE SUMMARY REPORT



Date 7/6/22

Wheel Plant Wheelabrator North Andover  
Unit 2 Unit Unit 1  
Outlet Source Outlet

| Date     | Hour | On-Line Minutes | O2            |        | NOx             |        | SO2             |        |                |        |         | CO     |                 |        | Carbon Feed |        | FF Temp (deg F) |            | Steam Klbs/Hr |            |           |
|----------|------|-----------------|---------------|--------|-----------------|--------|-----------------|--------|----------------|--------|---------|--------|-----------------|--------|-------------|--------|-----------------|------------|---------------|------------|-----------|
|          |      |                 | Out Vol % Dry | Status | Outlet ppm 7%O2 | Status | Outlet ppm 7%O2 | Status | Inlet ppm 7%O2 | Status | Removal | Status | Outlet ppm 7%O2 | Status | 4 Hr Block  | Status | Lbs/Hr Avg.     | 8 Hr Block | 1 Hr Avg.     | 4 Hr Block | 1 Hr Avg. |
| 7/6/2022 | 0    | 60              | 10.7          |        | 196             |        | 10              |        | 29             |        | 68      |        | 5               |        |             | 17     |                 | 321        |               | 163.7      |           |
| 7/6/2022 | 1    | 60              | 10.7          |        | 195             |        | 6               |        | 32             |        | 80      |        | 4               |        |             | 16     |                 | 317        |               | 165.6      |           |
| 7/6/2022 | 2    | 60              | 10.8          |        | 183             |        | 9               |        | 44             |        | 80      |        | 9               |        |             | 16     |                 | 317        |               | 165.2      |           |
| 7/6/2022 | 3    | 60              | 9.9           |        | 179             |        | 5               |        | 48             |        | 90      |        | 60              | 19     |             | 15     |                 | 311        | 317           | 171.2      | 166.4     |
| 7/6/2022 | 4    | 60              | 11.4          |        | 175             |        | 2               |        | 36             |        | 95      |        | 7               |        |             | 14     |                 | 282        |               | 143.4      |           |
| 7/6/2022 | 5    | 60              | 10.5          |        | 189             |        | 15              |        | 70             |        | 79      |        | 6               |        |             | 14     |                 | 289        |               | 161.0      |           |
| 7/6/2022 | 6    | 60              | 10.4          |        | 189             |        | 9               |        | 32             |        | 73      |        | 4               |        |             | 14     |                 | 299        |               | 163.3      |           |
| 7/6/2022 | 7    | 60              | 10.2          |        | 185             |        | 11              |        | 41             |        | 73      |        | 3               | 5      |             | 14     | 15              | 303        | 294           | 166.8      | 158.6     |
| 7/6/2022 | 8    | 60              | 10.3          |        | 183             |        | 12              |        | 45             |        | 73      |        | 6               |        |             | 14     |                 | 304        |               | 167.8      |           |
| 7/6/2022 | 9    | 60              | 10.9          |        | 181             |        | 3               |        | 30             |        | 89      |        | 7               |        |             | 15     |                 | 300        |               | 161.1      |           |
| 7/6/2022 | 10   | 60              | 10.7          |        | 185             |        | 4               |        | 27             |        | 86      |        | 6               |        |             | 14     |                 | 305        |               | 165.7      |           |
| 7/6/2022 | 11   | 60              | 11.3          | IBC    | 244             | IBC    | 12              | IBC    | 44             |        | 72      | IBC    | 3               | IBC    | 6           |        | 14              | 311        | 305           | 173.4      | 167.0     |
| 7/6/2022 | 12   | 60              | 10.2          |        | 185             |        | 4               |        | 24             |        | 85      |        | 12              |        |             | 14     |                 | 307        |               | 164.4      |           |
| 7/6/2022 | 13   | 60              | 10.5          |        | 185             |        | 2               |        | 23             |        | 92      |        | 5               |        |             | 14     |                 | 305        |               | 157.8      |           |
| 7/6/2022 | 14   | 60              | 10.7          |        | 185             |        | 2               |        | 23             |        | 90      |        | 5               |        |             | 14     |                 | 306        |               | 159.9      |           |
| 7/6/2022 | 15   | 60              | 10.5          |        | 189             |        | 3               |        | 22             |        | 89      |        | 4               | 7      |             | 14     | 14              | 313        | 308           | 166.2      | 162.1     |
| 7/6/2022 | 16   | 60              | 11.7          |        | 177             |        | 1               |        | 20             |        | 97      |        | 13              |        |             | 14     |                 | 301        |               | 142.5      |           |
| 7/6/2022 | 17   | 60              | 10.3          |        | 185             |        | 6               |        | 35             |        | 84      |        | 4               |        |             | 14     |                 | 313        |               | 166.7      |           |
| 7/6/2022 | 18   | 60              | 10.4          |        | 188             |        | 10              |        | 40             |        | 74      |        | 4               |        |             | 14     |                 | 318        |               | 168.1      |           |
| 7/6/2022 | 19   | 60              | 10.4          |        | 186             |        | 6               |        | 37             |        | 85      |        | 4               | 6      |             | 14     |                 | 317        | 312           | 168.7      | 161.5     |
| 7/6/2022 | 20   | 60              | 10.4          |        | 177             |        | 6               |        | 43             |        | 86      |        | 4               |        |             | 14     |                 | 313        |               | 168.9      |           |
| 7/6/2022 | 21   | 60              | 10.5          |        | 176             |        | 3               |        | 64             |        | 95      |        | 6               |        |             | 15     |                 | 303        |               | 165.6      |           |
| 7/6/2022 | 22   | 60              | 10.7          |        | 191             |        | 4               |        | 52             |        | 93      |        | 4               |        |             | 13     |                 | 300        |               | 164.9      |           |
| 7/6/2022 | 23   | 60              | 10.7          |        | 194             |        | 5               |        | 38             |        | 87      |        | 4               | 4      |             | 13     | 14              | 313        | 307           | 164.2      | 165.9     |

Average:  
Geometric Mean Average:

Limit:

|                              |                                    |
|------------------------------|------------------------------------|
| 185                          | 5                                  |
| ≤ 205<br>24-HR<br>Block Avg. | ≤ 29<br>24-HR<br>Geometric<br>Mean |

OR

|                                |
|--------------------------------|
| 87                             |
| ≥ 75%<br>Removal<br>Efficiency |

|                                  |
|----------------------------------|
| see<br>above                     |
| ≤ 69<br>4-HR<br>Block<br>Average |

ppmc

|                                   |
|-----------------------------------|
| see<br>above                      |
| ≤ 12<br>8-HR.<br>Block<br>Average |

lb/hr

|                                   |
|-----------------------------------|
| see<br>above                      |
| ≤ 345<br>4-HR<br>Block<br>Average |

°F

|                                   |
|-----------------------------------|
| see<br>above                      |
| ≤ 173<br>4-HR<br>Block<br>Average |

klb/hr

**Status Flags**

- I - Invalid
- B - Bad
- C - Calibration
- M - Maintenance
- F - Offline
- P - Purge
- T - Out of Control
- E - Excluded
- ^ - Startup
- \* - Shutdown



# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 06-Jul-2022

Plant Wheelabrator North Andover  
Unit Unit 1  
Source Outlet

Opacity is a measure of how much soot or smoke may be contained in stack emissions. The more smoke that is contained in the emissions the higher the level of opacity. Continuous opacity monitors located after all of the air pollution control equipment measure the opacity of the emissions from each boiler. Typically the human eye can not detect or see smoke that is less than 5% opacity. You won't see smoke from a modern trash-to-energy plant although in colder weather you will see water vapor condensation, similar to seeing your breath on a cold day. This is not considered opacity. We have a permit limit established by the Massachusetts Department of Environmental Protection of 10% opacity averaged every six (6) minutes.

Limit 10 %

| Time (hr) | 1-6 min | 7-12 min | 13-18 min | 19-24 min | 25-30 min | 31-36 min | 37-42 min | 43-48 min | 49-54 min | 55-60 min | Average |    |   |    |    |    |    |
|-----------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|----|---|----|----|----|----|
| 0         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 1         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 2         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 3         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 4         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 5         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 6         | 2       | IC       | 6         | IC        | 2         | 2         | 2         | 2         | 2         | 2         | 3       |    |   |    |    |    |    |
| 7         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 8         | 2       | 2        | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2       |    |   |    |    |    |    |
| 9         | 2       | 2        | 2         | 2         | 2         | IM        | 10        | IM        | 21        | IM        | 15      | IM | 2 | IM | 4  |    |    |
| 10        | 15      | IM       | 11        | IM        | 15        | IM        | 10        | IM        | 14        | IM        | 9       | IM | 2 | IM | 10 | IM | 11 |
| 11        | 1       | IM       | 1         | IM        | 1         | IM        | 1         | IM        | 1         | IM        | 1       | IM | 1 | IM | 1  | IM | 1  |
| 12        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 13        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 14        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 15        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 16        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 17        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 18        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 19        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 20        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 21        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 22        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |
| 23        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1 | 1  | 1  | 1  | 1  |

**Status Flags**

I - Invalid                      C - Calibration                      F - Offline                      T - Out of Control                      ^ - Startup  
 B - Bad                            M - Maintenance                      P - Purge                            E - Excluded                            \* - Shutdown



# WHEELABRATOR NORTH ANDOVER A WIN-WASTE INNOVATIONS COMPANY OPACITY REPORT



Date 06-Jul-2022

Plant Wheelabrator North Andover  
Unit Unit 2  
Source Outlet

Opacity is a measure of how much soot or smoke may be contained in stack emissions. The more smoke that is contained in the emissions the higher the level of opacity. Continuous opacity monitors located after all of the air pollution control equipment measure the opacity of the emissions from each boiler. Typically the human eye can not detect or see smoke that is less than 5% opacity. You won't see smoke from a modern trash-to-energy plant although in colder weather you will see water vapor condensation, similar to seeing your breath on a cold day. This is not considered opacity. We have a permit limit established by the Massachusetts Department of Environmental Protection of 10% opacity averaged every six (6) minutes.

Limit 10 %

| Time (hr) | 1-6 min | 7-12 min | 13-18 min | 19-24 min | 25-30 min | 31-36 min | 37-42 min | 43-48 min | 49-54 min | 55-60 min | Average |    |    |    |   |    |    |    |   |    |   |
|-----------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|----|----|----|---|----|----|----|---|----|---|
| 0         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 1         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 2         | 1       | 0        | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0       |    |    |    |   |    |    |    |   |    |   |
| 3         | 0       | 0        | 1         | 1         | 1         | 1         | 0         | 1         | 1         | 1         | 0       |    |    |    |   |    |    |    |   |    |   |
| 4         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 5         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 6         | 2       | IBC      | 5         | IBC       | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 7         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 8         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 9         | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 10        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 2         | 1         | 1       |    |    |    |   |    |    |    |   |    |   |
| 11        | 1       | 1        | 1         | IM        | 27        | BM        | 5         | BM        | 20        | BM        | 5       | BM | 20 | BM | 5 | BM | 20 | BM | 9 |    |   |
| 12        | 5       | BM       | 19        | BM        | 1         | BM        | 14        | BM        | 13        | BM        | 2       | BM | 1  | BM | 1 | BM | 1  | BM | 2 | BM | 6 |
| 13        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 14        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 15        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 16        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 17        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 18        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 19        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 20        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 21        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 22        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |
| 23        | 1       | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1       | 1  | 1  | 1  | 1 | 1  | 1  | 1  | 1 | 1  | 1 |

**Status Flags**

I - Invalid                      C - Calibration                      F - Offline                      T - Out of Control                      ^ - Startup  
 B - Bad                            M - Maintenance                      P - Purge                      E - Excluded                      \* - Shutdown