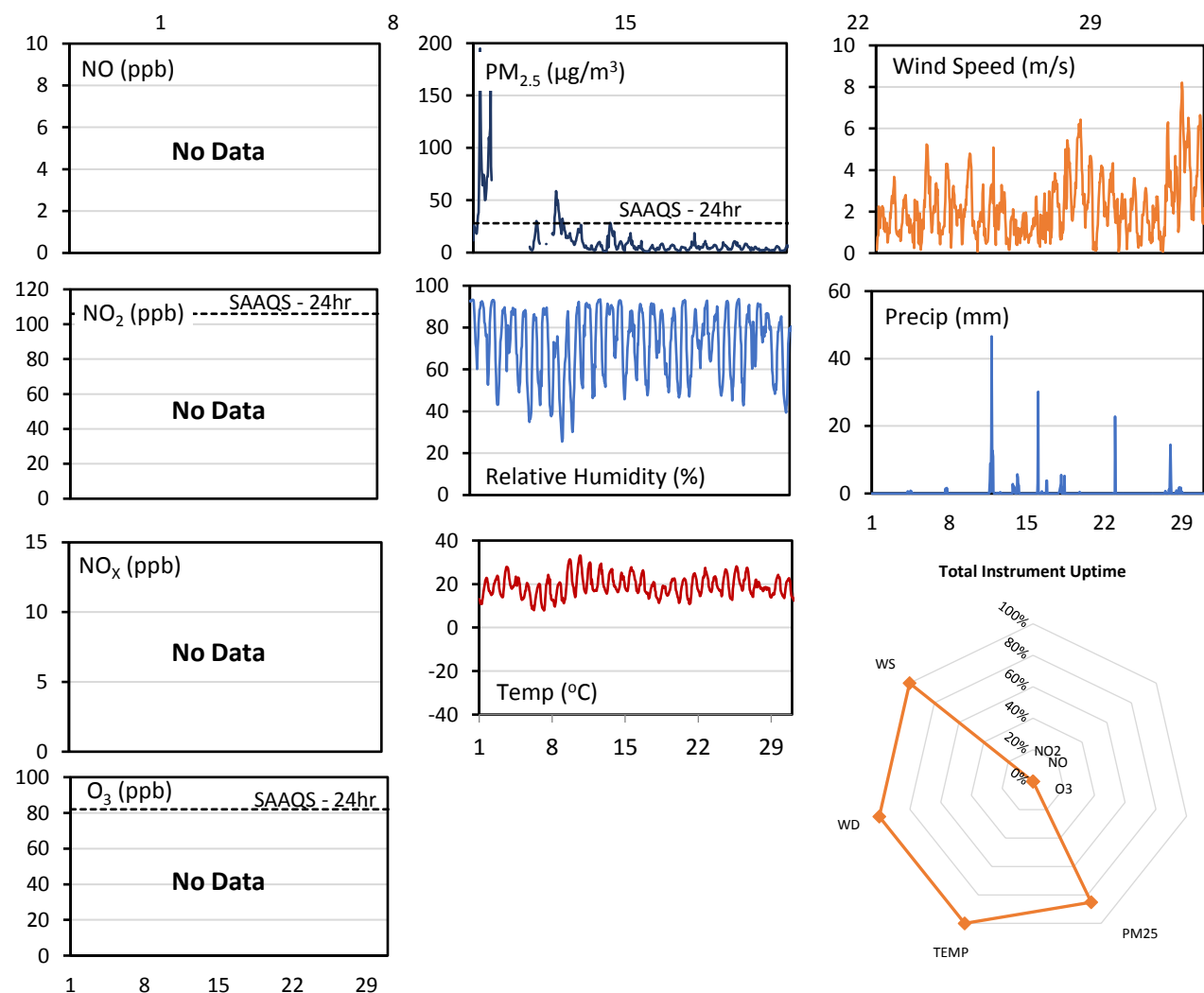
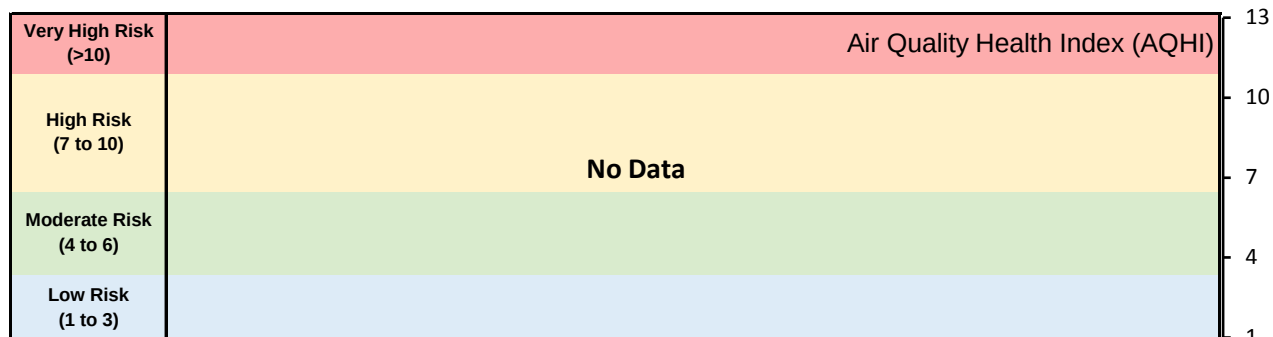


# SESAA Esterhazy Station - July 2015 Summary Report

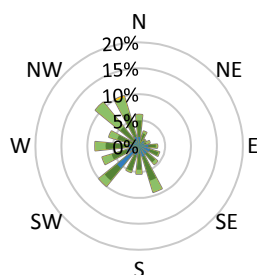
| Pollutants        |                   | Month Records |              | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Total Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |              | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | N/A           | 0%           | 0.0             | N/A    | -              | -           | 0.0            | N/A          | -              | -            |
| NO <sub>2</sub>   | ppb               | N/A           | 0%           | 0.0             | N/A    | 106            | N/A         | 0.0            | N/A          | 159            | N/A          |
| NO <sub>x</sub>   | ppb               | N/A           | 0%           | 0.0             | N/A    | -              | -           | 0.0            | N/A          | -              | -            |
| O <sub>3</sub>    | ppb               | N/A           | 0%           | 0.0             | N/A    | -              | -           | 0.0            | N/A          | 82             | N/A          |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 12.1          | 85%          | 81.8            | Jul-02 | 28             | 4           | 195.0          | Jul-01 16:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards

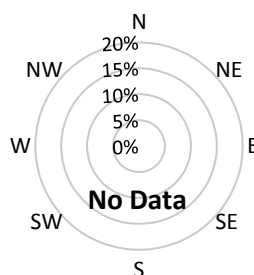


# SESAA Esterhazy Station - July 2015 Summary Report

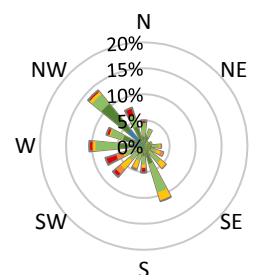
Wind Rose



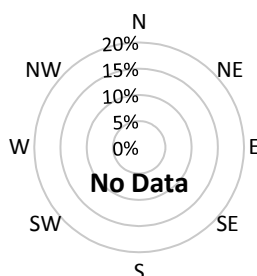
NO<sub>2</sub> Pollutant Rose



PM<sub>2.5</sub> Pollutant Rose



O<sub>3</sub> Pollutant Rose



| Parameters        | Unit              | Color Code for Wind Speed and Pollution Concentration Class |                |                |                 |                  |           |
|-------------------|-------------------|-------------------------------------------------------------|----------------|----------------|-----------------|------------------|-----------|
| Wind Speed        | m/s               | 0.3 ≤ WS < 1.4                                              | 1.4 ≤ WS < 3.1 | 3.1 ≤ WS < 7.8 | 7.8 ≤ WS < 10.8 | 10.8 ≤ WS < 13.6 | WS ≥ 13.6 |
| O <sub>3</sub>    | ppb               | 0 ≤ C < 10                                                  | 10 ≤ C < 20    | 20 ≤ C < 40    | 40 ≤ C < 60     | 60 ≤ C < 82      | C ≥ 82    |
| NO <sub>2</sub>   | ppb               | 0 ≤ C < 5                                                   | 5 ≤ C < 15     | 15 ≤ C < 30    | 30 ≤ C < 100    | 100 ≤ C < 212    | C ≥ 212   |
| PM <sub>2.5</sub> | ug/m <sup>3</sup> | 0 ≤ C < 2                                                   | 2 ≤ C < 4      | 4 ≤ C < 10     | 10 ≤ C < 20     | 20 ≤ C < 30      | C ≥ 30    |

## Monthly Update

- NO<sub>x</sub> and O<sub>3</sub> data invalidated due to operational issues
- Significant forest fire activity had an impact on particulate monitoring equipment resulting in 15% downtime

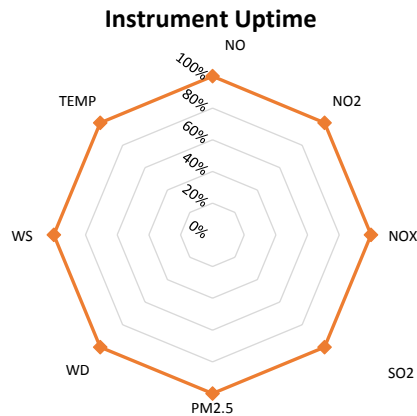
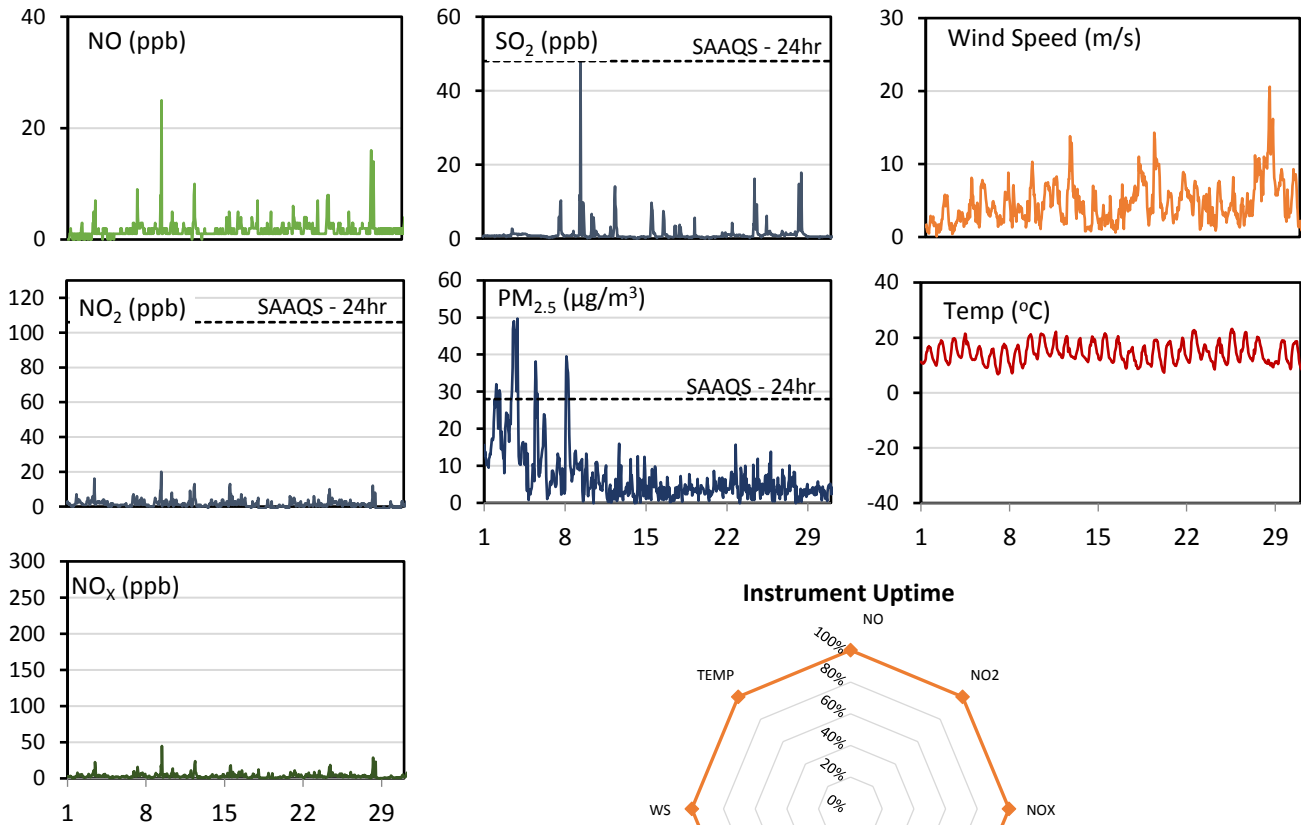
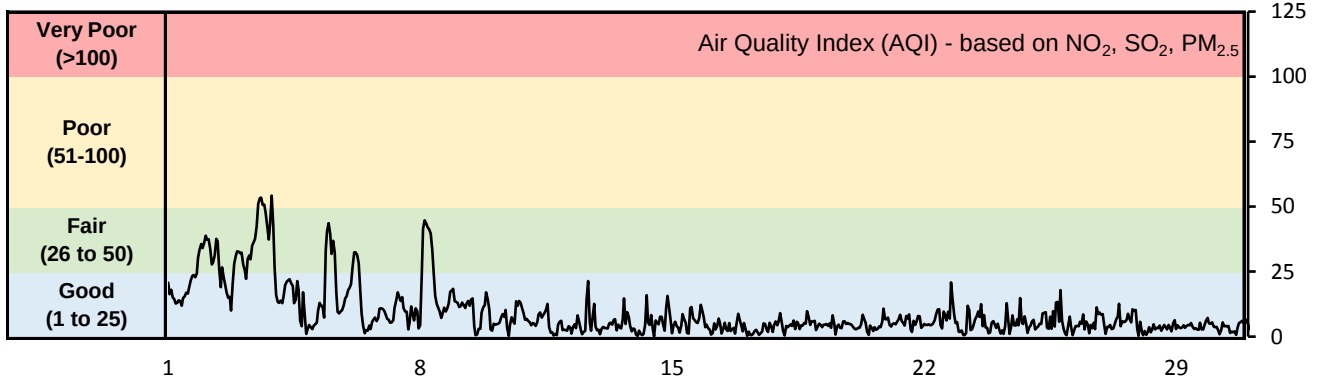
## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

| Exceedance Time | AQI | NO <sub>2</sub> ppb | NO ppb | SO <sub>2</sub> ppb | PM <sub>2.5</sub> µg/m <sup>3</sup> | NO <sub>x</sub> ppb | Temp °C | WD deg | WS m/s |
|-----------------|-----|---------------------|--------|---------------------|-------------------------------------|---------------------|---------|--------|--------|
| Jul-01          | N/A | N/A                 | N/A    | N/A                 | <b>60.2</b>                         | 0.0                 | 16.8    | 219.4  | 1.4    |
| Jul-02          | N/A | N/A                 | N/A    | N/A                 | <b>81.8</b>                         | 0.0                 | 19.1    | 309.5  | 1.9    |
| Jul-08          | N/A | N/A                 | N/A    | N/A                 | <b>29.5</b>                         | 0.0                 | 15.4    | 302.7  | 2.0    |
| Jul-09          | N/A | N/A                 | N/A    | N/A                 | <b>28.4</b>                         | 0.0                 | 21.7    | 218.5  | 2.9    |

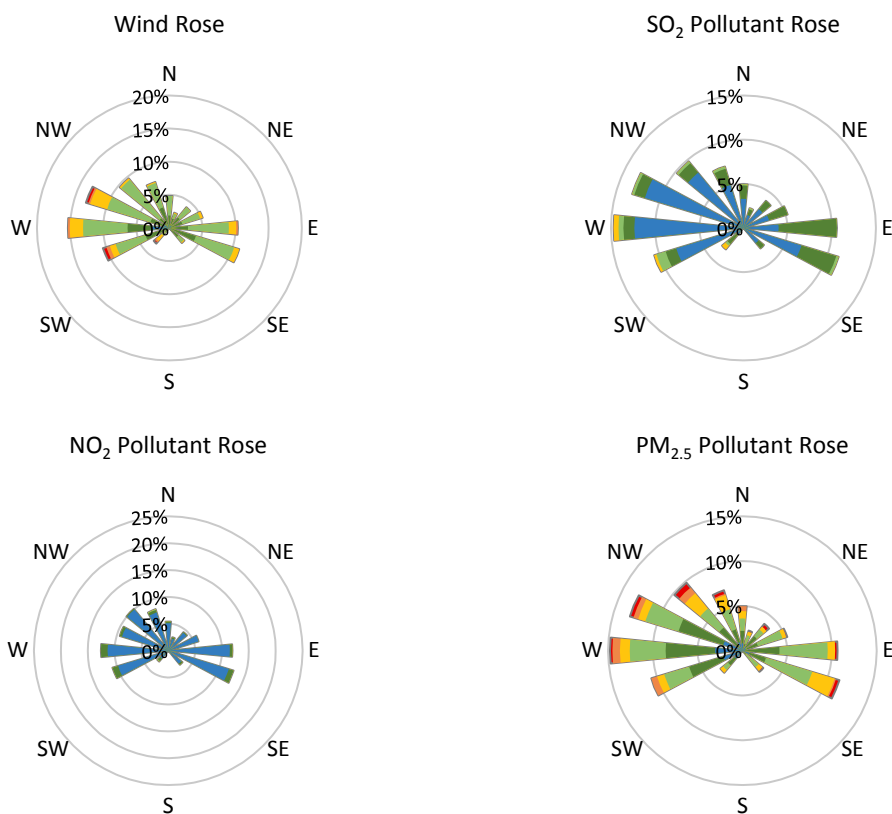
# SESAA Estevan Station - July 2015 Summary Report

| Pollutants        |                   | Month Records |        | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |        | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | 1.8           | 100%   | 3.6             | Jul-28 | -              | -           | 25.0           | Jul-09 10:00 | -              | -            |
| NO <sub>2</sub>   | ppb               | 1.4           | 100%   | 3.5             | Jul-03 | 106            | 0           | 20.0           | Jul-09 10:00 | 159            | 0            |
| NO <sub>x</sub>   | ppb               | 3.4           | 100%   | 6.6             | Jul-09 | -              | -           | 44.8           | Jul-09 10:00 | -              | -            |
| SO <sub>2</sub>   | ppb               | 1.2           | 100%   | 4.9             | Jul-09 | 48             | 0           | 51.4           | Jul-09 10:00 | 172            | 0            |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 7.2           | 100%   | 32.6            | Jul-03 | 28             | 1           | 49.7           | Jul-03 21:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards



# SESAA Estevan Station - July 2015 Summary Report



| Parameters        | Unit                     | Color Code for Wind Speed and Pollution Concentration Class |                     |                     |                      |                       |                |  |
|-------------------|--------------------------|-------------------------------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------|--|
| Wind Speed        | m/s                      | $0.3 \leq WS < 1.4$                                         | $1.4 \leq WS < 3.1$ | $3.1 \leq WS < 7.8$ | $7.8 \leq WS < 10.8$ | $10.8 \leq WS < 13.6$ | $WS \geq 13.6$ |  |
| NO <sub>2</sub>   | ppb                      | $0 \leq C < 5$                                              | $5 \leq C < 15$     | $15 \leq C < 30$    | $30 \leq C < 100$    | $100 \leq C < 212$    | $C \geq 212$   |  |
| SO <sub>2</sub>   | ppb                      | $1 \leq C < 5$                                              | $6 \leq C < 15$     | $16 \leq C < 30$    | $31 \leq C < 100$    | $101 \leq C < 212$    | $C \geq 213$   |  |
| PM <sub>2.5</sub> | $\mu\text{g}/\text{m}^3$ | $0 \leq C < 2$                                              | $2 \leq C < 4$      | $4 \leq C < 10$     | $10 \leq C < 20$     | $20 \leq C < 30$      | $C \geq 30$    |  |

## Monthly Update

- Achieved 100% of scheduled uptime
- All compliance parameters are above 90% data validity; no operational issues

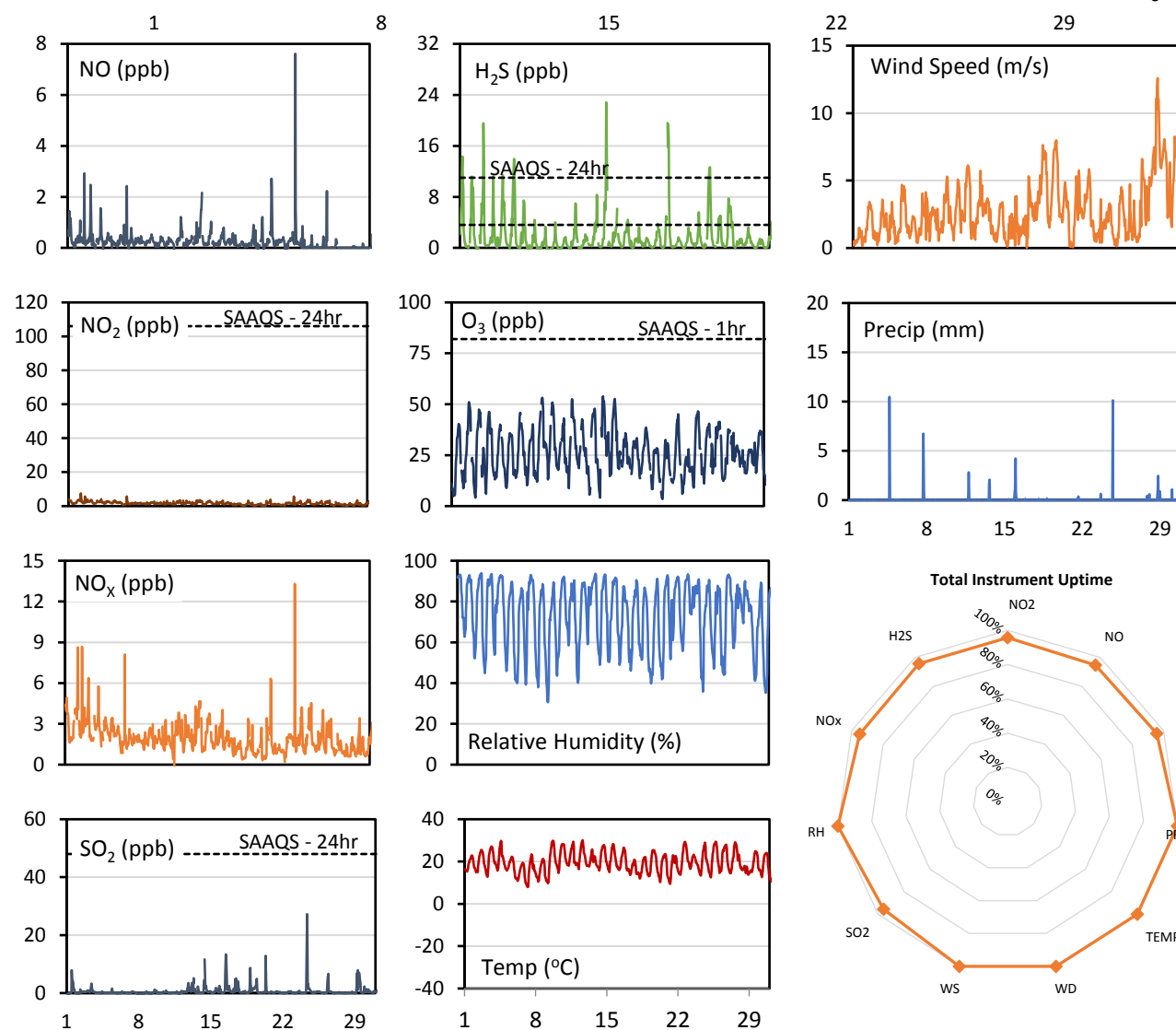
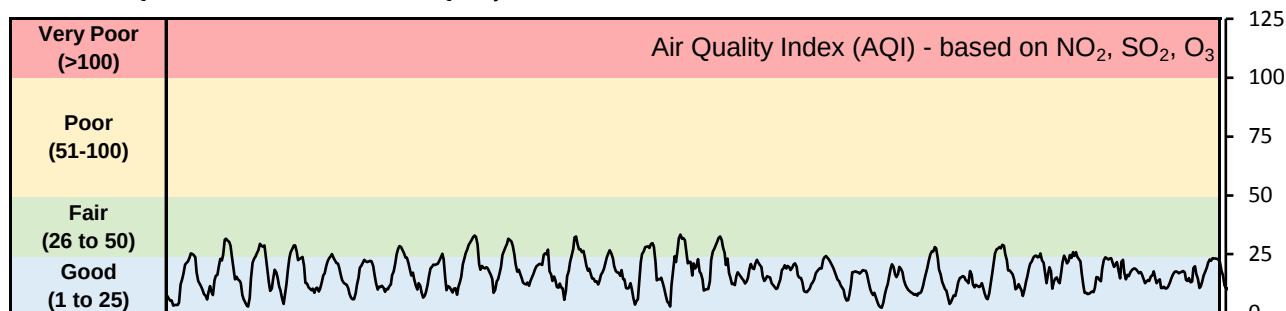
## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

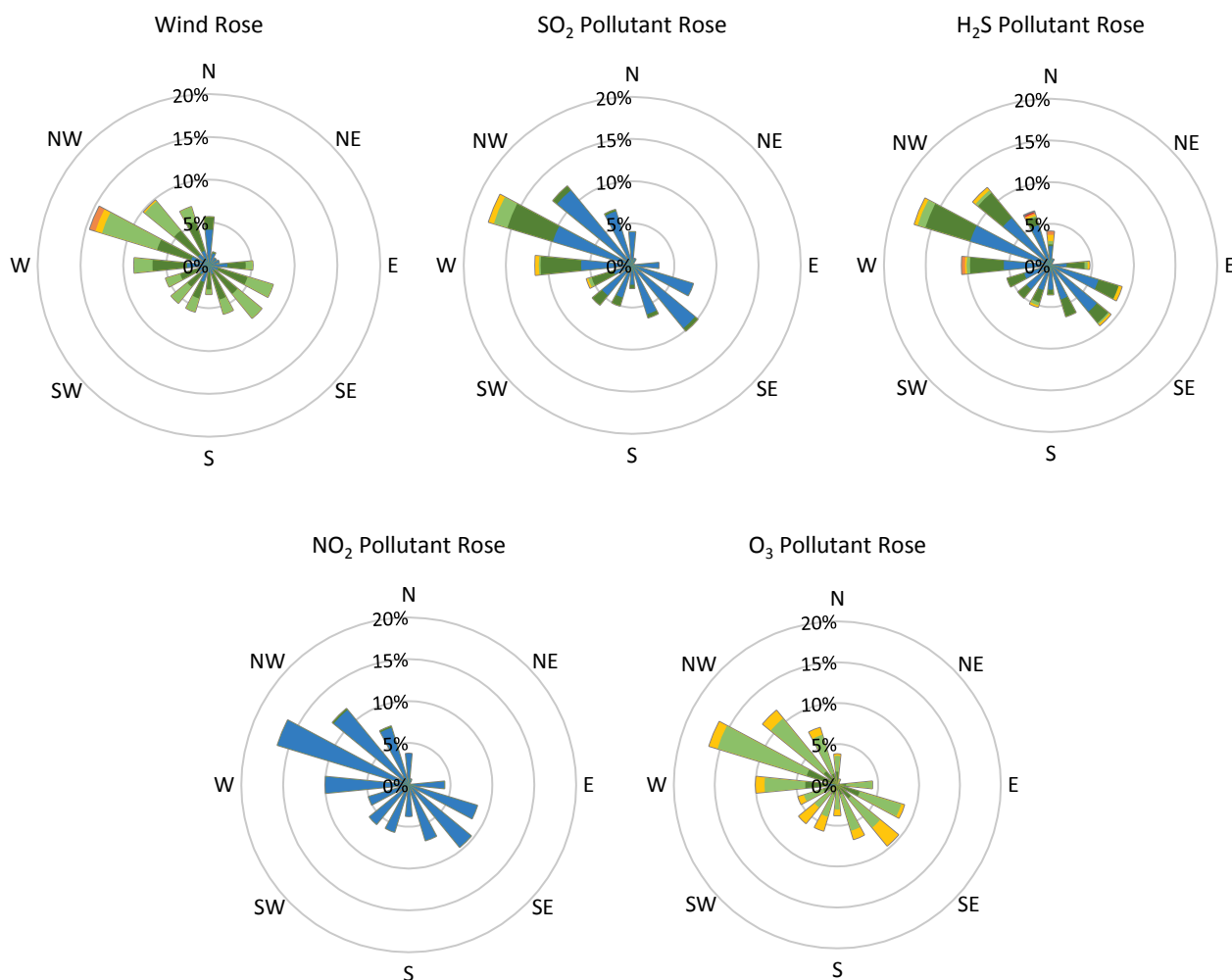
| Exceedance Time | AQI  | NO  | NO <sub>2</sub> | NO <sub>x</sub> | SO <sub>2</sub> | PM <sub>2.5</sub>        | WD    | WS  | TEMP |
|-----------------|------|-----|-----------------|-----------------|-----------------|--------------------------|-------|-----|------|
|                 | -    | ppb | ppb             | ppb             | ppb             | $\mu\text{g}/\text{m}^3$ | deg   | deg | °C   |
| July 03         | 39.3 | 1.6 | 3.5             | 5.2             | 1.2             | 32.6                     | 181.3 | 2.2 | 15.0 |

# SESAA Glen Ewen Station - July 2015 Summary Report

| Pollutants       |            | Month Records |              | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|------------------|------------|---------------|--------------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name             | Conc. Unit | Avg. Conc.    | Total Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                  |            |               |              | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO               | ppb        | 0.2           | 95%          | 0.7             | Jul-23 | -              | -           | 7.6            | Jul-23 15:00 | -              | -            |
| NO <sub>2</sub>  | ppb        | 1.6           | 96%          | 3.1             | Jul-02 | 106            | 0           | 7.5            | Jul-02 06:00 | 159            | 0            |
| NO <sub>x</sub>  | ppb        | 1.9           | 95%          | 3.7             | Jul-02 | -              | -           | 13.3           | Jul-23 15:00 | -              | -            |
| SO <sub>2</sub>  | ppb        | 0.7           | 96%          | 2.8             | Jul-24 | 48             | 0           | 27.2           | Jul-24 09:00 | 172            | 0            |
| H <sub>2</sub> S | ppb        | 1.8           | 96%          | 4.3             | Jul-21 | 3.6            | 4           | 22.8           | Jul-15 05:00 | 11             | 20           |
| O <sub>3</sub>   | ppb        | 26.4          | 96%          | 34.1            | Jul-16 | -              | -           | 53.9           | Jul-15 13:00 | 82             | 0            |

SAAQS: Saskatchewan Ambient Air Quality Standards





| Parameters       | Unit | Color Code for Wind Speed and Pollution Concentration Class |                     |                     |                      |                       |                |
|------------------|------|-------------------------------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------|
| Wind Speed       | m/s  | $0.3 \leq WS < 1.4$                                         | $1.4 \leq WS < 3.1$ | $3.1 \leq WS < 7.8$ | $7.8 \leq WS < 10.8$ | $10.8 \leq WS < 13.6$ | $WS \geq 13.6$ |
| SO <sub>2</sub>  | ppb  | $0 \leq C < 1$                                              | $1 \leq C < 5$      | $5 \leq C < 10$     | $10 \leq C < 57$     | $57 \leq C < 172$     | $C \geq 172$   |
| NO <sub>2</sub>  | ppb  | $0 \leq C < 5$                                              | $5 \leq C < 15$     | $15 \leq C < 30$    | $30 \leq C < 100$    | $100 \leq C < 212$    | $C \geq 212$   |
| H <sub>2</sub> S | ppb  | $0 \leq C < 1$                                              | $1 \leq C < 3.6$    | $3.6 \leq C < 5$    | $5 \leq C < 8$       | $8 \leq C < 10.8$     | $C \geq 10.8$  |
| O <sub>3</sub>   | ppb  | $0 \leq C < 10$                                             | $10 \leq C < 20$    | $20 \leq C < 40$    | $40 \leq C < 60$     | $60 \leq C < 82$      | $C \geq 82$    |

### Monthly Update

- Achieved 97% to 100% of scheduled uptime for all parameters
- Downtime results from operational issues (3%) and from routine daily Internal Zeroes and Spans (4%)
- All compliance parameters are above 90% data validity

# SESAA Glen Ewen Station - July 2015 Summary Report

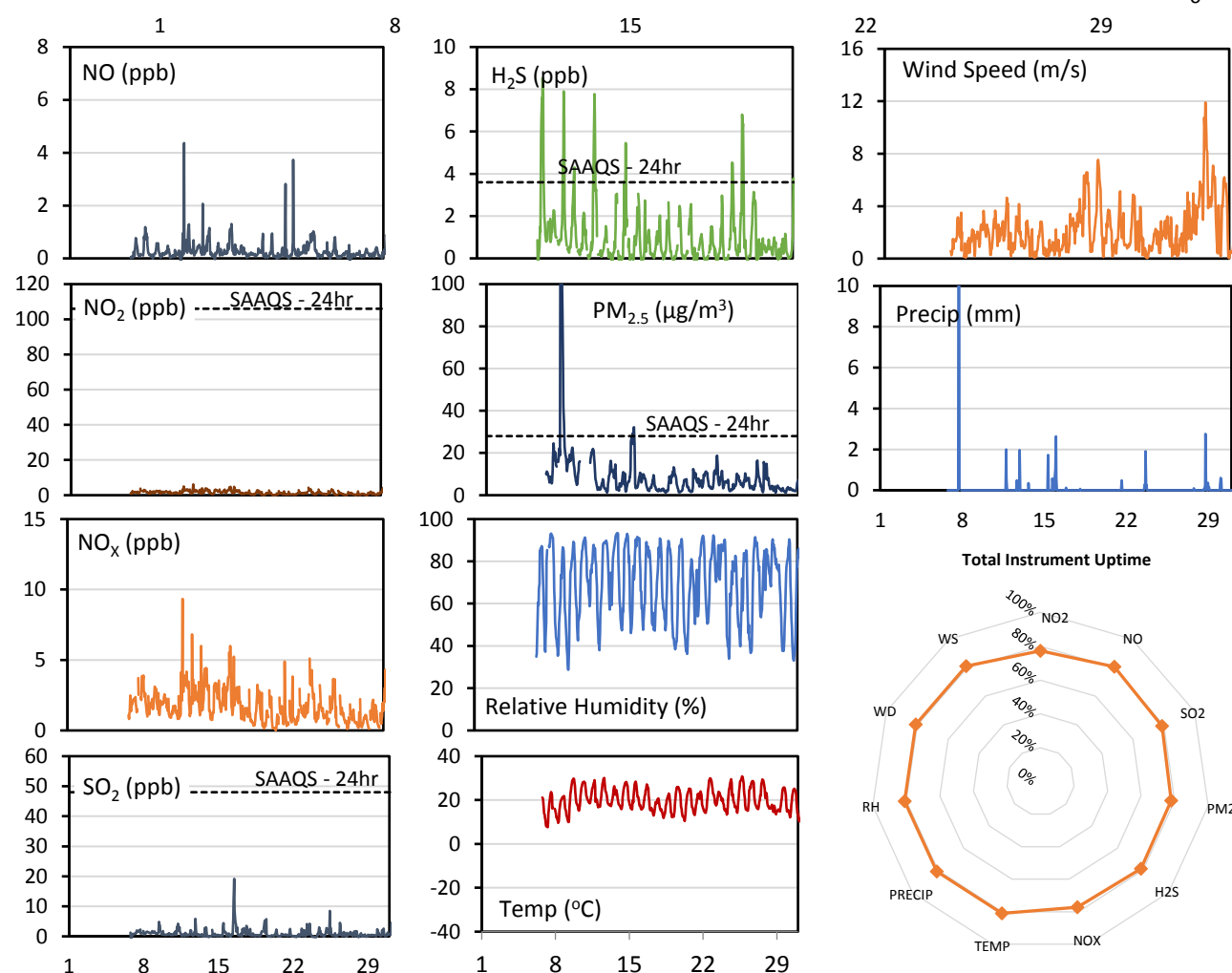
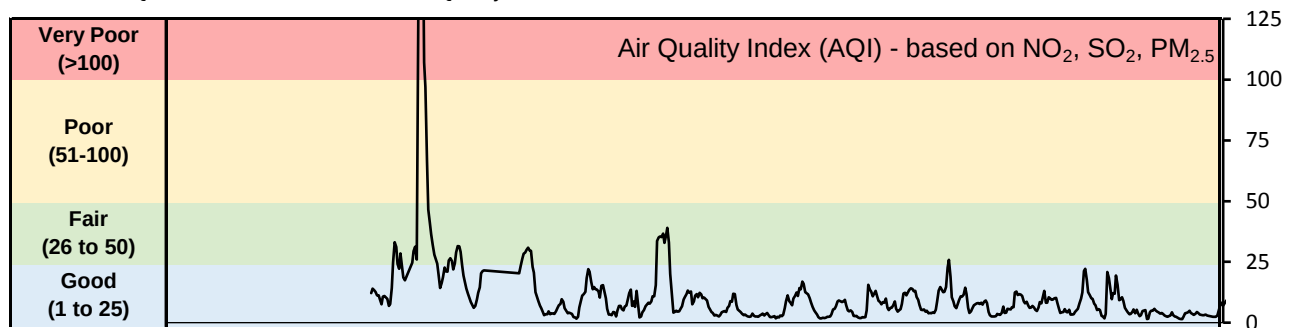
| Exceedance Summary (1- Hour Average - Exceedances Highlighted) |      |                 |     |                 |                |                 |                  |      |       |     |
|----------------------------------------------------------------|------|-----------------|-----|-----------------|----------------|-----------------|------------------|------|-------|-----|
| Exceedance Time                                                | AQI  | NO <sub>2</sub> | NO  | SO <sub>2</sub> | O <sub>3</sub> | NO <sub>x</sub> | H <sub>2</sub> S | Temp | WD    | WS  |
|                                                                | -    | ppb             | ppb | ppb             | ppb            | ppb             | ppb              | °C   | deg   | m/s |
| Jul-01 05:00                                                   | 3.4  | 3.1             | 0.6 | -0.2            | 5.2            | 3.7             | <b>11.7</b>      | 15.7 | 350.3 | 0.4 |
| Jul-01 06:00                                                   | 3.4  | 3.1             | 0.6 | -0.2            | 5.2            | 3.8             | <b>14.3</b>      | 15.3 | 1.7   | 0.6 |
| Jul-02 04:00                                                   | 8.8  | 3.0             | 0.3 | -0.3            | 13.4           | 3.4             | <b>11.2</b>      | 15.0 | 333.5 | 0.8 |
| Jul-03 07:00                                                   | 2.7  | 3.8             | 2.5 | 0.4             | 4.2            | 6.4             | <b>19.5</b>      | 14.5 | 291.3 | 0.5 |
| Jul-03 08:00                                                   | 6.4  | 3.3             | 1.2 | 1.0             | 9.8            | 4.6             | <b>13.3</b>      | 17.6 | 283.5 | 0.5 |
| Jul-04 06:00                                                   | 6.3  | 3.2             | 0.6 | 0.0             | 9.7            | 3.9             | <b>11.2</b>      | 15.7 | 71.4  | 0.4 |
| Jul-05 04:00                                                   | 8.6  | 2.3             | 0.3 | 0.0             | 13.1           | 2.7             | <b>11.4</b>      | 15.8 | 348.7 | 1.2 |
| Jul-06 05:00                                                   | 6.4  | 2.3             | 0.5 | -0.1            | 9.8            | 2.9             | <b>11.6</b>      | 10.9 | 356.9 | 0.7 |
| Jul-06 06:00                                                   | 5.8  | 2.2             | 0.5 | 0.0             | 8.9            | 2.8             | <b>13.9</b>      | 11.2 | 5.9   | 0.9 |
| Jul-06 07:00                                                   | 5.9  | 1.9             | 0.5 | 0.1             | 9.1            | 2.4             | <b>13.1</b>      | 11.8 | 357.4 | 1.0 |
| Jul-15 04:00                                                   | 4.8  | 3.0             | 0.6 | 0.1             | 7.3            | 3.7             | <b>16.1</b>      | 16.0 | 202.6 | 0.1 |
| Jul-15 05:00                                                   | 4.2  | 3.2             | 0.6 | 0.2             | 6.5            | 3.8             | <b>22.8</b>      | 15.6 | 263.1 | 0.1 |
| Jul-15 06:00                                                   | 2.7  | 2.6             | 1.0 | 0.1             | 4.2            | 3.7             | <b>13.3</b>      | 15.0 | 287.3 | 0.4 |
| Jul-21 03:00                                                   | 4.6  | 2.1             | 0.5 | 0.2             | 7.0            | 2.6             | <b>19.6</b>      | 10.7 | 20.7  | 0.3 |
| Jul-21 04:00                                                   | 3.2  | 2.1             | 0.6 | 0.2             | 4.8            | 2.8             | <b>15.8</b>      | 9.7  | 316.8 | 0.1 |
| Jul-21 05:00                                                   | 2.5  | 1.8             | 0.5 | 0.2             | 3.8            | 2.2             | <b>19.4</b>      | 9.5  | 248.0 | 0.1 |
| Jul-21 06:00                                                   | 2.3  | 3.6             | 2.7 | 0.1             | 3.5            | 6.3             | <b>17.2</b>      | 9.7  | 82.0  | 0.3 |
| Jul-25 04:00                                                   | 11.0 | 2.9             | 0.0 | 0.3             | 16.9           | 3.3             | <b>11.7</b>      | 13.7 | 16.9  | 0.2 |
| Jul-25 05:00                                                   | 9.6  | 3.1             | 0.2 | 0.2             | 14.7           | 3.7             | <b>12.5</b>      | 12.9 | 93.9  | 0.1 |
| Jul-25 06:00                                                   | 7.2  | 3.6             | 0.5 | 0.2             | 11.1           | 4.5             | <b>12.6</b>      | 12.5 | 120.0 | 0.2 |

| Exceedance Summary (24- Hour Average - Exceedances Highlighted) |      |                 |     |                 |                |                 |                  |      |       |     |
|-----------------------------------------------------------------|------|-----------------|-----|-----------------|----------------|-----------------|------------------|------|-------|-----|
| Exceedance Time                                                 | AQI  | NO <sub>2</sub> | NO  | SO <sub>2</sub> | O <sub>3</sub> | NO <sub>x</sub> | H <sub>2</sub> S | Temp | WD    | WS  |
|                                                                 | -    | ppb             | ppb | ppb             | ppb            | ppb             | ppb              | °C   | deg   | m/s |
| Jul-15                                                          | 15.0 | 1.7             | 0.4 | 0.1             | 23.0           | 2.2             | <b>3.8</b>       | 14.9 | 239.9 | 1.4 |
| Jul-15                                                          | 19.7 | 1.9             | 0.3 | 0.8             | 30.9           | 2.2             | <b>4.2</b>       | 21.5 | 199.8 | 1.2 |
| Jul-21                                                          | 12.3 | 1.4             | 0.5 | 0.3             | 18.8           | 1.8             | <b>4.3</b>       | 17.0 | 141.3 | 2.5 |
| Jul-25                                                          | 17.2 | 1.8             | 0.1 | 0.3             | 26.8           | 2.1             | <b>3.9</b>       | 21.7 | 108.2 | 2.0 |

# SESAA Oxbow Station - July 2015 Summary Report

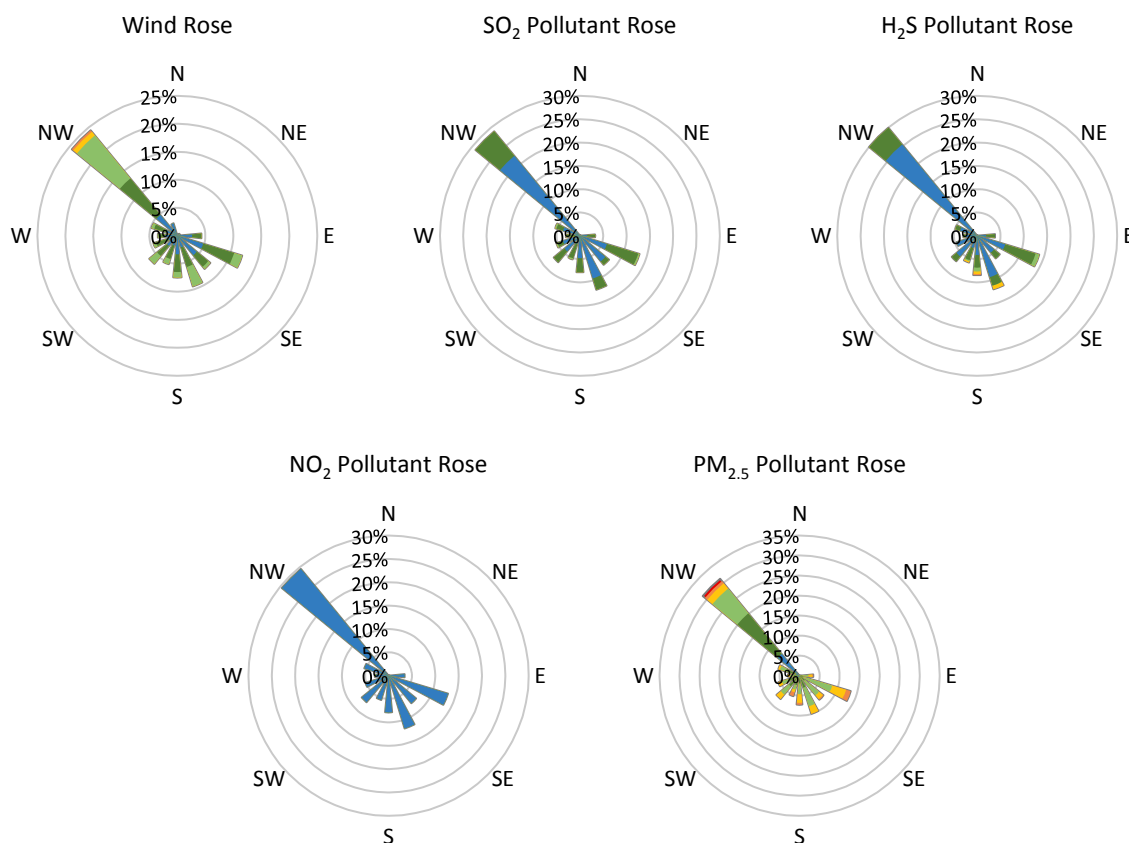
| Pollutants        |                   | Month Records |              | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Total Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |              | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | 0.3           | 81%          | 0.5             | Jul-16 | -              | -           | 4.4            | Jul-11 22:00 | -              | -            |
| NO <sub>2</sub>   | ppb               | 1.4           | 77%          | 2.5             | Jul-12 | 106            | 0           | 6.1            | Jul-12 20:00 | 159            | 0            |
| NO <sub>x</sub>   | ppb               | 1.7           | 77%          | 2.9             | Jul-12 | -              | -           | 9.3            | Jul-11 22:00 | -              | -            |
| SO <sub>2</sub>   | ppb               | 0.9           | 79%          | 3.1             | Jul-16 | 48             | 0           | 19.1           | Jul-16 11:00 | 172            | 0            |
| H <sub>2</sub> S  | ppb               | 1.0           | 78%          | 3.3             | Jul-07 | 3.6            | 0           | 8.5            | Jul-07 06:00 | 11             | 0            |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 8.9           | 78%          | 55.9            | Jul-08 | 28             | 1           | 288.5          | Jul-08 05:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards





# SESAA Oxbow Station - July 2015 Summary Report



| Parameters        | Unit                     | Color Code for Wind Speed and Pollution Concentration Class |                     |                     |                      |                       |                |
|-------------------|--------------------------|-------------------------------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------|
| Wind Speed        | m/s                      | $0.3 \leq WS < 1.4$                                         | $1.4 \leq WS < 3.1$ | $3.1 \leq WS < 7.8$ | $7.8 \leq WS < 10.8$ | $10.8 \leq WS < 13.6$ | $WS \geq 13.6$ |
| SO <sub>2</sub>   | ppb                      | $0 \leq C < 1$                                              | $1 \leq C < 5$      | $5 \leq C < 10$     | $10 \leq C < 57$     | $57 \leq C < 172$     | $C \geq 172$   |
| NO <sub>2</sub>   | ppb                      | $0 \leq C < 5$                                              | $5 \leq C < 15$     | $15 \leq C < 30$    | $30 \leq C < 100$    | $100 \leq C < 212$    | $C \geq 212$   |
| H <sub>2</sub> S  | ppb                      | $0 \leq C < 1$                                              | $1 \leq C < 3.6$    | $3.6 \leq C < 5$    | $5 \leq C < 8$       | $8 \leq C < 10.8$     | $C \geq 10.8$  |
| PM <sub>2.5</sub> | $\mu\text{g}/\text{m}^3$ | $0 \leq C < 2$                                              | $2 \leq C < 4$      | $4 \leq C < 10$     | $10 \leq C < 20$     | $20 \leq C < 30$      | $C \geq 30$    |

## Monthly Update

- Achieved 78-84% of scheduled uptime
- Operational issues (air conditioning) resulted in significant downtime throughout early July

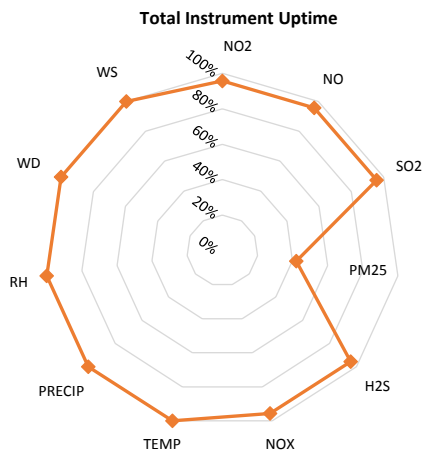
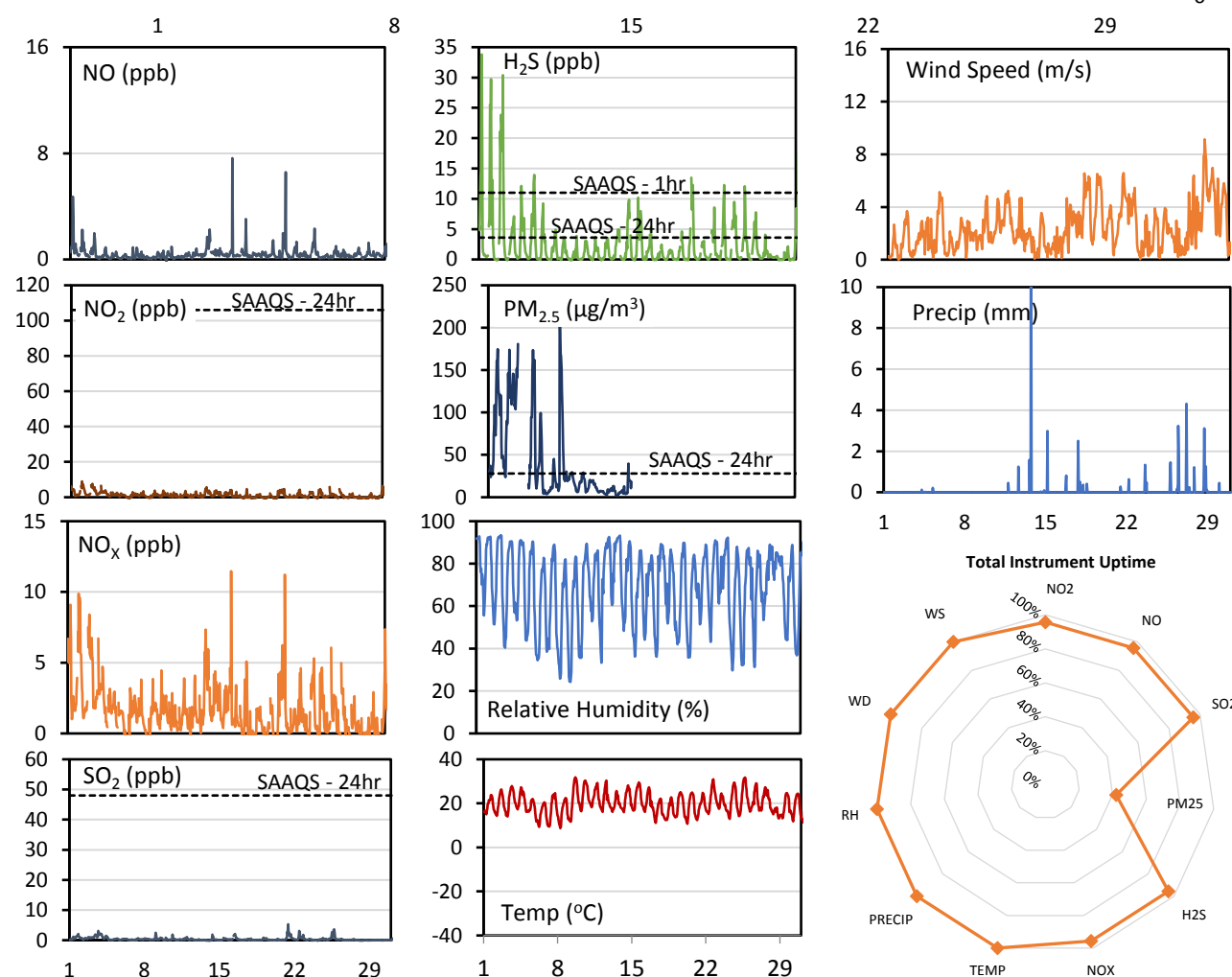
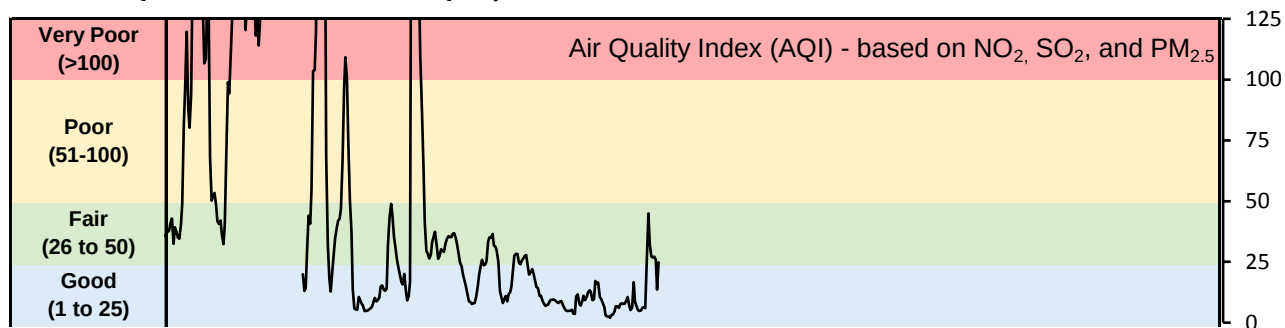
## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

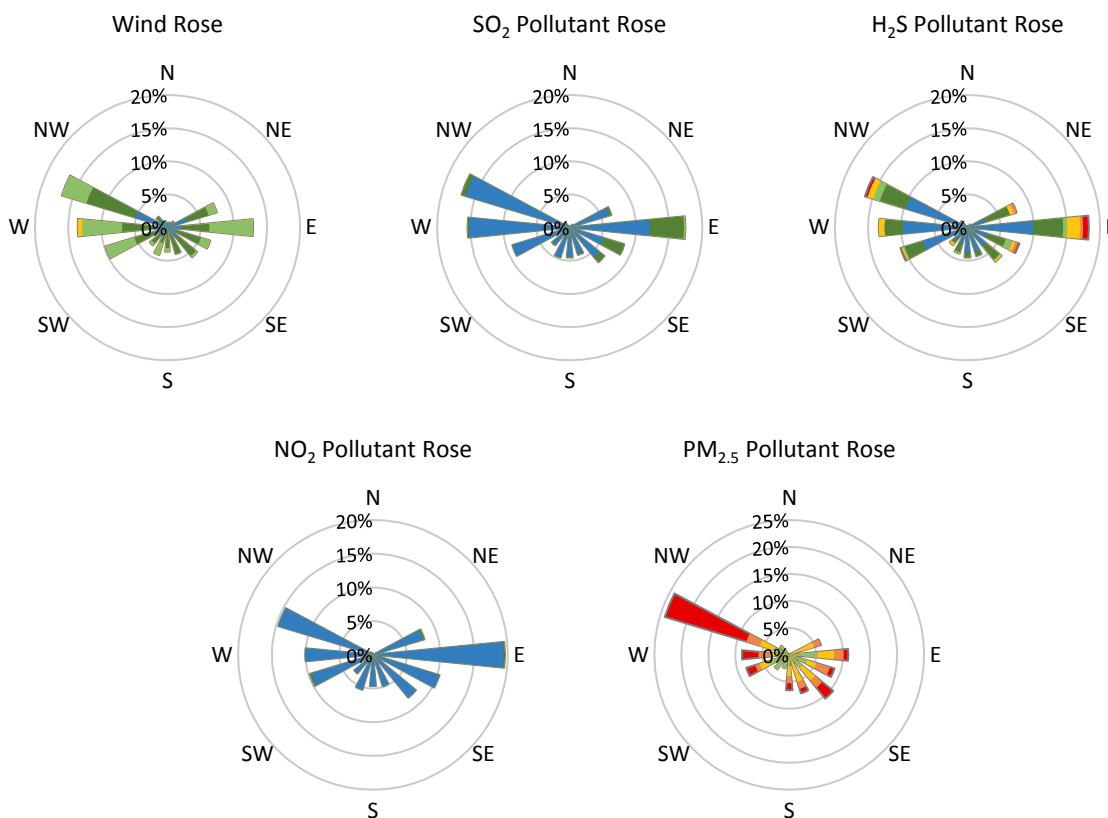
| Exceedance Time | AQI  | NO <sub>2</sub> ppb | NO ppb | SO <sub>2</sub> ppb | PM <sub>2.5</sub> $\mu\text{g}/\text{m}^3$ | NO <sub>x</sub> ppb | H <sub>2</sub> S ppb | Temp °C | WD deg | WS m/s |
|-----------------|------|---------------------|--------|---------------------|--------------------------------------------|---------------------|----------------------|---------|--------|--------|
| Jul-08          | 61.1 | 1.8                 | 0.4    | 1.2                 | 55.9                                       | 2.2                 | 1.2                  | 16.5    | 267.3  | 1.1    |

# SESAA Stoughton Station - July 2015 Summary Report

| Pollutants        |                   | Month Records |              | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Total Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |              | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | 0.4           | 96%          | 1.0             | Jul-01 | -              | -           | 7.6            | Jul-16 11:00 | -              | -            |
| NO <sub>2</sub>   | ppb               | 1.2           | 96%          | 3.6             | Jul-03 | 106            | 0           | 9.0            | Jul-02 01:00 | 159            | 0            |
| NO <sub>x</sub>   | ppb               | 1.6           | 96%          | 4.1             | Jul-03 | -              | -           | 11.5           | Jul-16 11:00 | -              | -            |
| SO <sub>2</sub>   | ppb               | 0.4           | 96%          | 1.4             | Jul-03 | 48             | 0           | 5.3            | Jul-21 10:00 | 172            | 0            |
| H <sub>2</sub> S  | ppb               | 2.3           | 96%          | 8.7             | Jul-03 | 3.6            | 5           | 33.8           | Jul-01 07:00 | 11             | 27           |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 40.1          | 42%          | 133.6           | Jul-03 | 28             | 5           | 232.3          | Jul-08 00:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards





| Parameters        | Unit                     | Color Code for Wind Speed and Pollution Concentration Class |                     |                     |                      |                       |                |  |
|-------------------|--------------------------|-------------------------------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------|--|
| Wind Speed        | m/s                      | $0.3 \leq WS < 1.4$                                         | $1.4 \leq WS < 3.1$ | $3.1 \leq WS < 7.8$ | $7.8 \leq WS < 10.8$ | $10.8 \leq WS < 13.6$ | $WS \geq 13.6$ |  |
| SO <sub>2</sub>   | ppb                      | $0 \leq C < 1$                                              | $1 \leq C < 5$      | $5 \leq C < 10$     | $10 \leq C < 57$     | $57 \leq C < 172$     | $C \geq 172$   |  |
| NO <sub>2</sub>   | ppb                      | $0 \leq C < 5$                                              | $5 \leq C < 15$     | $15 \leq C < 30$    | $30 \leq C < 100$    | $100 \leq C < 212$    | $C \geq 212$   |  |
| H <sub>2</sub> S  | ppb                      | $0 \leq C < 1$                                              | $1 \leq C < 3.6$    | $3.6 \leq C < 5$    | $5 \leq C < 8$       | $8 \leq C < 10.8$     | $C \geq 10.8$  |  |
| PM <sub>2.5</sub> | $\mu\text{g}/\text{m}^3$ | $0 \leq C < 2$                                              | $2 \leq C < 4$      | $4 \leq C < 10$     | $10 \leq C < 20$     | $20 \leq C < 30$      | $C \geq 30$    |  |

### Monthly Update

- Significant forest fire activity and operational issues had an impact on particulate monitoring equipment resulting in 58% downtime
- Achieved 100% of scheduled uptime for all other parameters
- Downtime due to routine daily Internal Zeroes and Spans

# SESAA Stoughton Station - July 2015 Summary Report

## Exceedance Summary (1- Hour Average - Exceedances Highlighted)

| Exceedance Time | AQI   | NO <sub>2</sub> | NO  | SO <sub>2</sub> | PM <sub>2.5</sub> | NO <sub>x</sub> | H <sub>2</sub> S | Temp | WD    | WS  |
|-----------------|-------|-----------------|-----|-----------------|-------------------|-----------------|------------------|------|-------|-----|
| -               | -     | ppb             | ppb | ppb             | µg/m <sup>3</sup> | ppb             | ppb              | °C   | deg   | m/s |
| Jul-01 04:00    | 40.7  | 4.1             | 1.2 | 0.3             | 34.4              | 5.3             | <b>13.8</b>      | 16.5 | 28.0  | 0.1 |
| Jul-01 05:00    | 42.8  | 3.7             | 2.0 | 0.3             | 37.1              | 5.7             | <b>14.6</b>      | 15.8 | 56.5  | 0.1 |
| Jul-01 06:00    | 32.4  | 4.4             | 4.7 | 0.2             | 23.8              | 9.1             | <b>33.6</b>      | 15.0 | 286.1 | 0.2 |
| Jul-01 07:00    | 39.3  | 3.7             | 3.0 | 0.2             | 32.6              | 6.6             | <b>33.8</b>      | 16.1 | 313.0 | 0.3 |
| Jul-01 08:00    | 37.4  | 1.5             | 0.9 | 0.8             | 30.1              | 2.5             | <b>11.5</b>      | 17.7 | 358.0 | 0.4 |
| Jul-02 01:00    | 133.3 | 9.0             | 0.9 | 0.6             | 121.2             | 9.9             | <b>15.8</b>      | 16.0 | 221.7 | 0.1 |
| Jul-02 02:00    | 127.3 | 5.4             | 0.6 | 0.7             | 115.8             | 6.0             | <b>25.5</b>      | 16.0 | 37.3  | 0.4 |
| Jul-02 03:00    | 106.6 | 7.4             | 2.2 | 0.7             | 96.9              | 9.6             | <b>24.6</b>      | 15.4 | 308.3 | 0.2 |
| Jul-02 04:00    | 108.5 | 6.8             | 2.2 | 0.5             | 98.6              | 9.0             | <b>29.7</b>      | 14.9 | 249.6 | 1.2 |
| Jul-02 07:00    | 68.2  | 3.3             | 1.3 | 0.2             | 62.3              | 4.6             | <b>13.1</b>      | 15.7 | 291.8 | 1.0 |
| Jul-03 01:00    | 162.7 | 7.5             | 0.9 | 0.7             | 147.9             | 8.4             | <b>21.1</b>      | 16.5 | 284.8 | 0.5 |
| Jul-03 02:00    | 191.3 | 5.3             | 0.4 | 1.0             | 173.9             | 5.7             | <b>17.8</b>      | 16.2 | 282.6 | 0.3 |
| Jul-03 03:00    | 140.3 | 5.1             | 0.4 | 1.0             | 127.6             | 5.5             | <b>23.9</b>      | 14.6 | 288.4 | 0.2 |
| Jul-03 04:00    | 143.8 | 4.8             | 0.8 | 0.8             | 130.8             | 5.6             | <b>22.2</b>      | 14.3 | 54.1  | 0.2 |
| Jul-03 05:00    | 137.0 | 4.3             | 0.9 | 0.9             | 124.6             | 5.3             | <b>20.8</b>      | 14.3 | 66.7  | 0.7 |
| Jul-03 06:00    | 144.1 | 5.6             | 1.1 | 1.0             | 131.0             | 6.7             | <b>23.4</b>      | 14.1 | 318.4 | 0.3 |
| Jul-03 07:00    | 120.4 | 3.4             | 2.0 | 0.9             | 109.5             | 5.4             | <b>30.4</b>      | 14.8 | 326.5 | 0.4 |
| Jul-03 08:00    | 131.4 | 3.8             | 1.5 | 1.2             | 119.4             | 5.4             | <b>15.8</b>      | 17.0 | 74.6  | 0.4 |
| Jul-05 01:00    | 32.2  | 2.0             | 0.3 | 0.1             | 23.5              | 2.4             | <b>12.1</b>      | 16.1 | 297.0 | 1.1 |
| Jul-06 05:00    | 74.7  | 1.0             | 0.4 | 0.4             | 68.1              | 1.4             | <b>12.6</b>      | 9.5  | 290.8 | 0.5 |
| Jul-06 06:00    | 50.6  | 0.7             | 0.4 | 0.4             | 46.4              | 1.0             | <b>13.9</b>      | 9.4  | 294.5 | 0.3 |
| Jul-21 03:00    | N/A   | 4.1             | 0.3 | 0.2             | N/A               | 4.4             | <b>13.5</b>      | 12.8 | 83.2  | 1.6 |
| Jul-21 06:00    | N/A   | 3.0             | 0.7 | 0.6             | N/A               | 3.7             | <b>12.3</b>      | 13.7 | 87.9  | 2.4 |
| Jul-24 05:00    | N/A   | 2.8             | 1.0 | -0.1            | N/A               | 3.7             | <b>12.3</b>      | 13.3 | 217.5 | 1.0 |
| Jul-26 04:00    | N/A   | 2.1             | 0.6 | 0.2             | N/A               | 2.7             | <b>12.0</b>      | 16.3 | 79.0  | 1.3 |
| Jul-31 05:00    | N/A   | 2.4             | 0.5 | 0.5             | N/A               | 2.9             | <b>11.5</b>      | 11.7 | 300.1 | 0.7 |
| Jul-31 06:00    | N/A   | 2.2             | 0.5 | 0.2             | N/A               | 2.7             | <b>17.5</b>      | 11.3 | 309.2 | 0.4 |

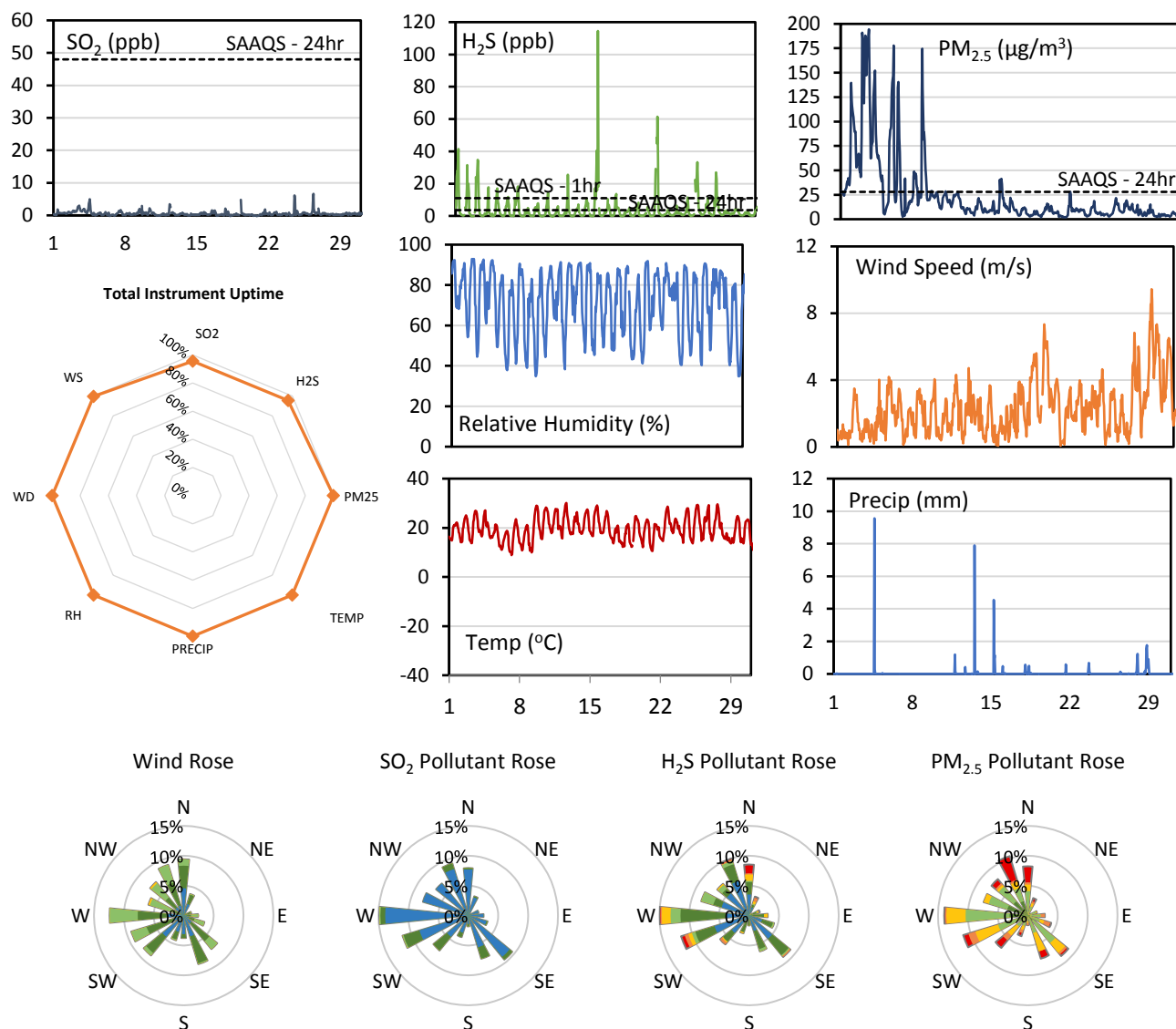
## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

| Exceedance Day | AQI   | NO <sub>2</sub> | NO  | SO <sub>2</sub> | PM <sub>2.5</sub> | NO <sub>x</sub> | H <sub>2</sub> S | Temp | WD    | WS  |
|----------------|-------|-----------------|-----|-----------------|-------------------|-----------------|------------------|------|-------|-----|
| -              | -     | ppb             | ppb | ppb             | µg/m <sup>3</sup> | ppb             | ppb              | °C   | deg   | m/s |
| Jul-01         | 76.7  | 2.7             | 1.0 | 0.8             | <b>69.9</b>       | 3.7             | <b>6.4</b>       | 19.3 | 264.7 | 0.7 |
| Jul-02         | 83.3  | 3.4             | 0.7 | 0.6             | <b>75.9</b>       | 4.1             | <b>6.5</b>       | 20.0 | 275.1 | 1.7 |
| Jul-03         | 146.9 | 3.6             | 0.5 | 1.4             | <b>133.6</b>      | 4.1             | <b>8.7</b>       | 21.3 | 162.0 | 1.1 |
| Jul-05         | 75.7  | 1.5             | 0.2 | 0.3             | <b>69.0</b>       | 1.7             | 3.1              | 17.9 | 290.4 | 2.8 |
| Jul-06         | 33.9  | 0.5             | 0.2 | 0.2             | 25.7              | 0.8             | <b>3.7</b>       | 15.3 | 268.6 | 0.9 |
| Jul-08         | 73.8  | 0.4             | 0.1 | 0.3             | <b>67.3</b>       | 0.5             | 1.4              | 16.3 | 252.9 | 1.9 |
| Jul-31         | N/A   | 1.3             | 0.4 | 0.2             | N/A               | 1.7             | <b>3.8</b>       | 19.4 | 267.2 | 1.3 |

# SESAA Wauchope Station - July 2015 Summary Report

| Pollutants        |                   | Month Records |              | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Total Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |              | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| SO <sub>2</sub>   | ppb               | 0.6           | 96%          | 1.7             | Jul-03 | 48             | 0           | 6.6            | Jul-26 09:00 | 172            | 0            |
| H <sub>2</sub> S  | ppb               | 4.0           | 96%          | 12.6            | Jul-15 | 3.6            | 11          | 114.5          | Jul-15 06:00 | 11             | 65           |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 23.3          | 100%         | 136.9           | Jul-03 | 28             | 8           | 194.4          | Jul-03 11:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards



| Parameters        | Unit              | Color Code for Wind Speed and Pollution Concentration Class |                |                |                 |                  |           |
|-------------------|-------------------|-------------------------------------------------------------|----------------|----------------|-----------------|------------------|-----------|
| Wind Speed        | m/s               | 0.3 ≤ WS < 1.4                                              | 1.4 ≤ WS < 3.1 | 3.1 ≤ WS < 7.8 | 7.8 ≤ WS < 10.8 | 10.8 ≤ WS < 13.6 | WS ≥ 13.6 |
| SO <sub>2</sub>   | ppb               | 0 ≤ C < 1                                                   | 1 ≤ C < 5      | 5 ≤ C < 10     | 10 ≤ C < 57     | 57 ≤ C < 172     | C ≥ 172   |
| H <sub>2</sub> S  | ppb               | 0 ≤ C < 1                                                   | 1 ≤ C < 3.6    | 3.6 ≤ C < 5    | 5 ≤ C < 8       | 8 ≤ C < 10.8     | C ≥ 10.8  |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 0 ≤ C < 2                                                   | 2 ≤ C < 4      | 4 ≤ C < 10     | 10 ≤ C < 20     | 20 ≤ C < 30      | C ≥ 30    |

## Monthly Update

- Achieved >99% of scheduled uptime
- Downtime due to routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity; no operational issues

| Exceedance Summary (1- Hour Average - Exceedances Highlighted) |                        |                                        |                         |            |           |           |
|----------------------------------------------------------------|------------------------|----------------------------------------|-------------------------|------------|-----------|-----------|
| Exceedance Time                                                | SO <sub>2</sub><br>ppb | PM <sub>2.5</sub><br>µg/m <sup>3</sup> | H <sub>2</sub> S<br>ppb | Temp<br>°C | WD<br>deg | WS<br>m/s |
| Jul-01 02:00                                                   | 0.3                    | 28.1                                   | <b>15.7</b>             | 15.7       | 5.1       | 0.4       |
| Jul-01 03:00                                                   | 0.2                    | 27.9                                   | <b>24.4</b>             | 15.5       | 15.0      | 0.5       |
| Jul-01 04:00                                                   | 0.2                    | 27.6                                   | <b>27.9</b>             | 15.4       | 3.3       | 0.7       |
| Jul-01 05:00                                                   | 0.0                    | 27.9                                   | <b>27.6</b>             | 15.3       | 353.9     | 0.6       |
| Jul-01 06:00                                                   | 0.2                    | 26.0                                   | <b>38.7</b>             | 14.9       | 356.9     | 0.6       |
| Jul-01 07:00                                                   | 0.2                    | 23.9                                   | <b>41.4</b>             | 15.1       | 10.0      | 0.9       |
| Jul-01 08:00                                                   | 0.7                    | 26.5                                   | <b>17.6</b>             | 17.1       | 334.4     | 0.5       |
| Jul-02 03:00                                                   | 0.7                    | 104.7                                  | <b>17.8</b>             | 14.9       | 336.1     | 0.5       |
| Jul-02 04:00                                                   | 0.6                    | 96.6                                   | <b>31.4</b>             | 14.2       | 324.6     | 0.9       |
| Jul-02 05:00                                                   | 0.6                    | 89.6                                   | <b>17.2</b>             | 15.3       | 312.6     | 0.9       |
| Jul-02 06:00                                                   | 0.5                    | 89.2                                   | <b>17.6</b>             | 14.1       | 262.0     | 0.9       |
| Jul-02 07:00                                                   | 0.6                    | 89.8                                   | <b>19.9</b>             | 14.5       | 278.4     | 0.9       |
| Jul-02 08:00                                                   | 0.6                    | 73.7                                   | <b>13.8</b>             | 16.9       | 330.9     | 1.2       |
| Jul-03 01:00                                                   | 1.1                    | 118.8                                  | <b>24.1</b>             | 15.3       | 9.5       | 0.4       |
| Jul-03 02:00                                                   | 1.1                    | 159.5                                  | <b>21.6</b>             | 14.7       | 313.9     | 0.5       |
| Jul-03 03:00                                                   | 1.3                    | 183.1                                  | <b>21.1</b>             | 14.8       | 274.2     | 0.8       |
| Jul-03 04:00                                                   | 1.3                    | 187.9                                  | <b>25.9</b>             | 14.5       | 275.6     | 0.8       |
| Jul-03 05:00                                                   | 1.1                    | 160.0                                  | <b>34.8</b>             | 13.8       | 287.7     | 0.3       |
| Jul-03 06:00                                                   | 1.3                    | 147.4                                  | <b>34.1</b>             | 13.8       | 260.6     | 1.0       |
| Jul-03 07:00                                                   | 1.5                    | 168.3                                  | <b>14.6</b>             | 15.1       | 288.5     | 0.8       |
| Jul-04 06:00                                                   | 0.7                    | 62.6                                   | <b>12.4</b>             | 16.5       | 219.7     | 0.2       |
| Jul-04 07:00                                                   | 0.7                    | 65.4                                   | <b>17.8</b>             | 17.2       | 161.9     | 0.8       |
| Jul-05 02:00                                                   | -0.1                   | 14.3                                   | <b>11.2</b>             | 15.9       | 7.2       | 1.0       |
| Jul-05 03:00                                                   | 0.0                    | 15.9                                   | <b>12.9</b>             | 15.8       | 5.3       | 1.5       |
| Jul-05 04:00                                                   | 0.2                    | 18.1                                   | <b>17.0</b>             | 16.0       | 352.6     | 0.8       |
| Jul-05 05:00                                                   | 0.2                    | 28.8                                   | <b>11.1</b>             | 16.5       | 12.1      | 2.1       |
| Jul-06 06:00                                                   | 0.0                    | 25.2                                   | <b>11.8</b>             | 11.1       | 359.9     | 1.4       |
| Jul-07 05:00                                                   | 0.6                    | 18.1                                   | <b>18.0</b>             | 8.9        | 223.4     | 0.6       |
| Jul-07 06:00                                                   | 0.7                    | 20.7                                   | <b>18.3</b>             | 9.5        | 225.7     | 0.8       |
| Jul-10 06:00                                                   | 0.3                    | 24.3                                   | <b>14.3</b>             | 15.4       | 261.3     | 0.4       |
| Jul-12 05:00                                                   | 0.2                    | 10.4                                   | <b>11.3</b>             | 15.8       | 144.1     | 0.2       |
| Jul-12 06:00                                                   | 0.2                    | 10.8                                   | <b>25.5</b>             | 15.7       | 211.8     | 0.4       |
| Jul-14 23:00                                                   | 0.2                    | 28.4                                   | <b>17.1</b>             | 18.9       | 303.4     | 0.3       |
| Jul-15 00:00                                                   | 0.1                    | 32.3                                   | <b>11.5</b>             | 18.5       | 249.6     | 1.1       |
| Jul-15 02:00                                                   | 0.2                    | 35.9                                   | <b>21.1</b>             | 17.7       | 322.7     | 0.4       |
| Jul-15 03:00                                                   | 0.1                    | 23.8                                   | <b>40.5</b>             | 17.5       | 334.3     | 0.5       |
| Jul-15 04:00                                                   | 0.2                    | 21.0                                   | <b>15.7</b>             | 17.7       | 254.1     | 0.1       |
| Jul-15 05:00                                                   | 0.1                    | 21.9                                   | <b>41.6</b>             | 16.7       | 218.4     | 0.1       |
| Jul-15 06:00                                                   | 0.1                    | 16.3                                   | <b>114.5</b>            | 16.7       | 303.8     | 0.7       |
| Jul-15 07:00                                                   | 0.6                    | 13.5                                   | <b>18.2</b>             | 16.6       | 171.8     | 0.3       |
| Jul-17 00:00                                                   | 0.2                    | 10.7                                   | <b>11.9</b>             | 16.9       | 320.1     | 0.6       |
| Jul-17 01:00                                                   | 0.0                    | 12.1                                   | <b>11.3</b>             | 16.6       | 274.0     | 1.1       |
| Jul-17 02:00                                                   | 0.1                    | 11.6                                   | <b>13.7</b>             | 15.9       | 235.7     | 0.9       |
| Jul-21 00:00                                                   | -0.1                   | 27.4                                   | <b>22.3</b>             | 12.7       | 358.0     | 0.3       |
| Jul-21 01:00                                                   | -0.1                   | 28.2                                   | <b>29.2</b>             | 11.9       | 316.8     | 0.2       |
| Jul-21 03:00                                                   | 0.1                    | 13.1                                   | <b>48.3</b>             | 10.8       | 355.6     | 0.4       |
| Jul-21 04:00                                                   | 0.2                    | 11.1                                   | <b>44.6</b>             | 10.6       | 353.3     | 0.4       |

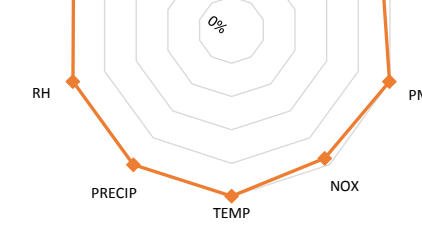
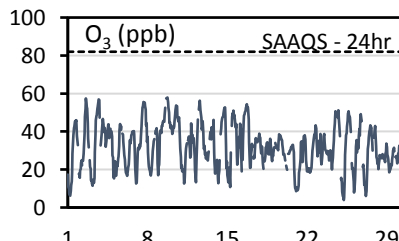
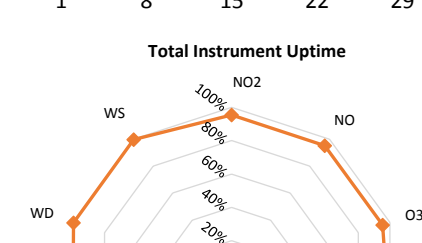
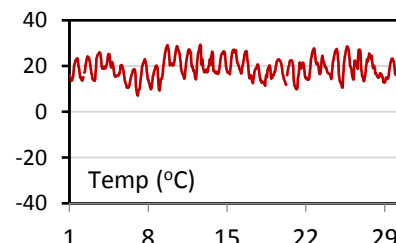
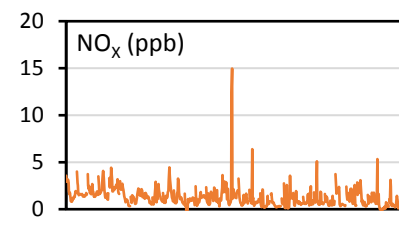
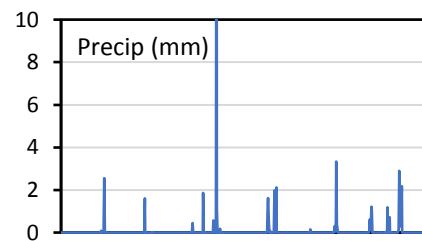
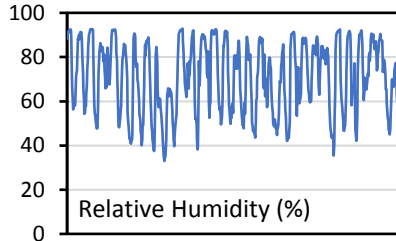
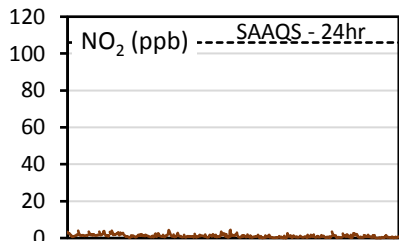
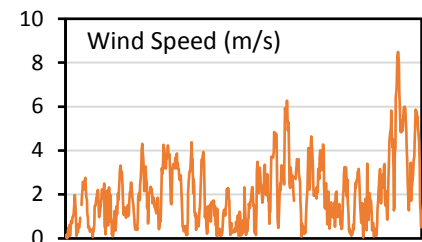
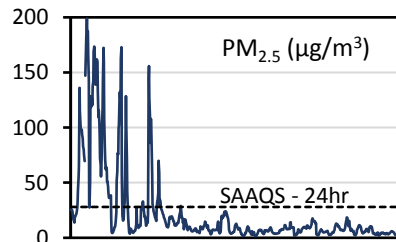
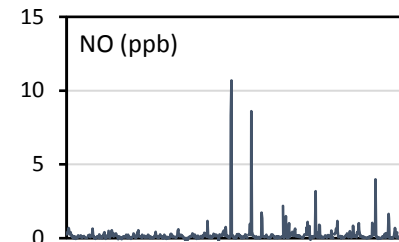
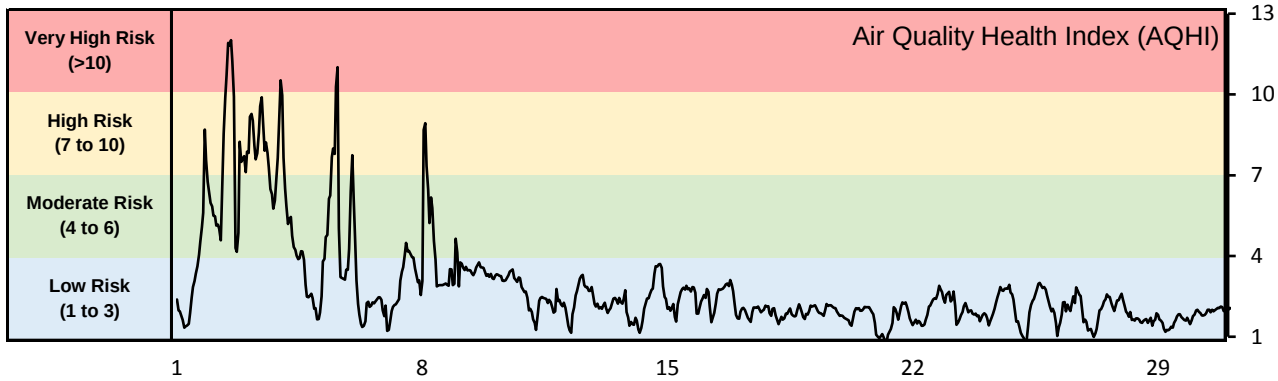
| Exceedance Summary (1- Hour Average - Exceedances Highlighted) |                        |                                        |                         |            |           |           |
|----------------------------------------------------------------|------------------------|----------------------------------------|-------------------------|------------|-----------|-----------|
| Exceedance Time                                                | SO <sub>2</sub><br>ppb | PM <sub>2.5</sub><br>µg/m <sup>3</sup> | H <sub>2</sub> S<br>ppb | Temp<br>°C | WD<br>deg | WS<br>m/s |
| Jul-21 05:00                                                   | 0.4                    | 7.9                                    | <b>61.4</b>             | 10.6       | 16.5      | 0.4       |
| Jul-21 06:00                                                   | 0.1                    | 10.8                                   | <b>35.7</b>             | 11.8       | 125.9     | 0.1       |
| Jul-24 06:00                                                   | -0.1                   | 5.7                                    | <b>11.5</b>             | 13.9       | 257.2     | 2.1       |
| Jul-24 23:00                                                   | 0.1                    | 16.1                                   | <b>22.3</b>             | 16.4       | 359.6     | 0.3       |
| Jul-25 00:00                                                   | 0.1                    | 19.3                                   | <b>19.0</b>             | 15.7       | 7.4       | 0.6       |
| Jul-25 01:00                                                   | 0.2                    | 21.6                                   | <b>15.0</b>             | 15.1       | 7.6       | 0.8       |
| Jul-25 02:00                                                   | 0.2                    | 18.2                                   | <b>16.8</b>             | 14.9       | 1.9       | 0.9       |
| Jul-25 03:00                                                   | 0.3                    | 15.7                                   | <b>21.6</b>             | 14.2       | 8.2       | 1.0       |
| Jul-25 04:00                                                   | 0.3                    | 15.1                                   | <b>29.2</b>             | 13.9       | 6.6       | 1.1       |
| Jul-25 05:00                                                   | 0.2                    | 14.8                                   | <b>33.2</b>             | 13.7       | 10.7      | 1.3       |
| Jul-25 06:00                                                   | 0.4                    | 16.1                                   | <b>18.8</b>             | 14.5       | 15.9      | 0.9       |
| Jul-25 07:00                                                   | 0.7                    | 11.3                                   | <b>14.6</b>             | 16.6       | 91.5      | 0.6       |
| Jul-26 06:00                                                   | 0.8                    | 11.8                                   | <b>11.2</b>             | 15.3       | 257.5     | 2.0       |
| Jul-27 01:00                                                   | 0.2                    | 5.0                                    | <b>20.8</b>             | 15.9       | 359.5     | 0.5       |
| Jul-27 02:00                                                   | 0.3                    | 5.4                                    | <b>27.0</b>             | 14.8       | 13.0      | 0.9       |
| Jul-27 03:00                                                   | 0.3                    | 6.4                                    | <b>22.7</b>             | 14.7       | 12.7      | 0.8       |
| Jul-27 04:00                                                   | 0.4                    | 10.1                                   | <b>11.1</b>             | 15.3       | 64.6      | 1.2       |
| Jul-27 06:00                                                   | 0.5                    | 7.2                                    | <b>11.5</b>             | 16.8       | 4.5       | 1.7       |

| Exceedance Summary (24- Hour Average - Exceedances Highlighted) |                        |                                        |                         |            |           |           |
|-----------------------------------------------------------------|------------------------|----------------------------------------|-------------------------|------------|-----------|-----------|
| Exceedance Time                                                 | SO <sub>2</sub><br>ppb | PM <sub>2.5</sub><br>µg/m <sup>3</sup> | H <sub>2</sub> S<br>ppb | Temp<br>°C | WD<br>deg | WS<br>m/s |
| Jul-01                                                          | 0.6                    | <b>42.2</b>                            | <b>9.7</b>              | 18.8       | 192.8     | 0.7       |
| Jul-02                                                          | 0.8                    | <b>88.6</b>                            | <b>6.3</b>              | 19.8       | 305.5     | 1.8       |
| Jul-03                                                          | 1.7                    | <b>136.9</b>                           | <b>8.7</b>              | 20.5       | 212.9     | 0.9       |
| Jul-04                                                          | 1.6                    | <b>49.4</b>                            | 2.5                     | 20.8       | 105.3     | 1.4       |
| Jul-05                                                          | 0.3                    | <b>65.9</b>                            | <b>4.2</b>              | 17.7       | 258.9     | 2.4       |
| Jul-06                                                          | 0.2                    | <b>31.9</b>                            | <b>4.1</b>              | 14.7       | 195.5     | 1.9       |
| Jul-07                                                          | 0.6                    | <b>28.0</b>                            | <b>4.6</b>              | 16.2       | 212.2     | 1.4       |
| Jul-08                                                          | 0.4                    | <b>52.9</b>                            | 1.6                     | 15.8       | 248.9     | 2.2       |
| Jul-14                                                          | 0.2                    | 12.1                                   | <b>3.9</b>              | 22.1       | 216.4     | 1.5       |
| Jul-15                                                          | 0.5                    | 17.7                                   | <b>12.6</b>             | 22.5       | 232.4     | 0.9       |
| Jul-21                                                          | 0.4                    | 11.7                                   | <b>11.5</b>             | 17.0       | 167.9     | 1.8       |
| Jul-25                                                          | 0.5                    | 12.4                                   | <b>8.4</b>              | 21.9       | 84.5      | 1.9       |
| Jul-27                                                          | 0.4                    | 5.9                                    | <b>6.1</b>              | 21.6       | 90.2      | 3.5       |

# SESAA Wawota Station - July 2015 Summary Report

| Pollutants        |                   | Month Records |        | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |        | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | 0.2           | 95%    | 1.0             | Jul-15 | -              | -           | 10.7           | Jul-15 18:00 | -              | -            |
| NO <sub>2</sub>   | ppb               | 1.1           | 95%    | 2.3             | Jul-05 | 106            | 0           | 4.4            | Jul-15 18:00 | 159            | 0            |
| NO <sub>x</sub>   | ppb               | 1.3           | 95%    | 2.6             | Jul-15 | -              | -           | 15.0           | Jul-15 18:00 | -              | -            |
| O <sub>3</sub>    | ppb               | 32.1          | 95%    | 45.8            | Jul-09 | -              | -           | 57.9           | Jul-09 18:00 | 82             | 0            |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 22.0          | 100%   | 127.3           | Jul-03 | 28             | 6           | 198.8          | Jul-02 11:00 | -              | -            |

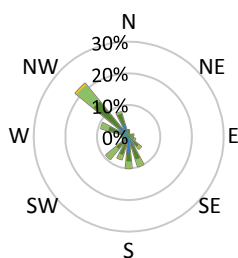
SAAQS: Saskatchewan Ambient Air Quality Standards



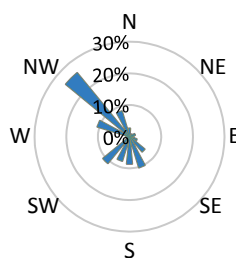


# SESAA Wawota Station - July 2015 Summary Report

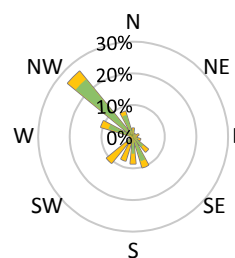
Wind Rose



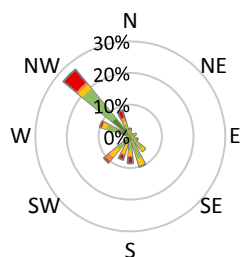
NO<sub>2</sub> Pollutant Rose



O<sub>3</sub> Pollutant Rose



PM<sub>2.5</sub> Pollutant Rose



| Parameters        | Unit              | Color Code for Wind Speed and Pollution Concentration Class |                |                |                 |                  |           |  |
|-------------------|-------------------|-------------------------------------------------------------|----------------|----------------|-----------------|------------------|-----------|--|
| Wind Speed        | m/s               | 0.3 ≤ WS < 1.4                                              | 1.4 ≤ WS < 3.1 | 3.1 ≤ WS < 7.8 | 7.8 ≤ WS < 10.8 | 10.8 ≤ WS < 13.6 | WS ≥ 13.6 |  |
| O <sub>3</sub>    | ppb               | 0 ≤ C < 10                                                  | 10 ≤ C < 20    | 20 ≤ C < 40    | 40 ≤ C < 60     | 60 ≤ C < 82      | C ≥ 82    |  |
| NO <sub>2</sub>   | ppb               | 0 ≤ C < 5                                                   | 5 ≤ C < 15     | 15 ≤ C < 30    | 30 ≤ C < 100    | 100 ≤ C < 212    | C ≥ 212   |  |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 0 ≤ C < 2                                                   | 2 ≤ C < 4      | 4 ≤ C < 10     | 10 ≤ C < 20     | 20 ≤ C < 30      | C ≥ 30    |  |

## Monthly Update

- Achieved >99% of scheduled uptime
- Downtime due to routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity; no operational issues

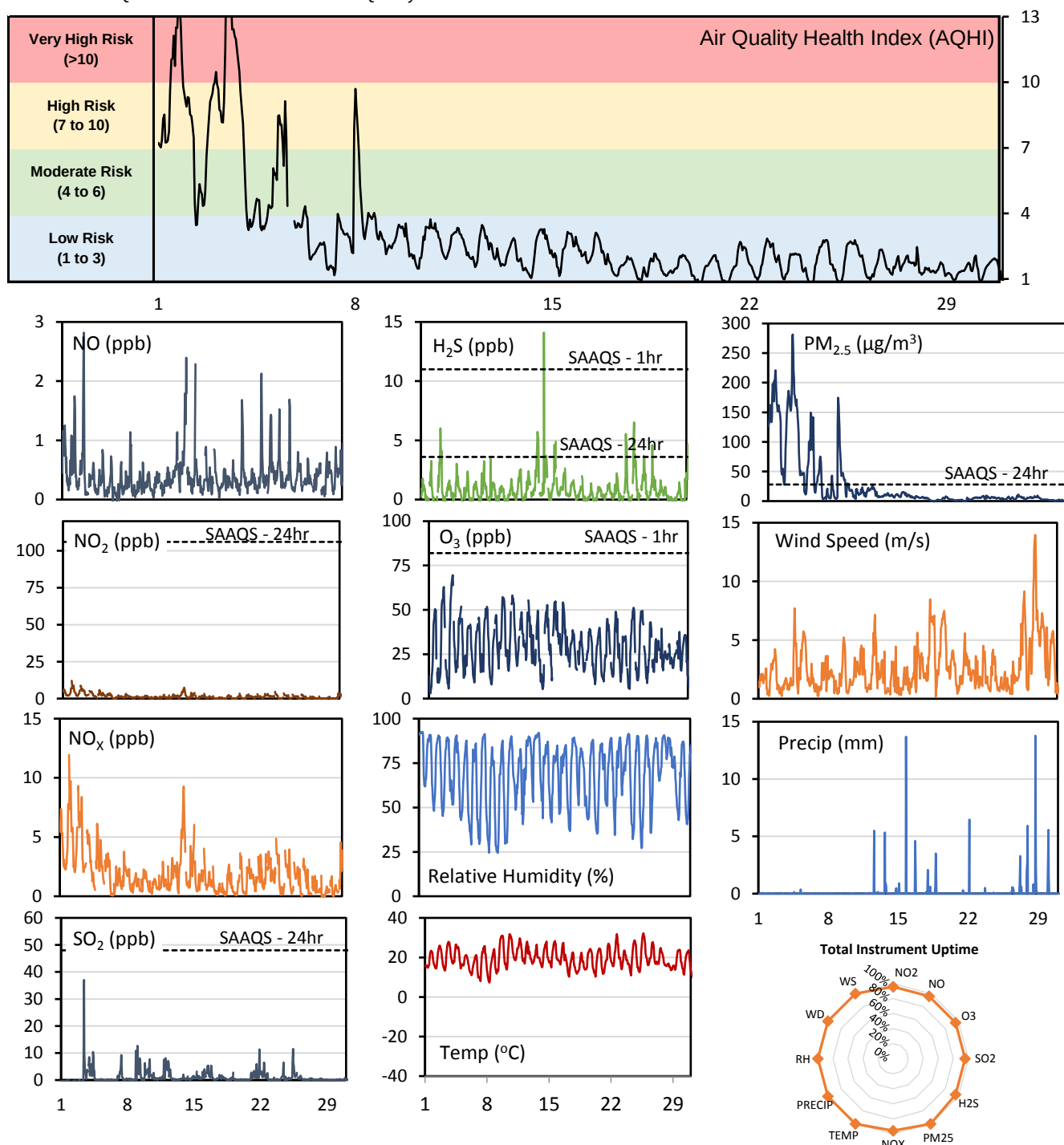
## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

| Exceedance Time | AQI | NO <sub>2</sub> ppb | NO ppb | O <sub>3</sub> ppb | PM <sub>2.5</sub> µg/m <sup>3</sup> | NO <sub>x</sub> ppb | Temp °C | WD deg | WS m/s |
|-----------------|-----|---------------------|--------|--------------------|-------------------------------------|---------------------|---------|--------|--------|
| Jul-01          | 3.6 | 1.7                 | 0.2    | 26.2               | <b>44.4</b>                         | 1.9                 | 18.3    | 271.2  | 0.7    |
| Jul-02          | 7.5 | 1.7                 | 0.1    | 33.8               | <b>117.2</b>                        | 1.8                 | 19.1    | 292.5  | 1.5    |
| Jul-03          | 8.0 | 1.8                 | 0.1    | 33.3               | <b>127.3</b>                        | 1.9                 | 20.1    | 212.5  | 1.0    |
| Jul-04          | 4.3 | 2.1                 | 0.2    | 39.0               | <b>43.5</b>                         | 2.2                 | 21.1    | 203.5  | 1.4    |
| Jul-05          | 4.8 | 2.3                 | 0.2    | 28.7               | <b>66.0</b>                         | 2.5                 | 16.9    | 319.8  | 1.7    |
| Jul-08          | 4.3 | 1.1                 | 0.1    | 28.0               | <b>57.6</b>                         | 1.2                 | 15.0    | 301.4  | 1.6    |

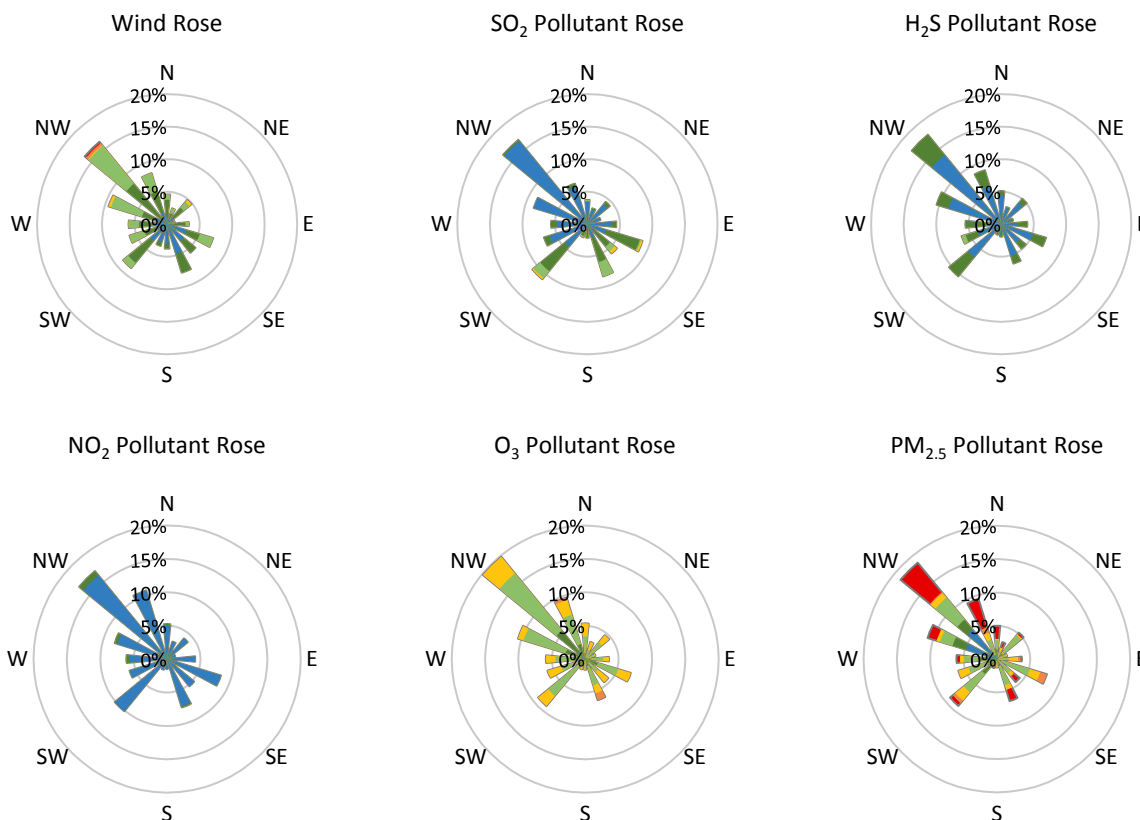
# SESAA Weyburn Station - July 2015 Summary Report

| Pollutants        |                   | Month Records |        | 24-Hour Records |        |                |             | 1-Hour Records |              |                |              |
|-------------------|-------------------|---------------|--------|-----------------|--------|----------------|-------------|----------------|--------------|----------------|--------------|
| Name              | Conc. Unit        | Avg. Conc.    | Uptime | Maximum         |        | SAAQS Standard | Exceed Days | Maximum        |              | SAAQS Standard | Exceed Hours |
|                   |                   |               |        | Conc.           | Time   |                |             | Conc.          | Time         |                |              |
| NO                | ppb               | 0.4           | 96%    | 0.7             | Jul-14 | -              | -           | 2.8            | Jul-03 08:00 | -              | -            |
| NO <sub>2</sub>   | ppb               | 1.5           | 96%    | 4.9             | Jul-02 | 106            | 0           | 12.1           | Jul-01 23:00 | 159            | 0            |
| NO <sub>x</sub>   | ppb               | 1.9           | 96%    | 5.6             | Jul-02 | -              | -           | 12.7           | Jul-01 23:00 | -              | -            |
| SO <sub>2</sub>   | ppb               | 1.0           | 96%    | 3.9             | Jul-03 | 48             | 0           | 37.0           | Jul-03 10:00 | 172            | 0            |
| H <sub>2</sub> S  | ppb               | 0.8           | 96%    | 2.4             | Jul-14 | 3.6            | 0           | 14.1           | Jul-14 22:00 | 11             | 1            |
| O <sub>3</sub>    | ppb               | 29.3          | 96%    | 37.4            | Jul-09 | -              | -           | 69.6           | Jul-03 18:00 | 82             | 0            |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | 26.4          | 100%   | 184.7           | Jul-03 | 28             | 6           | 281.4          | Jul-03 11:00 | -              | -            |

SAAQS: Saskatchewan Ambient Air Quality Standards



# SESAA Weyburn Station - July 2015 Summary Report



| Parameters        | Unit              | Color Code for Wind Speed and Pollution Concentration Class |                     |                     |                      |                       |                |  |
|-------------------|-------------------|-------------------------------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------|--|
| Wind Speed        | m/s               | $0.3 \leq WS < 1.4$                                         | $1.4 \leq WS < 3.1$ | $3.1 \leq WS < 7.8$ | $7.8 \leq WS < 10.8$ | $10.8 \leq WS < 13.6$ | $WS \geq 13.6$ |  |
| SO <sub>2</sub>   | ppb               | $0 \leq C < 1$                                              | $1 \leq C < 5$      | $5 \leq C < 10$     | $10 \leq C < 57$     | $57 \leq C < 172$     | $C \geq 172$   |  |
| NO <sub>2</sub>   | ppb               | $0 \leq C < 5$                                              | $5 \leq C < 15$     | $15 \leq C < 30$    | $30 \leq C < 100$    | $100 \leq C < 212$    | $C \geq 212$   |  |
| H <sub>2</sub> S  | ppb               | $0 \leq C < 1$                                              | $1 \leq C < 3.6$    | $3.6 \leq C < 5$    | $5 \leq C < 8$       | $8 \leq C < 10.8$     | $C \geq 10.8$  |  |
| O <sub>3</sub>    | ppb               | $0 \leq C < 10$                                             | $10 \leq C < 20$    | $20 \leq C < 40$    | $40 \leq C < 60$     | $60 \leq C < 82$      | $C \geq 82$    |  |
| PM <sub>2.5</sub> | µg/m <sup>3</sup> | $0 \leq C < 2$                                              | $2 \leq C < 4$      | $4 \leq C < 10$     | $10 \leq C < 20$     | $20 \leq C < 30$      | $C \geq 30$    |  |

## Monthly Update

- Achieved 100% of scheduled uptime
- Downtime due to routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity; no operational issues

## Exceedance Summary (1- Hour Average - Exceedances Highlighted)

| Exceedance Time | AQHI | NO <sub>2</sub> | NO  | SO <sub>2</sub> | O <sub>3</sub> | NO <sub>x</sub> | H <sub>2</sub> S | PM <sub>2.5</sub> | Temp | WD    | WS  |
|-----------------|------|-----------------|-----|-----------------|----------------|-----------------|------------------|-------------------|------|-------|-----|
|                 | -    | ppb             | ppb | ppb             | ppb            | ppb             | ppb              | µg/m <sup>3</sup> | °C   | deg   | m/s |
| Jul-14 22:00    | 2.2  | 3.9             | 0.3 | 1.1             | 27.4           | 4.3             | <b>14.1</b>      | 8.8               | 19.0 | 178.7 | 0.5 |

## Exceedance Summary (24- Hour Average - Exceedances Highlighted)

| Exceedance Time | AQHI | NO <sub>2</sub> | NO  | SO <sub>2</sub> | O <sub>3</sub> | NO <sub>x</sub> | H <sub>2</sub> S | PM <sub>2.5</sub> | Temp | WD    | WS  |
|-----------------|------|-----------------|-----|-----------------|----------------|-----------------|------------------|-------------------|------|-------|-----|
|                 | -    | ppb             | ppb | ppb             | ppb            | ppb             | ppb              | µg/m <sup>3</sup> | °C   | deg   | m/s |
| Jul-01          | 9.7  | 4.1             | 0.6 | -0.4            | 24.2           | 4.7             | 0.5              | <b>166.7</b>      | 18.4 | 226.1 | 1.6 |
| Jul-02          | 6.9  | 4.9             | 0.6 | -0.5            | 32.4           | 5.6             | 0.6              | <b>99.0</b>       | 20.1 | 299.2 | 2.3 |
| Jul-03          | 11.2 | 4.0             | 0.6 | 3.9             | 35.4           | 4.6             | 1.5              | <b>184.7</b>      | 21.0 | 192.6 | 1.0 |
| Jul-04          | 4.1  | 2.5             | 0.3 | 2.7             | 32.3           | 2.8             | 0.7              | <b>47.5</b>       | 21.5 | 141.1 | 2.5 |
| Jul-05          | 5.3  | 2.7             | 0.3 | 0.0             | 28.2           | 3.0             | 0.8              | <b>75.7</b>       | 17.8 | 323.3 | 3.5 |
| Jul-08          | 4.3  | 1.1             | 0.3 | 0.6             | 26.6           | 1.4             | 0.9              | <b>59.0</b>       | 15.6 | 274.3 | 1.6 |