

**APPENDIX I**  
**METEOROLOGICAL STATION DATA**

|   |  |
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| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 443665-02300<br><b>Date:</b> May 27, 2008 |
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**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **APRIL 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- A performance audit was conducted on the Lakeshore/Willis Ave meteorological monitoring system on April 9. As a result, brief periods of data are reported as scheduled down ("S") on this day to reflect these audit activities.
- No other operational problems occurred at the Lakeshore monitoring site in April and monthly data recovery rates for all parameters range from 99.7 to 100 percent.

**Climatic Summary: APRIL 2008**

General Predominance for winds from: south-southeast

**10-meter level**

|                    |            |                   |                 |
|--------------------|------------|-------------------|-----------------|
| Primary Peak WD:   | <u>SSE</u> | Max. Wind Speed : | <u>25.4 mph</u> |
| Secondary Peak WD: | <u>W</u>   | Min. Wind Speed : | <u>0.9 mph</u>  |

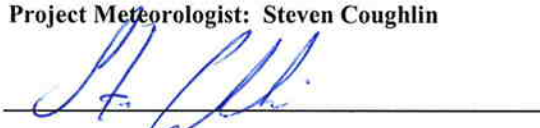
**2-meter level**

|                   |                |                      |                |                        |            |
|-------------------|----------------|----------------------|----------------|------------------------|------------|
| Max. Temperature: | <u>87.9 °F</u> | Max. Dew Point Temp. | <u>65.6 °F</u> | Max. Relative Humidity | <u>99%</u> |
| Min. Temperature: | <u>23.6 °F</u> | Min. Dew Point Temp. | <u>6.0 °F</u>  | Min. Relative Humidity | <u>14%</u> |

**Cumulative-to-date Data Recovery Rates      Period: January 1, 2008 through      April 30, 2008**

| <u>10-Meter Level</u>           |               | <u>2-Meter Level</u>   |               |
|---------------------------------|---------------|------------------------|---------------|
| 10-Meter Vector Wind Speed:     | <u>95.2</u> % | 2-Meter Temperature:   | <u>99.9</u> % |
| 10-Meter Vector Wind Direction: | <u>95.2</u> % | Delta Temperature:     | <u>99.9</u> % |
| 10-Meter Scalar Wind Speed:     | <u>95.2</u> % | Relative Humidity:     | <u>100</u> %  |
| 10-Meter Scalar Wind Direction: | <u>99.9</u> % | Dew Point Temperature: | <u>99.9</u> % |
| 10-Meter Sigma Theta:           | <u>99.9</u> % | Solar Radiation:       | <u>100</u> %  |
|                                 |               | Barometric Pressure:   | <u>100</u> %  |
| 10-Meter Vertical Wind Speed:   | <u>99.5</u> % |                        |               |
| Sigma W:                        | <u>99.5</u> % |                        |               |
| Sigma Phi:                      | <u>95.0</u> % |                        |               |
| 10-Meter Temperature:           | <u>99.9</u> % |                        |               |

**Project Meteorologist: Steven Coughlin**



**Distribution:**

P. Petrone - Parsons  
 G. Pacheco - Parsons  
 T. Fritts - Parsons

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
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METEOROLOGICAL DATA SUMMARY FOR: APRIL 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: APRIL 2008

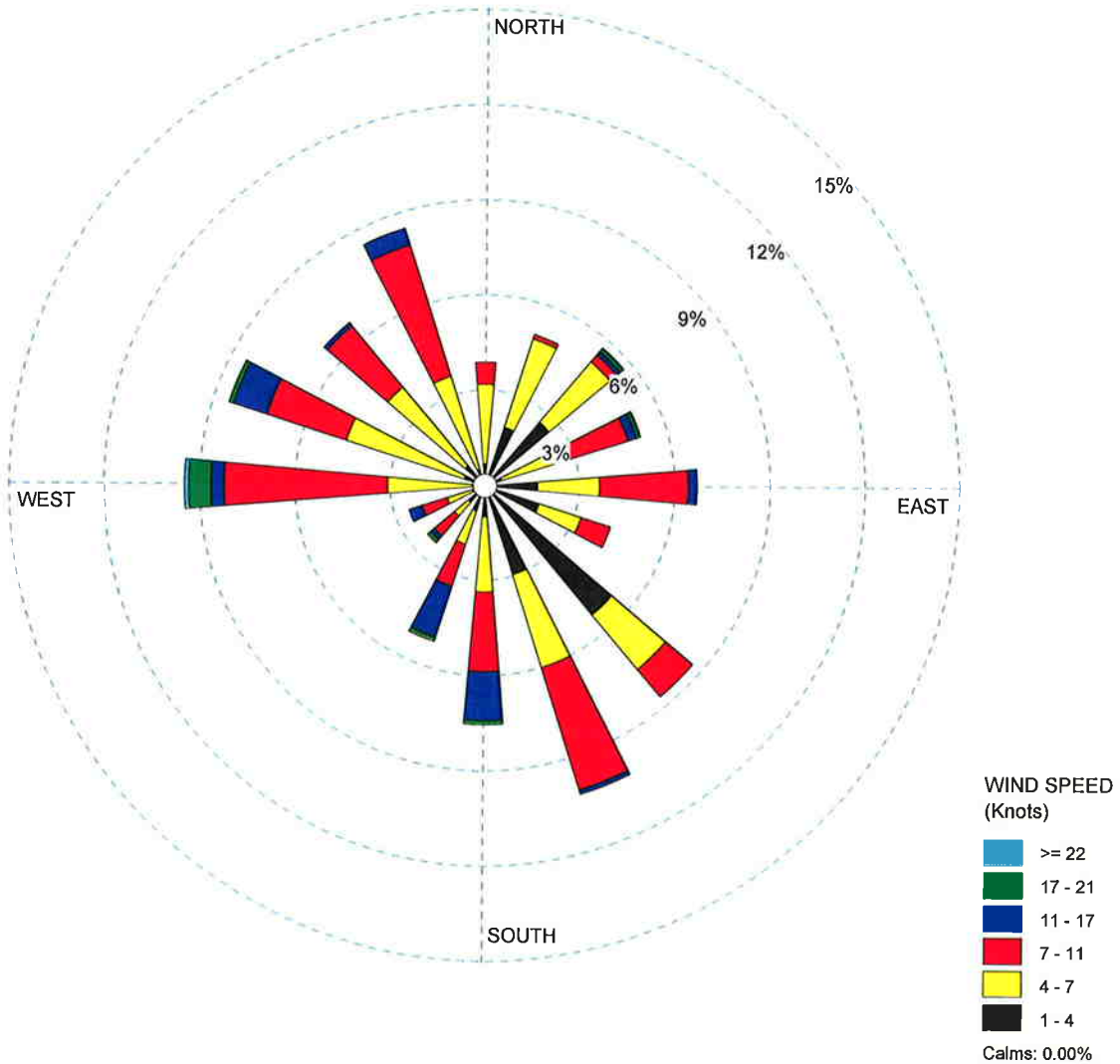
| <u>SITE / PARAMETER</u>                    | <u>MONTHLY<br/>MINIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MAXIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MEAN<br/>VALUE</u> | <u>MONTHLY DATA RECOVERY RATES (%)</u> |                                     |
|--|--------------------------------------|--------------------------------------|-----------------------------------|--|-------------------------------------|
|  |                                      |                                      |                                   | <u>OPERATING<br/>SCHEDULE</u>          | <u>BASED ON<br/>TOTAL<br/>HOURS</u> |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                                      |                                      |                                   |  |                                     |
| <u>10-Meter Level</u>                      |                                      |                                      |                                   |  |                                     |
| Vector Wind Speed (mph)                    | 0.2                                  | 24.7                                 | 6.6                               | 100.0                                  | 99.9                                |
| Vector Wind Direction (deg)                | 1                                    | 359                                  | 189                               | 100.0                                  | 99.9                                |
| Scalar Wind Speed (mph)                    | 0.9                                  | 25.4                                 | 7.1                               | 100.0                                  | 99.9                                |
| Scalar Wind Direction (deg.)               | 2                                    | 359                                  | 188                               | 100.0                                  | 99.9                                |
| Sigma Theta (deg.)                         | 5.5                                  | 69.8                                 | 19.9                              | 100.0                                  | 99.9                                |
| Vertical Wind Speed (mph)                  | -0.18                                | 1.34                                 | 0.19                              | 100.0                                  | 99.9                                |
| Sigma W (mph)                              | 0.07                                 | 2.68                                 | 0.90                              | 100.0                                  | 99.9                                |
| Sigma Phi (deg)                            | 2.50                                 | 16.6                                 | 7.4                               | 100.0                                  | 99.9                                |
| Temperature (deg-F)                        | 25.7                                 | 87.1                                 | 52.7                              | 100.0                                  | 99.7                                |
| <u>2-Meter Level</u>                       |                                      |                                      |                                   |  |                                     |
| Temperature (deg-F)                        | 23.6                                 | 87.9                                 | 52.8                              | 100.0                                  | 99.7                                |
| 10-m - 2-m Delta Temp (F-deg)              | -2.81                                | 3.85                                 | -0.09                             | 100.0                                  | 99.7                                |
| Relative Humidity (percent)                | 14.0                                 | 98.8                                 | 57.8                              | 100.0                                  | 100.0                               |
| Dew Point Temperature (deg-F)              | 6.0                                  | 65.6                                 | 36.0                              | 100.0                                  | 99.7                                |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                                  | 1038.0                               | 5724.7 (Avg. Daily Total)         | 100.0                                  | 99.9                                |
| Barometric Pressure (in. Hg.)              | 29.11                                | 30.22                                | 29.77                             | 100.0                                  | 100.0                               |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-Meter Tower - April 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008  
Apr 1 - Apr 30  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**719 hrs.**

AVG. WIND SPEED:

**6.19 Knots**

DATE:

**5/27/2008**

PROJECT NO.:

**440540-02300**

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 443665-02300<br><b>Date:</b> May 24, 2008 |
|---|--|

**Subject:** **Submittal of Wastebed 13 Meteorological Data for:** **APRIL 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- A performance audit was conducted on the Wastebed 13 meteorological monitoring system on April 9. As a result, brief periods of data are reported as scheduled down ("S") on this day to reflect these audit activities.
- No other operational problems occurred at the Wastebed 13 monitoring site in April and monthly data recovery rates for all parameters range from 99.4 to 100 percent.
- Precipitation bucket is non-heated, so recorded precipitation amounts generally reflect rain events only.

**Climatic Summary:                      APRIL 2008**

General Predominance for winds from: west-northwest through northwest

**10-meter level**

|                    |            |                   |                 |
|--------------------|------------|-------------------|-----------------|
| Primary Peak WD:   | <u>WNW</u> | Max. Wind Speed : | <u>25.6 mph</u> |
| Secondary Peak WD: | <u>SW</u>  | Min. Wind Speed : | <u>0.9 mph</u>  |

**2-meter level**

|                   |                |                      |                |                        |              |
|-------------------|----------------|----------------------|----------------|------------------------|--------------|
| Max. Temperature: | <u>87.8 °F</u> | Max. Dew Point Temp. | <u>61.7 °F</u> | Max. Relative Humidity | <u>100%</u>  |
| Min. Temperature: | <u>23.5 °F</u> | Min. Dew Point Temp. | <u>6.9 °F</u>  | Min. Relative Humidity | <u>13.8%</u> |

|   |               |  |                       |
|---|---------------|--|-----------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> |               | <b>Period: January 1, 2008 through</b> | <b>April 30, 2008</b> |
| <b>10-Meter Level</b>                         |               | <b>2-Meter Level</b>                   |                       |
| 10-Meter Vector Wind Speed:                   | <u>94.5</u> % | 2-Meter Temperature:                   | <u>99.9</u> %         |
| 10-Meter Vector Wind Direction:               | <u>94.5</u> % | Delta Temperature:                     | <u>99.9</u> %         |
| 10-Meter Scalar Wind Speed:                   | <u>94.5</u> % | Relative Humidity:                     | <u>100</u> %          |
| 10-Meter Scalar Wind Direction:               | <u>99.8</u> % | Dew Point Temperature:                 | <u>99.9</u> %         |
| 10-Meter Sigma Theta:                         | <u>99.8</u> % | Net Radiation:                         | <u>99.9</u> %         |
|   |               | Barometric Pressure:                   | <u>100</u> %          |
| 10-Meter Vertical Wind Speed:                 | <u>99.3</u> % |  |                       |
| Sigma W:                                      | <u>99.3</u> % | <b>Surface</b>                         |                       |
| Sigma Phi:                                    | <u>94.4</u> % |  |                       |
| 10-Meter Temperature:                         | <u>99.9</u> % | Precipitation (Rain):                  | <u>100</u> %          |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
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METEOROLOGICAL DATA SUMMARY FOR: APRIL 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: APRIL 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|                                   |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)           | 0.1                         | 25.0                        | 7.0                       | 100.0                           | 99.9           |
| Vector Wind Direction (deg)       | 1                           | 357                         | 204                       | 100.0                           | 99.9           |
| Scalar Wind Speed (mph)           | 0.9                         | 25.6                        | 7.5                       | 100.0                           | 99.9           |
| Scalar Wind Direction (deg.)      | 2                           | 357                         | 204                       | 100.0                           | 99.9           |
| Sigma Theta (deg.)                | 4.0                         | 81.4                        | 19.9                      | 100.0                           | 99.9           |
| Vertical Wind Speed (mph)         | -0.18                       | 1.36                        | 0.21                      | 100.0                           | 99.9           |
| Sigma W (mph)                     | 0.06                        | 2.55                        | 0.94                      | 100.0                           | 99.9           |
| Sigma Phi (deg)                   | 2.23                        | 22.3                        | 7.3                       | 100.0                           | 99.9           |
| Temperature (deg-F)               | 25.9                        | 86.9                        | 52.2                      | 100.0                           | 99.4           |
| <u>2-Meter Level</u>              |                             |                             |                           |                                 |                |
| Temperature (deg-F)               | 23.5                        | 87.8                        | 51.9                      | 100.0                           | 99.9           |
| 10-m - 2-m Delta Temp (F-deg)     | -2.40                       | 5.62                        | 0.33                      | 100.0                           | 99.4           |
| Relative Humidity (percent)       | 13.8                        | 100.0                       | 59.9                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 6.9                         | 61.7                        | 35.7                      | 100.0                           | 99.9           |
| Net Radiation (W/m <sup>2</sup> ) | -74.0                       | 533.9                       | 2087.5 (Avg. Daily Total) | 100.0                           | 99.9           |
| Barometric Pressure (in. Hg.)     | 29.01                       | 30.08                       | 29.66                     | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                           |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.64                        | 2.90 (Total)              | 100.0                           | 100.0          |

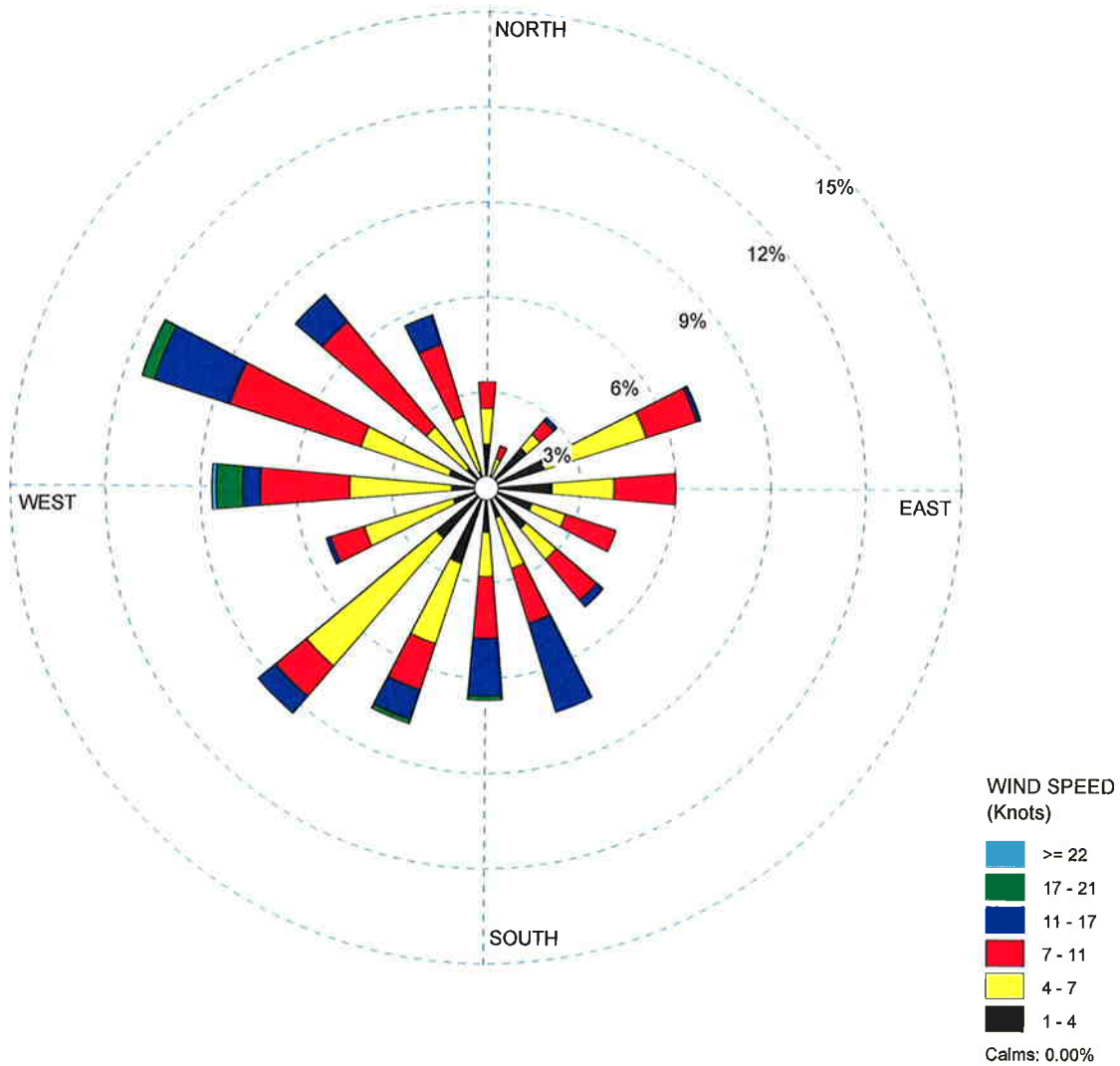


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-Meter Tower - April 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



|                  |   |                |  |
|------------------|---|----------------|--|
| COMMENTS:        | DATA PERIOD:                            | COMPANY NAME:  |  |
|                  | 2008<br>Apr 1 - Apr 30<br>00:00 - 23:00 | <b>PARSONS</b> |  |
|                  | CALM WINDS:                             | MODELER:       |  |
|                  | 0.00%                                   | TOTAL COUNT:   |  |
| AVG. WIND SPEED: | DATE:                                   | PROJECT NO.:   |  |
| 6.53 Knots       | 5/19/2008                               | 443665-02300   |  |

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 440540-02300<br><b>Date:</b> June 9, 2008 |
|---|--|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **MAY 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Lakeshore monitoring site in May and monthly data recovery rates for all parameters are 100 percent.


**Climatic Summary:                      MAY 2008**

General Predominance for winds from: due west through west-northwest

**10-meter level**  
 Primary Peak WD: W                      Max. Wind Speed : 14.7 mph  
 Secondary Peak WD: WNW                      Min. Wind Speed : 1.0 mph

**2-meter level**  
 Max. Temperature: 82.6 °F                      Max. Dew Point Temp. 63.2 °F                      Max. Relative Humidity 98%  
 Min. Temperature: 31.2 °F                      Min. Dew Point Temp. 19.9 °F                      Min. Relative Humidity 18%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through | May 31, 2008  |
|--|---------------|---------------------------------|---------------|
| <b>10-Meter Level</b>                  |               | <b>2-Meter Level</b>            |               |
| 10-Meter Vector Wind Speed:            | <u>96.2</u> % | 2-Meter Temperature:            | <u>99.9</u> % |
| 10-Meter Vector Wind Direction:        | <u>96.2</u> % | Delta Temperature:              | <u>99.9</u> % |
| 10-Meter Scalar Wind Speed:            | <u>96.2</u> % | Relative Humidity:              | <u>100</u> %  |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> % | Dew Point Temperature:          | <u>99.9</u> % |
| 10-Meter Sigma Theta:                  | <u>99.9</u> % | Solar Radiation:                | <u>100</u> %  |
| 10-Meter Vertical Wind Speed:          | <u>99.6</u> % | Barometric Pressure:            | <u>100</u> %  |
| Sigma W:                               | <u>99.6</u> % |                                 |               |
| Sigma Phi:                             | <u>96.0</u> % |                                 |               |
| 10-Meter Temperature:                  | <u>99.9</u> % |                                 |               |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE -- METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE -- 10-METER TOWER  
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METEOROLOGICAL DATA SUMMARY FOR: MAY 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M - 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: MAY 2008

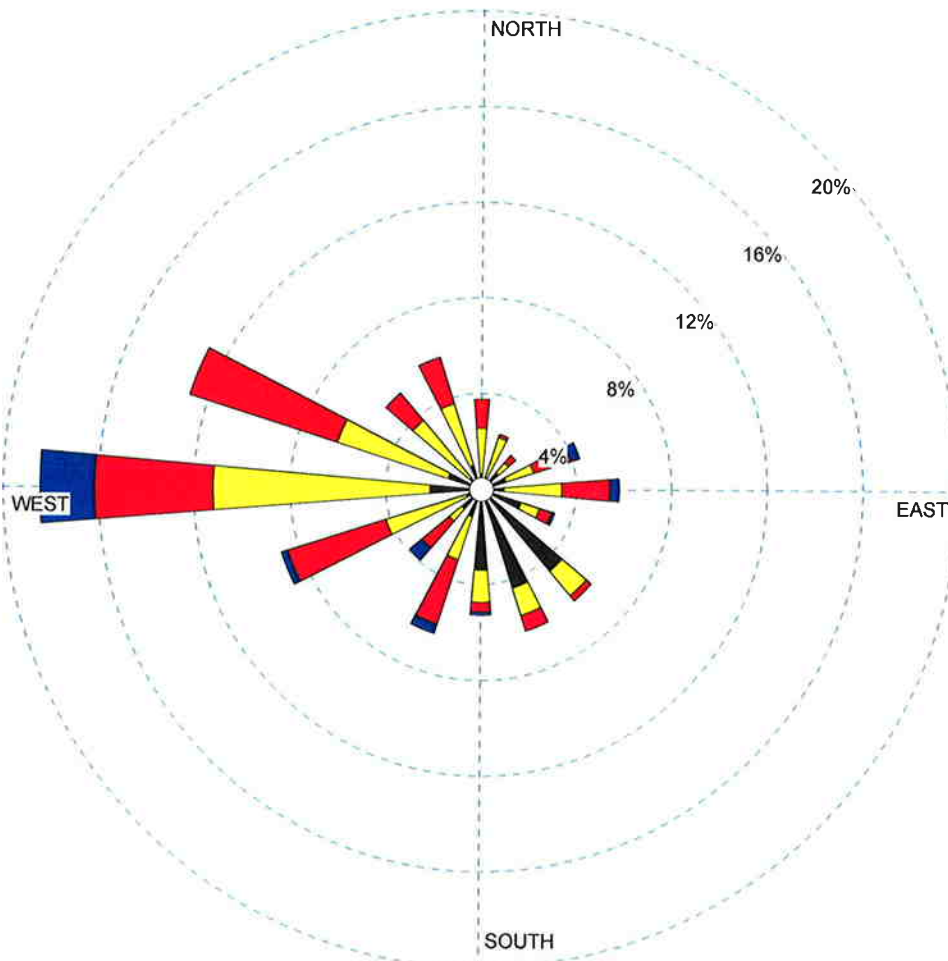
| <u>SITE / PARAMETER</u>                    | <u>MONTHLY<br/>MINIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MAXIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MEAN<br/>VALUE</u> | <u>MONTHLY DATA RECOVERY RATES (%)</u> |                        |
|--|--------------------------------------|--------------------------------------|-----------------------------------|--|------------------------|
|  |                                      |                                      |                                   | <u>OPERATING<br/>SCHEDULE</u>          | <u>TOTAL<br/>HOURS</u> |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                                      |                                      |                                   |  |                        |
| <u>10-Meter Level</u>                      |                                      |                                      |                                   |  |                        |
| Vector Wind Speed (mph)                    | 0.2                                  | 14.3                                 | 5.9                               | 100.0                                  | 100.0                  |
| Vector Wind Direction (deg)                | 1                                    | 358                                  | 213                               | 100.0                                  | 100.0                  |
| Scalar Wind Speed (mph)                    | 1.0                                  | 14.7                                 | 6.4                               | 100.0                                  | 100.0                  |
| Scalar Wind Direction (deg.)               | 1                                    | 360                                  | 214                               | 100.0                                  | 100.0                  |
| Sigma Theta (deg.)                         | 6.8                                  | 76.4                                 | 23.1                              | 100.0                                  | 100.0                  |
| Vertical Wind Speed (mph)                  | -0.23                                | 0.69                                 | 0.14                              | 100.0                                  | 100.0                  |
| Sigma W (mph)                              | 0.12                                 | 2.20                                 | 0.93                              | 100.0                                  | 100.0                  |
| Sigma Phi (deg)                            | 3.18                                 | 15.7                                 | 8.4                               | 100.0                                  | 100.0                  |
| Temperature (deg-F)                        | 33.0                                 | 82.4                                 | 55.5                              | 100.0                                  | 100.0                  |
| <u>2-Meter Level</u>                       |                                      |                                      |                                   |  |                        |
| Temperature (deg-F)                        | 31.2                                 | 82.6                                 | 55.6                              | 100.0                                  | 100.0                  |
| 10-m - 2-m Delta Temp (F-deg)              | -2.96                                | 3.75                                 | -0.04                             | 100.0                                  | 100.0                  |
| Relative Humidity (percent)                | 17.6                                 | 97.6                                 | 63.8                              | 100.0                                  | 100.0                  |
| Dew Point Temperature (deg-F)              | 19.9                                 | 63.2                                 | 41.7                              | 100.0                                  | 100.0                  |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                                  | 1101.0                               | 5827.1 (Avg. Daily Total)         | 100.0                                  | 100.0                  |
| Barometric Pressure (in. Hg.)              | 29.01                                | 30.05                                | 29.56                             | 100.0                                  | 100.0                  |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-Meter Tower - May 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
May 1 - May 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**5.58 Knots**

DATE:

**6/6/2008**

PROJECT NO.:

**440540-02300**

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> June 9, 2008 |
|---|--|

**Subject: Submittal of Wastedbed 13 Meteorological Data for: MAY 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Wastedbed 13 monitoring site in May and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: MAY 2008**

General Predominance for winds from: southwest through due west to west-northwest

**10-meter level**  
 Primary Peak WD: SW            Max. Wind Speed : 15.6 mph  
 Secondary Peak WD: WNW        Min. Wind Speed : 0.8 mph

**2-meter level**  
 Max. Temperature: 82.2 °F            Max. Dew Point Temp. 62.6 °F            Max. Relative Humidity 100%  
 Min. Temperature: 28.6 °F            Min. Dew Point Temp. 20.0 °F            Min. Relative Humidity 19.6%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through | May 31, 2008  |
|--|---------------|---------------------------------|---------------|
| <b>10-Meter Level</b>                  |               | <b>2-Meter Level</b>            |               |
| 10-Meter Vector Wind Speed:            | <u>95.6</u> % | 2-Meter Temperature:            | <u>99.9</u> % |
| 10-Meter Vector Wind Direction:        | <u>95.6</u> % | Delta Temperature:              | <u>99.9</u> % |
| 10-Meter Scalar Wind Speed:            | <u>95.6</u> % | Relative Humidity:              | <u>100</u> %  |
| 10-Meter Scalar Wind Direction:        | <u>99.8</u> % | Dew Point Temperature:          | <u>99.9</u> % |
| 10-Meter Sigma Theta:                  | <u>99.8</u> % | Net Radiation:                  | <u>99.9</u> % |
| 10-Meter Vertical Wind Speed:          | <u>99.5</u> % | Barometric Pressure:            | <u>100</u> %  |
| Sigma W:                               | <u>99.5</u> % | <b>Surface</b>                  |               |
| Sigma Phi:                             | <u>95.5</u> % | Precipitation (Rain):           | <u>100</u> %  |
| 10-Meter Temperature:                  | <u>99.9</u> % |                                 |               |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: MAY 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: MAY 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                            |
|-----------------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------------------|
|                                   |                             |                             |                           | OPERATING<br>SCHEDULE           | BASED ON<br>TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                           |                                 |                            |
| <u>10-Meter Level</u>             |                             |                             |                           |                                 |                            |
| Vector Wind Speed (mph)           | 0.2                         | 15.0                        | 6.1                       | 100.0                           | 100.0                      |
| Vector Wind Direction (deg)       | 3                           | 360                         | 225                       | 100.0                           | 100.0                      |
| Scalar Wind Speed (mph)           | 0.8                         | 15.6                        | 6.6                       | 100.0                           | 100.0                      |
| Scalar Wind Direction (deg.)      | 2                           | 359                         | 225                       | 100.0                           | 100.0                      |
| Sigma Theta (deg.)                | 6.1                         | 65.9                        | 20.2                      | 100.0                           | 100.0                      |
| Vertical Wind Speed (mph)         | -0.24                       | 0.80                        | 0.17                      | 100.0                           | 100.0                      |
| Sigma W (mph)                     | 0.05                        | 2.63                        | 0.89                      | 100.0                           | 100.0                      |
| Sigma Phi (deg)                   | 2.96                        | 22.1                        | 7.5                       | 100.0                           | 100.0                      |
| Temperature (deg-F)               | 31.6                        | 81.4                        | 54.5                      | 100.0                           | 100.0                      |
| <u>2-Meter Level</u>              |                             |                             |                           |                                 |                            |
| Temperature (deg-F)               | 28.6                        | 82.2                        | 54.3                      | 100.0                           | 100.0                      |
| 10-m - 2-m Delta Temp (F-deg)     | -2.68                       | 5.83                        | 0.17                      | 100.0                           | 100.0                      |
| Relative Humidity (percent)       | 19.6                        | 100.0                       | 67.5                      | 100.0                           | 100.0                      |
| Dew Point Temperature (deg-F)     | 20.0                        | 62.6                        | 41.8                      | 100.0                           | 100.0                      |
| Net Radiation (W/m <sup>2</sup> ) | -149.4                      | 606.9                       | 2322.1 (Avg. Daily Total) | 100.0                           | 100.0                      |
| Barometric Pressure (in. Hg.)     | 28.91                       | 29.94                       | 29.45                     | 100.0                           | 100.0                      |
| <u>Surface Level</u>              |                             |                             |                           |                                 |                            |
| Precipitation (Rain in inches)    | 0.00                        | 0.14                        | 1.62 (Total)              | 100.0                           | 100.0                      |

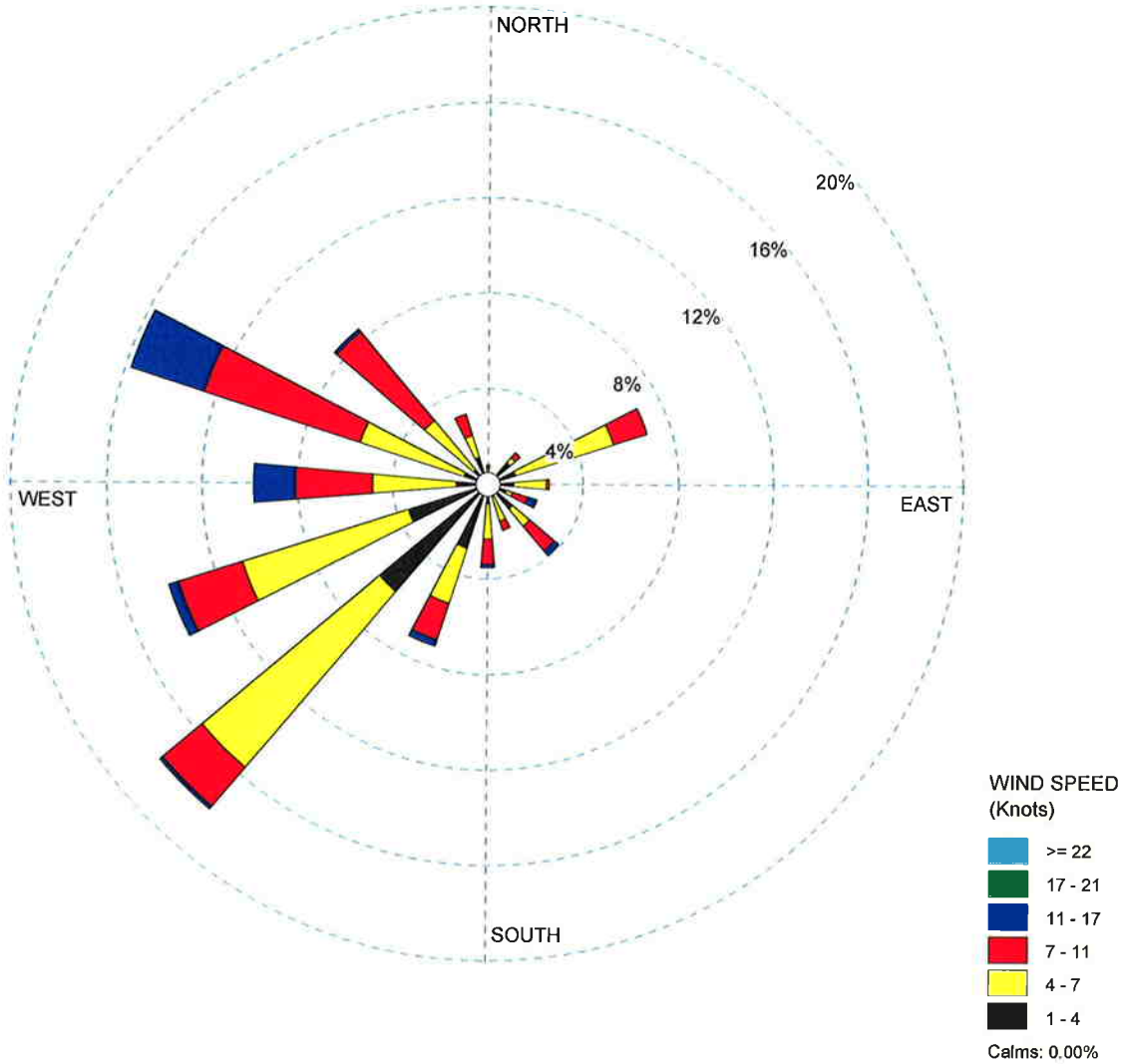


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-Meter Tower - May 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008  
May 1 - May 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**5.76 Knots**

DATE:

**6/5/2008**

PROJECT NO.:

**440540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> July 10, 2008 |
|---|---|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **JUNE 2008**

|   |  |  |
|---|--|--|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report<br><input checked="" type="checkbox"/> Final Report<br><input checked="" type="checkbox"/> Data Summaries | <input type="checkbox"/> AIRS Diskette<br><input type="checkbox"/> Client Data Disk<br><input type="checkbox"/> Other (as noted) |
|---|--|--|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Lakeshore monitoring site in June and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: JUNE 2008**

General Predominance for winds from: due west

**10-meter level**  
 Primary Peak WD: W      Max. Wind Speed: 14.6 mph  
 Secondary Peak WD: WSW      Min. Wind Speed: 1.1 mph

**2-meter level**  
 Max. Temperature: 95.3 °F      Max. Dew Point Temp. 74.0 °F      Max. Relative Humidity 96%  
 Min. Temperature: 54.3 °F      Min. Dew Point Temp. 43.5 °F      Min. Relative Humidity 29%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through | June 30, 2008 |
|--|---------------|---------------------------------|---------------|
| <b>10-Meter Level</b>                  |               | <b>2-Meter Level</b>            |               |
| 10-Meter Vector Wind Speed:            | <u>96.8</u> % | 2-Meter Temperature:            | <u>99.9</u> % |
| 10-Meter Vector Wind Direction:        | <u>96.8</u> % | Delta Temperature:              | <u>99.9</u> % |
| 10-Meter Scalar Wind Speed:            | <u>96.8</u> % | Relative Humidity:              | <u>100</u> %  |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> % | Dew Point Temperature:          | <u>99.9</u> % |
| 10-Meter Sigma Theta:                  | <u>99.9</u> % | Solar Radiation:                | <u>100</u> %  |
| 10-Meter Vertical Wind Speed:          | <u>99.7</u> % | Barometric Pressure:            | <u>100</u> %  |
| Sigma W:                               | <u>99.7</u> % |                                 |               |
| Sigma Phi:                             | <u>96.7</u> % |                                 |               |
| 10-Meter Temperature:                  | <u>99.9</u> % |                                 |               |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br><br>_____ | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: JUNE 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: JUNE 2008

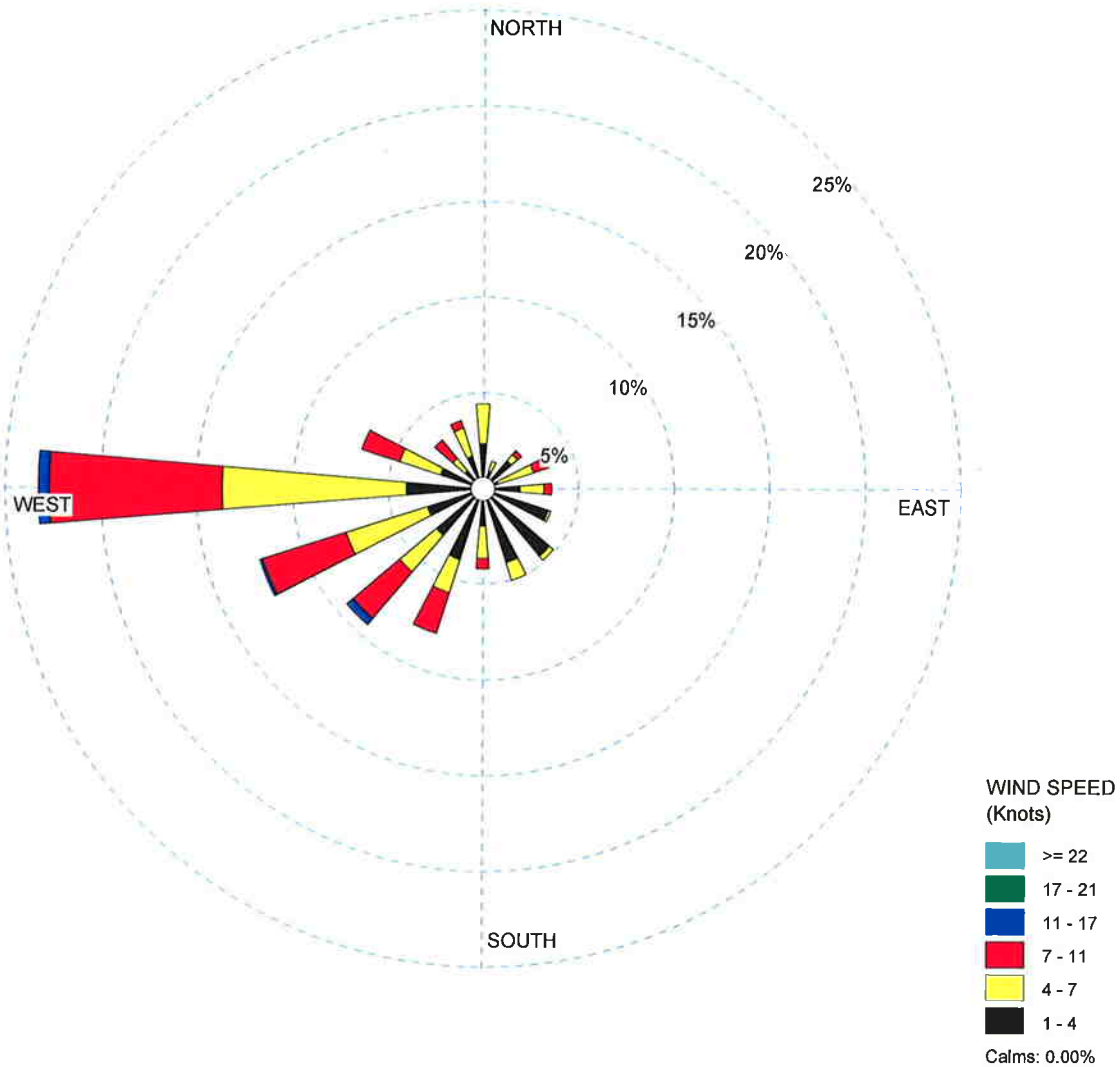
| SITE / PARAMETER                           | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                            |
|--|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------------------|
|  |                             |                             |                           | OPERATING<br>SCHEDULE           | BASED ON<br>TOTAL<br>HOURS |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                             |                             |                           |                                 |                            |
| <u>10-Meter Level</u>                      |                             |                             |                           |                                 |                            |
| Vector Wind Speed (mph)                    | 0.2                         | 13.9                        | 5.3                       | 100.0                           | 100.0                      |
| Vector Wind Direction (deg)                | 1                           | 360                         | 214                       | 100.0                           | 100.0                      |
| Scalar Wind Speed (mph)                    | 1.1                         | 14.6                        | 5.9                       | 100.0                           | 100.0                      |
| Scalar Wind Direction (deg.)               | 1                           | 360                         | 214                       | 100.0                           | 100.0                      |
| Sigma Theta (deg.)                         | 7.4                         | 73.3                        | 24.6                      | 100.0                           | 100.0                      |
| Vertical Wind Speed (mph)                  | -0.28                       | 0.71                        | 0.14                      | 100.0                           | 100.0                      |
| Sigma W (mph)                              | 0.18                        | 2.27                        | 0.86                      | 100.0                           | 100.0                      |
| Sigma Phi (deg)                            | 2.96                        | 16.8                        | 8.7                       | 100.0                           | 100.0                      |
| Temperature (deg-F)                        | 53.2                        | 94.5                        | 70.2                      | 100.0                           | 100.0                      |
| <u>2-Meter Level</u>                       |                             |                             |                           |                                 |                            |
| Temperature (deg-F)                        | 54.3                        | 95.3                        | 70.5                      | 100.0                           | 100.0                      |
| 10-m - 2-m Delta Temp (F-deg)              | -4.59                       | 3.69                        | -0.33                     | 100.0                           | 100.0                      |
| Relative Humidity (percent)                | 29.3                        | 96.4                        | 69.7                      | 100.0                           | 100.0                      |
| Dew Point Temperature (deg-F)              | 43.5                        | 74.0                        | 59.2                      | 100.0                           | 100.0                      |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                         | 1068.0                      | 6081.6 (Avg. Daily Total) | 100.0                           | 100.0                      |
| Barometric Pressure (in. Hg.)              | 29.36                       | 30.04                       | 29.61                     | 100.0                           | 100.0                      |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave. Monitoring Site - 10-Meter Tower - June 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008  
Jun 1 - Jun 30  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

CALM WINDS:

**0.00%**

TOTAL COUNT:

**720 hrs.**

AVG. WIND SPEED:

**5.13 Knots**

DATE:

**7/10/2008**

PROJECT NO.:

**444540-02300**

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: JUNE 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> July 10, 2008 |
|---|---|

**Subject:** **Submittal of Wastebed 13 Meteorological Data for:** **JUNE 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Wastebed 13 monitoring site in June and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: JUNE 2008**

General Predominance for winds from:     southwest through due west    

**10-meter level**

|                    |                    |                   |                         |
|--------------------|--------------------|-------------------|-------------------------|
| Primary Peak WD:   | <u>    SW    </u>  | Max. Wind Speed : | <u>    13.5 mph    </u> |
| Secondary Peak WD: | <u>    WSW    </u> | Min. Wind Speed : | <u>    1.0 mph    </u>  |

**2-meter level**

|                   |                        |                      |                        |                        |                      |
|-------------------|------------------------|----------------------|------------------------|------------------------|----------------------|
| Max. Temperature: | <u>    94.8 °F    </u> | Max. Dew Point Temp. | <u>    73.3 °F    </u> | Max. Relative Humidity | <u>    99.4%    </u> |
| Min. Temperature: | <u>    50.6 °F    </u> | Min. Dew Point Temp. | <u>    43.8 °F    </u> | Min. Relative Humidity | <u>    29.2%    </u> |

**Cumulative-to-date Data Recovery Rates      Period: January 1, 2008 through      June 30, 2008**

|  |   |
|--|---|
| <p><b>10-Meter Level</b></p> <p>10-Meter Vector Wind Speed:    <u>    96.4    </u> %</p> <p>10-Meter Vector Wind Direction: <u>    96.4    </u> %</p> <p>10-Meter Scalar Wind Speed:    <u>    96.4    </u> %</p> <p>10-Meter Scalar Wind Direction: <u>    99.9    </u> %</p> <p>10-Meter Sigma Theta:            <u>    99.9    </u> %</p> <p>10-Meter Vertical Wind Speed:    <u>    99.6    </u> %</p> <p>Sigma W:                            <u>    99.6    </u> %</p> <p>Sigma Phi:                          <u>    96.3    </u> %</p> <p>10-Meter Temperature:            <u>    99.9    </u> %</p> | <p><b>2-Meter Level</b></p> <p>2-Meter Temperature:            <u>    99.9    </u> %</p> <p>Delta Temperature:               <u>    99.9    </u> %</p> <p>Relative Humidity:                 <u>    100    </u> %</p> <p>Dew Point Temperature:          <u>    99.9    </u> %</p> <p>Net Radiation:                      <u>    99.9    </u> %</p> <p>Barometric Pressure:               <u>    100    </u> %</p> <p><b>Surface</b></p> <p>Precipitation (Rain):              <u>    100    </u> %</p> |
|--|---|

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br><br><hr style="width:30%; margin-left:0;"/> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: JUNE 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|                                   |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)           | 0.2                         | 12.8                        | 5.0                       | 100.0                           | 100.0          |
| Vector Wind Direction (deg)       | 1                           | 358                         | 226                       | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)           | 1.0                         | 13.5                        | 5.6                       | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)      | 3                           | 360                         | 225                       | 100.0                           | 100.0          |
| Sigma Theta (deg.)                | 5.6                         | 68.9                        | 22.4                      | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)         | -0.22                       | 0.66                        | 0.12                      | 100.0                           | 100.0          |
| Sigma W (mph)                     | 0.09                        | 1.94                        | 0.78                      | 100.0                           | 100.0          |
| Sigma Phi (deg)                   | 2.27                        | 19.6                        | 8.0                       | 100.0                           | 100.0          |
| Temperature (deg-F)               | 52.2                        | 93.6                        | 69.1                      | 100.0                           | 100.0          |
| <u>2-Meter Level</u>              |                             |                             |                           |                                 |                |
| Temperature (deg-F)               | 50.6                        | 94.8                        | 69.1                      | 100.0                           | 100.0          |
| 10-m - 2-m Delta Temp (F-deg)     | -2.58                       | 5.84                        | 0.02                      | 100.0                           | 100.0          |
| Relative Humidity (percent)       | 29.2                        | 99.4                        | 73.5                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 43.8                        | 73.3                        | 59.2                      | 100.0                           | 100.0          |
| Net Radiation (W/m <sup>2</sup> ) | -105.7                      | 649.1                       | 2863.1 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)     | 29.27                       | 29.94                       | 29.51                     | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                           |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.31                        | 2.38 (Total)              | 100.0                           | 100.0          |

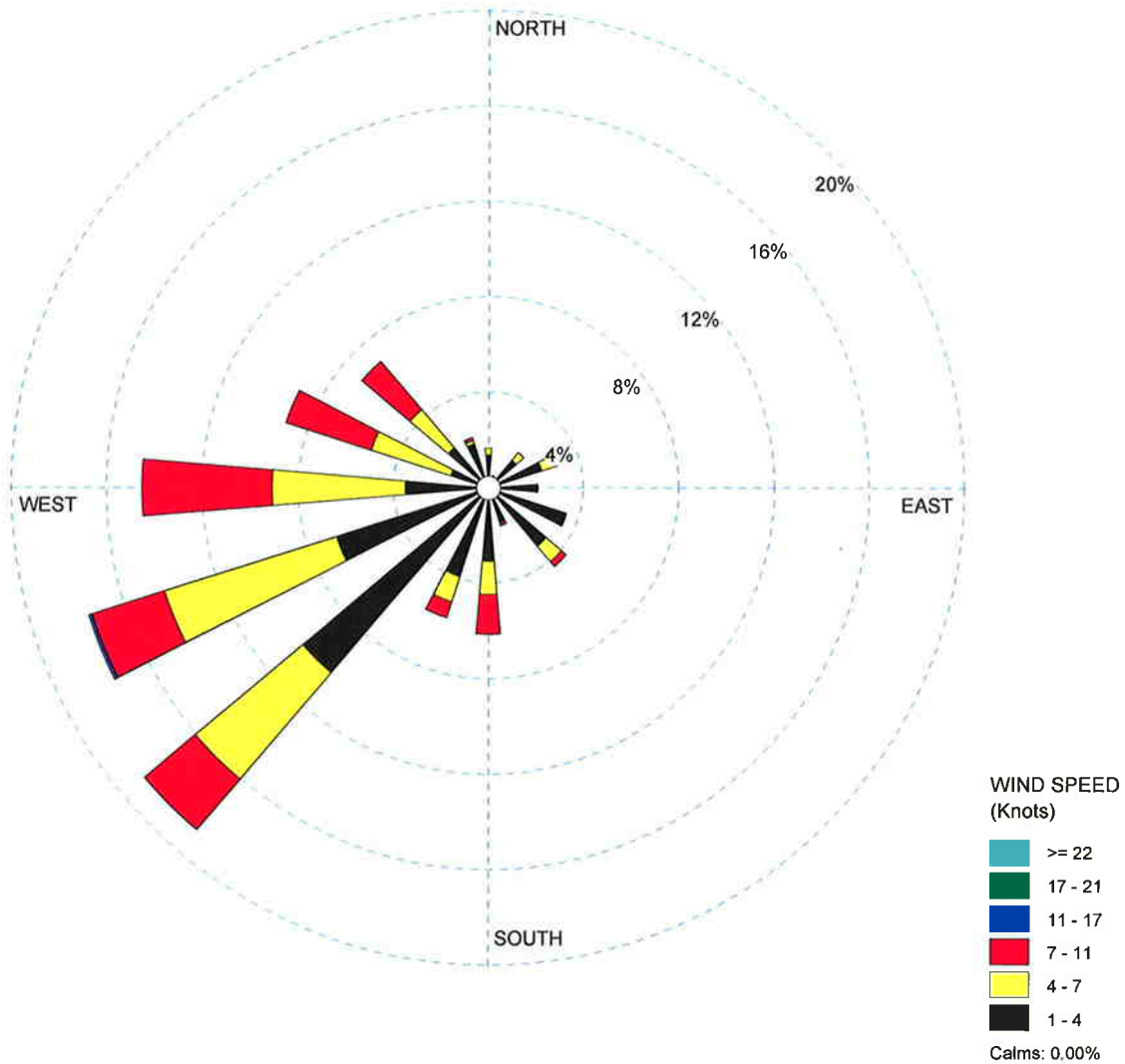


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastedbed 13 Monitoring Site - 10-Meter Tower - June 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



|           |  |                 |                     |
|-----------|--|-----------------|---------------------|
| COMMENTS: | DATA PERIOD:                                     | COMPANY NAME:   |                     |
|           | <b>2008<br/>Jun 1 - Jun 30<br/>00:00 - 23:00</b> | <b>PARSONS</b>  |                     |
|           | CALM WINDS:                                      | TOTAL COUNT:    |                     |
|           | <b>0.00%</b>                                     | <b>720 hrs.</b> |                     |
|           | AVG. WIND SPEED:                                 | DATE:           | PROJECT NO.:        |
|           | <b>4.84 Knots</b>                                | <b>7/8/2008</b> | <b>444540-02300</b> |

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> August 15, 2008 |
|---|---|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **JULY 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Lakeshore monitoring site in July and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: JULY 2008**

General Predominance for winds from: south-southwest through due west

**10-meter level**  
 Primary Peak WD: W                      Max. Wind Speed : 13.8 mph  
 Secondary Peak WD: SSW                      Min. Wind Speed : 0.9 mph

**2-meter level**  
 Max. Temperature: 90.1 °F                      Max. Dew Point Temp. 72.8 °F                      Max. Relative Humidity 98%  
 Min. Temperature: 53.7 °F                      Min. Dew Point Temp. 47.2 °F                      Min. Relative Humidity 32%

|   |               |  |                      |
|---|---------------|--|----------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> |               | <b>Period: January 1, 2008 through</b> | <b>July 31, 2008</b> |
| <b>10-Meter Level</b>                         |               | <b>2-Meter Level</b>                   |                      |
| 10-Meter Vector Wind Speed:                   | <u>97.2</u> % | 2-Meter Temperature:                   | <u>99.9</u> %        |
| 10-Meter Vector Wind Direction:               | <u>97.2</u> % | Delta Temperature:                     | <u>99.9</u> %        |
| 10-Meter Scalar Wind Speed:                   | <u>97.2</u> % | Relative Humidity:                     | <u>100</u> %         |
| 10-Meter Scalar Wind Direction:               | <u>99.9</u> % | Dew Point Temperature:                 | <u>99.9</u> %        |
| 10-Meter Sigma Theta:                         | <u>99.9</u> % | Solar Radiation:                       | <u>100</u> %         |
| 10-Meter Vertical Wind Speed:                 | <u>99.7</u> % | Barometric Pressure:                   | <u>100</u> %         |
| Sigma W:                                      | <u>99.7</u> % |  |                      |
| Sigma Phi:                                    | <u>97.1</u> % |  |                      |
| 10-Meter Temperature:                         | <u>99.9</u> % |  |                      |

|  |   |
|--|---|
| <p><b>Project Meteorologist: Steven Coughlin</b></p> | <p><b>Distribution:</b></p> P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: JULY 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: JULY 2008

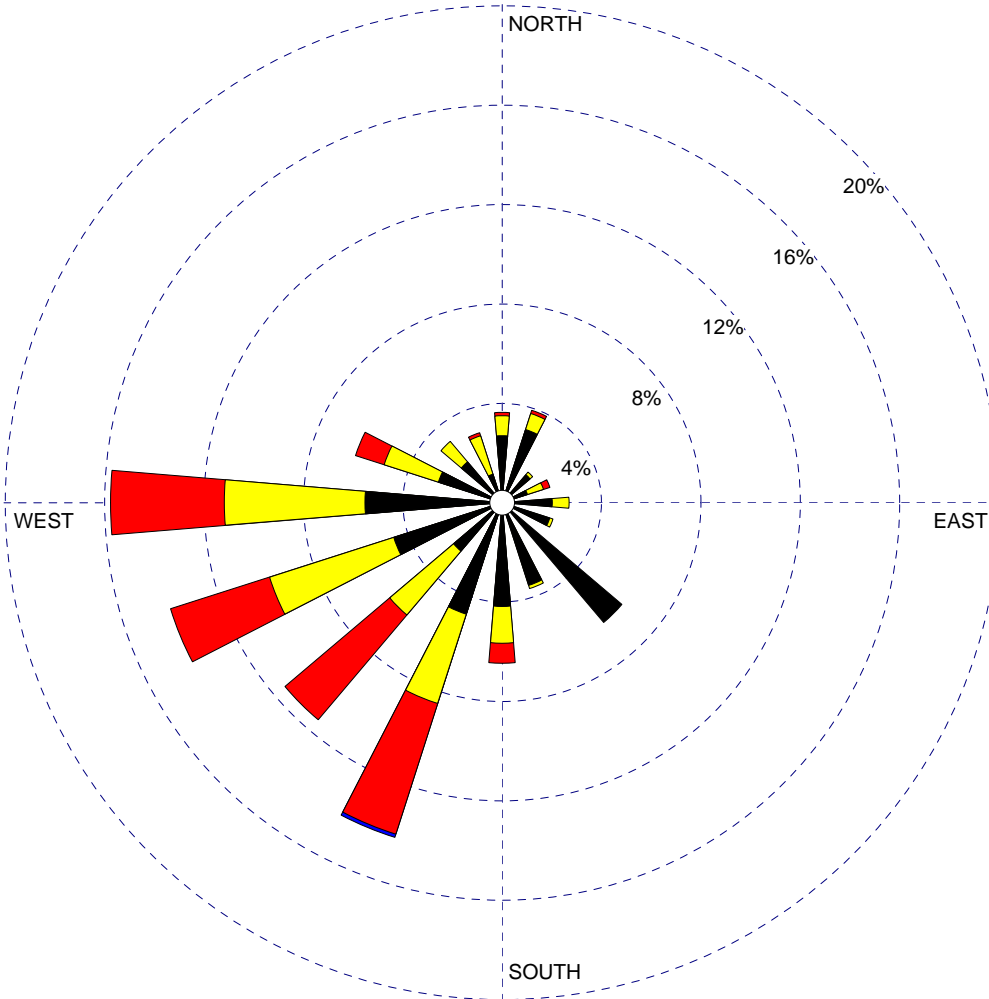
| <u>SITE / PARAMETER</u>                    | <u>MONTHLY<br/>MINIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MAXIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MEAN<br/>VALUE</u> | <u>MONTHLY DATA RECOVERY RATES (%)</u> |                                     |
|--|--------------------------------------|--------------------------------------|-----------------------------------|--|-------------------------------------|
|  |                                      |                                      |                                   | <u>OPERATING<br/>SCHEDULE</u>          | <u>BASED ON<br/>TOTAL<br/>HOURS</u> |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                                      |                                      |                                   |  |                                     |
| <u>10-Meter Level</u>                      |                                      |                                      |                                   |  |                                     |
| Vector Wind Speed (mph)                    | 0.2                                  | 13.4                                 | 5.0                               | 100.0                                  | 100.0                               |
| Vector Wind Direction (deg)                | 1                                    | 360                                  | 209                               | 100.0                                  | 100.0                               |
| Scalar Wind Speed (mph)                    | 0.9                                  | 13.8                                 | 5.5                               | 100.0                                  | 100.0                               |
| Scalar Wind Direction (deg.)               | 1                                    | 360                                  | 210                               | 100.0                                  | 100.0                               |
| Sigma Theta (deg.)                         | 5.6                                  | 67.9                                 | 23.4                              | 100.0                                  | 100.0                               |
| Vertical Wind Speed (mph)                  | -0.21                                | 0.64                                 | 0.13                              | 100.0                                  | 100.0                               |
| Sigma W (mph)                              | 0.15                                 | 2.18                                 | 0.80                              | 100.0                                  | 100.0                               |
| Sigma Phi (deg)                            | 2.95                                 | 20.0                                 | 8.7                               | 100.0                                  | 100.0                               |
| Temperature (deg-F)                        | 52.6                                 | 89.0                                 | 72.2                              | 100.0                                  | 100.0                               |
| <u>2-Meter Level</u>                       |                                      |                                      |                                   |  |                                     |
| Temperature (deg-F)                        | 53.7                                 | 90.1                                 | 72.5                              | 100.0                                  | 100.0                               |
| 10-m - 2-m Delta Temp (F-deg)              | -8.38                                | 3.87                                 | -0.35                             | 100.0                                  | 100.0                               |
| Relative Humidity (percent)                | 31.6                                 | 98.4                                 | 71.0                              | 100.0                                  | 100.0                               |
| Dew Point Temperature (deg-F)              | 47.2                                 | 72.8                                 | 61.7                              | 100.0                                  | 100.0                               |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                                  | 1062.0                               | 5960.7 (Avg. Daily Total)         | 100.0                                  | 100.0                               |
| Barometric Pressure (in. Hg.)              | 29.32                                | 29.87                                | 29.64                             | 100.0                                  | 100.0                               |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-meter Tower - July 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
Jul 1 - Jul 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**4.71 Knots**

DATE:

**8/14/2008**

PROJECT NO.:

**444540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> August 15, 2008 |
|---|---|

**Subject:** Submittal of Wastebed 13 Meteorological Data for: JULY 2008

|  |  |
|--|--|
| <b>Data:</b> <input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b> <input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|--|--|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Wastebed 13 monitoring site in July and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: JULY 2008**

General Predominance for winds from:           southwest          

**10-meter level**

Primary Peak WD: SW           Max. Wind Speed : 13.1 mph  
 Secondary Peak WD: WSW       Min. Wind Speed : 0.8 mph

**2-meter level**

|                                  |                                     |                                      |
|----------------------------------|-------------------------------------|--------------------------------------|
| Max. Temperature: <u>90.1 °F</u> | Max. Dew Point Temp. <u>71.3 °F</u> | Max. Relative Humidity <u>100.0%</u> |
| Min. Temperature: <u>50.7 °F</u> | Min. Dew Point Temp. <u>48.0 °F</u> | Min. Relative Humidity <u>33.5%</u>  |

|   |  |                      |
|---|--|----------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> | <b>Period: January 1, 2008 through</b> | <b>July 31, 2008</b> |
| <b>10-Meter Level</b>                         | <b>2-Meter Level</b>                   |                      |
| 10-Meter Vector Wind Speed: <u>96.9</u> %     | 2-Meter Temperature: <u>99.9</u> %     |                      |
| 10-Meter Vector Wind Direction: <u>96.9</u> % | Delta Temperature: <u>99.9</u> %       |                      |
| 10-Meter Scalar Wind Speed: <u>96.9</u> %     | Relative Humidity: <u>100</u> %        |                      |
| 10-Meter Scalar Wind Direction: <u>99.9</u> % | Dew Point Temperature: <u>99.9</u> %   |                      |
| 10-Meter Sigma Theta: <u>99.9</u> %           | Net Radiation: <u>99.9</u> %           |                      |
|   | Barometric Pressure: <u>100</u> %      |                      |
| 10-Meter Vertical Wind Speed: <u>99.6</u> %   |  |                      |
| Sigma W: <u>99.6</u> %                        | <b>Surface</b>                         |                      |
| Sigma Phi: <u>96.8</u> %                      |  |                      |
| 10-Meter Temperature: <u>99.9</u> %           | Precipitation (Rain): <u>100</u> %     |                      |

|   |   |
|---|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|---|---|

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: JULY 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: JULY 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|                                   |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)           | 0.1                         | 12.5                        | 4.4                       | 100.0                           | 100.0          |
| Vector Wind Direction (deg)       | 1                           | 359                         | 223                       | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)           | 0.8                         | 13.1                        | 4.9                       | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)      | 1                           | 360                         | 223                       | 100.0                           | 100.0          |
| Sigma Theta (deg.)                | 6.0                         | 77.6                        | 22.8                      | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)         | -0.17                       | 0.75                        | 0.09                      | 100.0                           | 100.0          |
| Sigma W (mph)                     | 0.06                        | 1.92                        | 0.68                      | 100.0                           | 100.0          |
| Sigma Phi (deg)                   | 2.92                        | 27.9                        | 7.9                       | 100.0                           | 100.0          |
| Temperature (deg-F)               | 51.0                        | 88.5                        | 70.9                      | 100.0                           | 100.0          |
| <u>2-Meter Level</u>              |                             |                             |                           |                                 |                |
| Temperature (deg-F)               | 50.7                        | 90.1                        | 71.1                      | 100.0                           | 100.0          |
| 10-m - 2-m Delta Temp (F-deg)     | -3.59                       | 5.63                        | -0.14                     | 100.0                           | 100.0          |
| Relative Humidity (percent)       | 33.5                        | 100.0                       | 75.9                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 48.0                        | 71.3                        | 62.0                      | 100.0                           | 100.0          |
| Net Radiation (W/m <sup>2</sup> ) | -102.3                      | 676.9                       | 2743.2 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)     | 29.21                       | 29.77                       | 29.54                     | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                           |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.71                        | 4.83 (Total)              | 100.0                           | 100.0          |

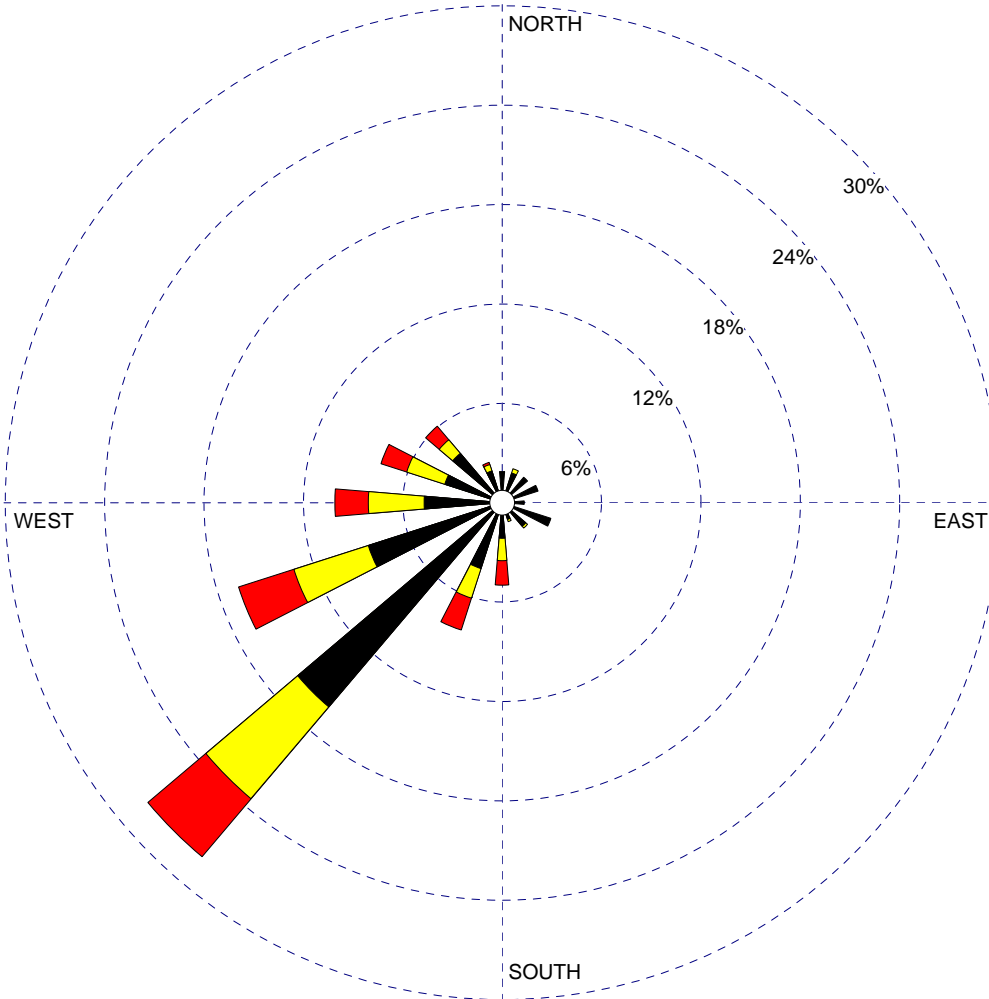


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastedbed 13 Monitoring Site - 10-meter Tower - July 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
Jul 1 - Jul 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**4.23 Knots**

DATE:

**8/14/2008**

PROJECT NO.:

**444540-02300**

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> September 10, 2008 |
|---|--|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **AUGUST 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- A performance audit was conducted at the Lakeshore meteorological monitoring site on August 5. As a result, a minor period of data is reported as scheduled down ("S") on this day to reflect these audit activities.
- No operational problems occurred at the Lakeshore monitoring site in August and monthly data recovery rates for all parameters exceed 99 percent.

**Climatic Summary: AUGUST 2008**

General Predominance for winds from: west-southwest through due west

**10-meter level**  
 Primary Peak WD: W    Max. Wind Speed: 13.5 mph  
 Secondary Peak WD: WSW    Min. Wind Speed: 1.1 mph

**2-meter level**  
 Max. Temperature: 87.2 °F    Max. Dew Point Temp. 68.9 °F    Max. Relative Humidity 99%  
 Min. Temperature: 48.4 °F    Min. Dew Point Temp. 39.5 °F    Min. Relative Humidity 32%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through | August 31, 2008 |
|--|---------------|---------------------------------|-----------------|
| <b>10-Meter Level</b>                  |               | <b>2-Meter Level</b>            |                 |
| 10-Meter Vector Wind Speed:            | <u>97.6</u> % | 2-Meter Temperature:            | <u>99.9</u> %   |
| 10-Meter Vector Wind Direction:        | <u>97.6</u> % | Delta Temperature:              | <u>99.9</u> %   |
| 10-Meter Scalar Wind Speed:            | <u>97.6</u> % | Relative Humidity:              | <u>100</u> %    |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> % | Dew Point Temperature:          | <u>99.9</u> %   |
| 10-Meter Sigma Theta:                  | <u>99.9</u> % | Solar Radiation:                | <u>100</u> %    |
| 10-Meter Vertical Wind Speed:          | <u>99.7</u> % | Barometric Pressure:            | <u>100</u> %    |
| Sigma W:                               | <u>99.7</u> % |                                 |                 |
| Sigma Phi:                             | <u>97.5</u> % |                                 |                 |
| 10-Meter Temperature:                  | <u>99.9</u> % |                                 |                 |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: AUGUST 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: AUGUST 2008

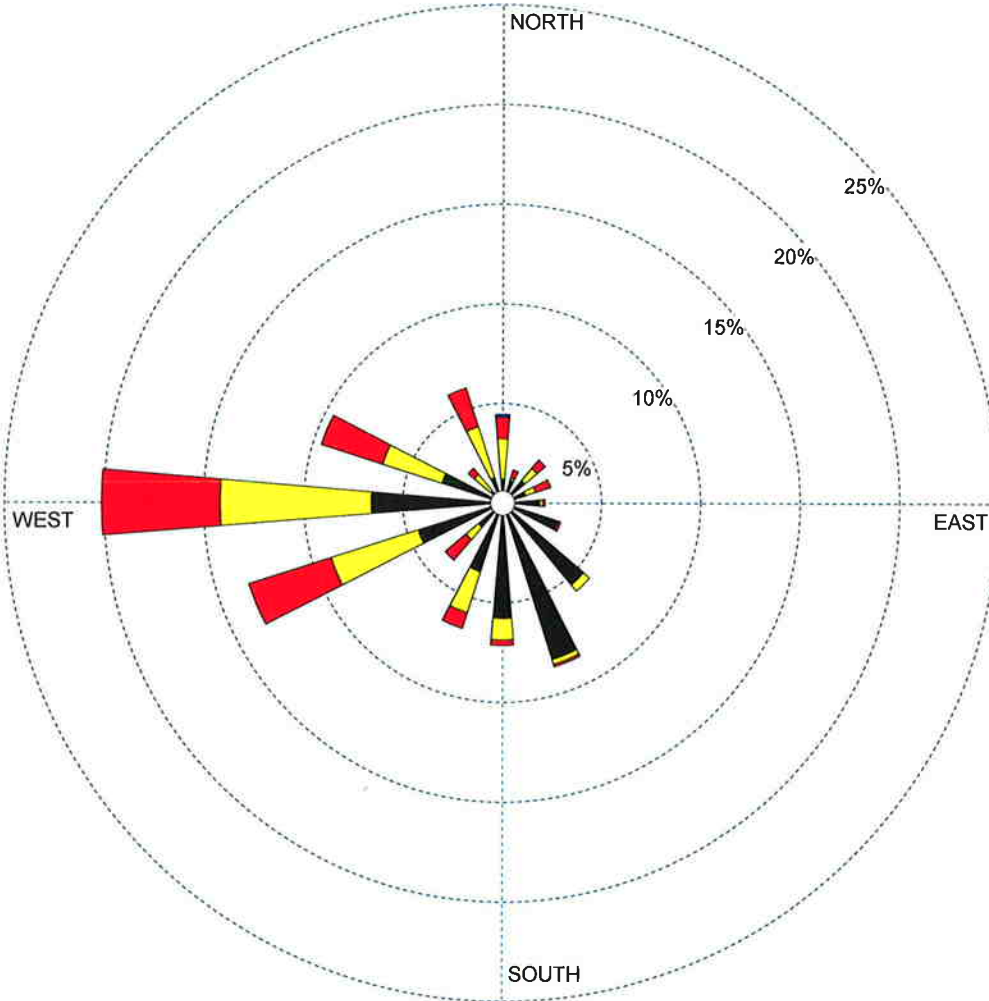
| SITE / PARAMETER                           | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%)<br>BASED ON |                |
|--|-----------------------------|-----------------------------|---------------------------|---|----------------|
|  |                             |                             |                           | OPERATING<br>SCHEDULE                       | TOTAL<br>HOURS |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                             |                             |                           |   |                |
| <u>10-Meter Level</u>                      |                             |                             |                           |   |                |
| Vector Wind Speed (mph)                    | 0.2                         | 13.0                        | 4.7                       | 100.0                                       | 99.9           |
| Vector Wind Direction (deg)                | 1                           | 360                         | 248                       | 100.0                                       | 99.9           |
| Scalar Wind Speed (mph)                    | 1.1                         | 13.5                        | 5.2                       | 100.0                                       | 99.9           |
| Scalar Wind Direction (deg.)               | 1                           | 360                         | 247                       | 100.0                                       | 99.9           |
| Sigma Theta (deg.)                         | 5.7                         | 71.3                        | 25.2                      | 100.0                                       | 99.9           |
| Vertical Wind Speed (mph)                  | -0.27                       | 0.65                        | 0.09                      | 100.0                                       | 99.9           |
| Sigma W (mph)                              | 0.16                        | 1.99                        | 0.79                      | 100.0                                       | 99.9           |
| Sigma Phi (deg)                            | 2.99                        | 21.0                        | 8.9                       | 100.0                                       | 99.9           |
| Temperature (deg-F)                        | 49.5                        | 86.2                        | 67.6                      | 100.0                                       | 99.6           |
| <u>2-Meter Level</u>                       |                             |                             |                           |   |                |
| Temperature (deg-F)                        | 48.4                        | 87.2                        | 67.6                      | 100.0                                       | 99.9           |
| 10-m - 2-m Delta Temp (F-deg)              | -2.67                       | 3.39                        | -0.04                     | 100.0                                       | 99.6           |
| Relative Humidity (percent)                | 31.9                        | 98.5                        | 73.8                      | 100.0                                       | 100.0          |
| Dew Point Temperature (deg-F)              | 39.5                        | 68.9                        | 58.0                      | 100.0                                       | 99.9           |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                         | 988.0                       | 5820.9 (Avg. Daily Total) | 100.0                                       | 100.0          |
| Barometric Pressure (in. Hg.)              | 29.39                       | 30.04                       | 29.67                     | 100.0                                       | 100.0          |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-meter Tower - August 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

|           |  |                                 |                                     |
|-----------|--|---------------------------------|-------------------------------------|
| COMMENTS: | DATA PERIOD:<br><b>2008<br/>Aug 1 - Aug 31<br/>00:00 - 23:00</b> | COMPANY NAME:<br><b>PARSONS</b> |                                     |
|           | CALM WINDS:<br><b>0.00%</b>                                      | TOTAL COUNT:<br><b>743 hrs.</b> |                                     |
|           | AVG. WIND SPEED:<br><b>4.54 Knots</b>                            | DATE:<br><b>9/5/2008</b>        | PROJECT NO.:<br><b>444540-02300</b> |
|           | MODELER:   |                                 |                                     |

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> September 10, 2008 |
|---|--|

**Subject:** Submittal of Wastebed 13 Meteorological Data for: **AUGUST 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- A performance audit was conducted at the Wastebed 13 meteorological monitoring site on August 6. As a result, a minor period of data is reported as scheduled down ("S") on this day to reflect these audit activities.
- No operational problems occurred at the Wastebed 13 monitoring site in August and monthly data recovery rates for all parameters exceed 99 percent.


**Climatic Summary: AUGUST 2008**

General Predominance for winds from:           southwest          

**10-meter level**  
 Primary Peak WD: SW    Max. Wind Speed : 11.5 mph  
 Secondary Peak WD: WSW    Min. Wind Speed : 0.9 mph

**2-meter level**  
 Max. Temperature: 85.8 °F    Max. Dew Point Temp. 69.8 °F    Max. Relative Humidity 100.0%  
 Min. Temperature: 47.8 °F    Min. Dew Point Temp. 38.7 °F    Min. Relative Humidity 31.4%

|   |  |                        |
|---|--|------------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> | <b>Period: January 1, 2008 through</b> | <b>August 31, 2008</b> |
| <b>10-Meter Level</b>                         | <b>2-Meter Level</b>                   |                        |
| 10-Meter Vector Wind Speed: <u>97.3 %</u>     | 2-Meter Temperature: <u>99.9 %</u>     |                        |
| 10-Meter Vector Wind Direction: <u>97.3 %</u> | Delta Temperature: <u>99.9 %</u>       |                        |
| 10-Meter Scalar Wind Speed: <u>97.3 %</u>     | Relative Humidity: <u>100 %</u>        |                        |
| 10-Meter Scalar Wind Direction: <u>99.9 %</u> | Dew Point Temperature: <u>99.9 %</u>   |                        |
| 10-Meter Sigma Theta: <u>99.9 %</u>           | Net Radiation: <u>99.9 %</u>           |                        |
|   | Barometric Pressure: <u>100 %</u>      |                        |
| 10-Meter Vertical Wind Speed: <u>99.7 %</u>   |  |                        |
| Sigma W: <u>99.7 %</u>                        | <b>Surface</b>                         |                        |
| Sigma Phi: <u>97.2 %</u>                      |  |                        |
| 10-Meter Temperature: <u>99.9 %</u>           | Precipitation (Rain): <u>100 %</u>     |                        |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: AUGUST 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: AUGUST 2008

| <u>SITE / PARAMETER</u>           | <u>MONTHLY<br/>MINIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MAXIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MEAN<br/>VALUE</u> | <u>MONTHLY DATA RECOVERY RATES (%)</u> |                        |
|-----------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|--|------------------------|
|                                   |                                      |                                      |                                   | <u>OPERATING<br/>SCHEDULE</u>          | <u>TOTAL<br/>HOURS</u> |
| <u>WASTEBED 13 10-METER TOWER</u> |                                      |                                      |                                   |  |                        |
| <u>10-Meter Level</u>             |                                      |                                      |                                   |  |                        |
| Vector Wind Speed (mph)           | 0.1                                  | 11.0                                 | 4.5                               | 100.0                                  | 99.9                   |
| Vector Wind Direction (deg)       | 2                                    | 357                                  | 226                               | 100.0                                  | 99.9                   |
| Scalar Wind Speed (mph)           | 0.9                                  | 11.5                                 | 5.0                               | 100.0                                  | 99.9                   |
| Scalar Wind Direction (deg.)      | 3                                    | 359                                  | 226                               | 100.0                                  | 99.9                   |
| Sigma Theta (deg.)                | 6.5                                  | 71.7                                 | 22.3                              | 100.0                                  | 99.9                   |
| Vertical Wind Speed (mph)         | -0.25                                | 0.69                                 | 0.12                              | 100.0                                  | 99.9                   |
| Sigma W (mph)                     | 0.09                                 | 1.95                                 | 0.68                              | 100.0                                  | 99.9                   |
| Sigma Phi (deg)                   | 2.83                                 | 23.6                                 | 7.8                               | 100.0                                  | 99.9                   |
| Temperature (deg-F)               | 47.4                                 | 85.2                                 | 66.3                              | 100.0                                  | 99.7                   |
| <u>2-Meter Level</u>              |                                      |                                      |                                   |  |                        |
| Temperature (deg-F)               | 47.8                                 | 85.8                                 | 66.6                              | 100.0                                  | 99.9                   |
| 10-m - 2-m Delta Temp (F-deg)     | -4.05                                | 5.77                                 | -0.26                             | 100.0                                  | 99.7                   |
| Relative Humidity (percent)       | 31.4                                 | 100.0                                | 78.7                              | 100.0                                  | 100.0                  |
| Dew Point Temperature (deg-F)     | 38.7                                 | 69.8                                 | 58.8                              | 100.0                                  | 99.9                   |
| Net Radiation (W/m <sup>2</sup> ) | -61.4                                | 590.0                                | 2575.5 (Avg. Daily Total)         | 100.0                                  | 100.0                  |
| Barometric Pressure (in. Hg.)     | 29.29                                | 29.94                                | 29.57                             | 100.0                                  | 100.0                  |
| <u>Surface Level</u>              |                                      |                                      |                                   |  |                        |
| Precipitation (Rain in inches)    | 0.00                                 | 0.40                                 | 4.19 (Total)                      | 100.0                                  | 100.0                  |

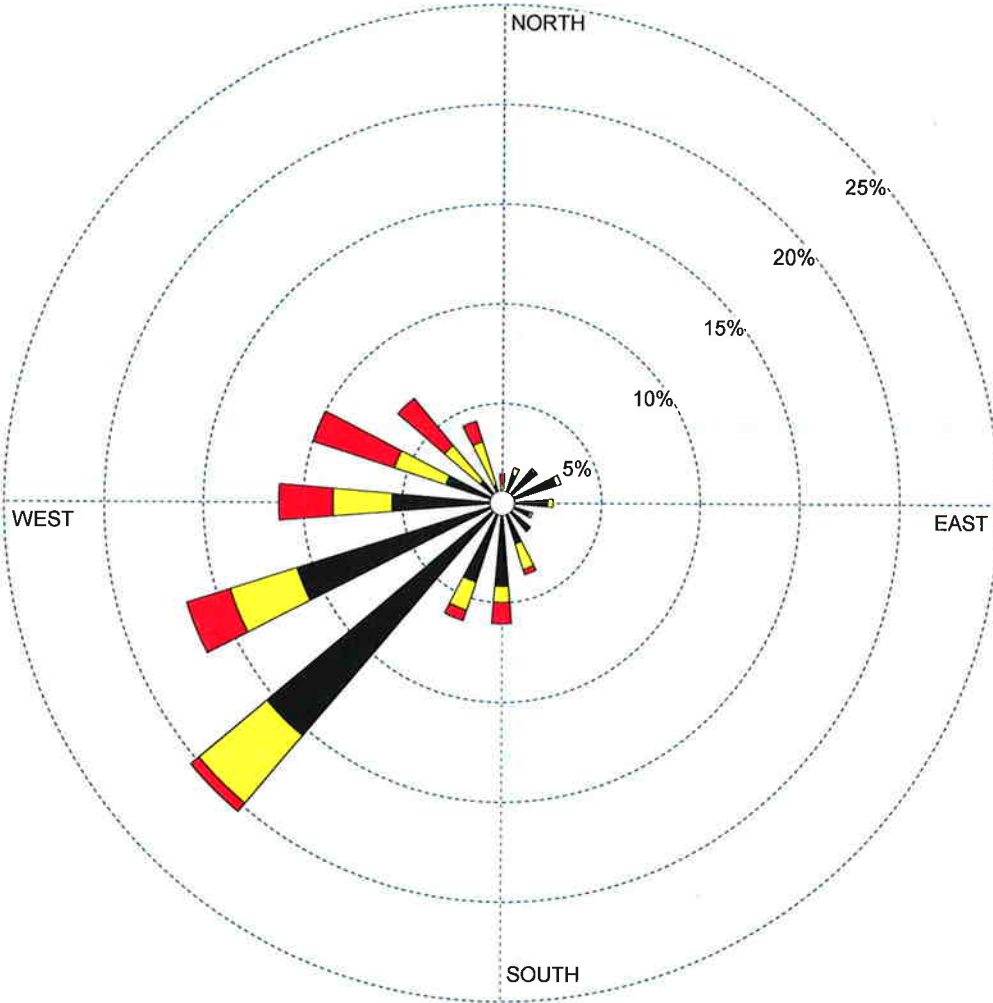


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-meter Tower - August 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

|                   |  |                     |                 |
|-------------------|--|---------------------|-----------------|
| COMMENTS:         | DATA PERIOD:                                     | COMPANY NAME:       |                 |
|                   | <b>2008<br/>Aug 1 - Aug 31<br/>00:00 - 23:00</b> | <b>PARSONS</b>      |                 |
|                   | CALM WINDS:                                      | MODELER:            |                 |
|                   | <b>0.00%</b>                                     | TOTAL COUNT:        | <b>743 hrs.</b> |
| AVG. WIND SPEED:  | DATE:  | PROJECT NO.:        |                 |
| <b>4.31 Knots</b> | <b>9/9/2008</b>                                  | <b>444540-02300</b> |                 |

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> October 23, 2008 |
|---|--|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **SEPTEMBER 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Lakeshore monitoring site in September and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: SEPTEMBER 2008**

General Predominance for winds from: due west

**10-meter level**  
 Primary Peak WD: W      Max. Wind Speed: 28.6 mph  
 Secondary Peak WD: SSW      Min. Wind Speed: 1.0 mph

**2-meter level**  
 Max. Temperature: 91.7 °F      Max. Dew Point Temp. 71.5 °F      Max. Relative Humidity 98%  
 Min. Temperature: 40.4 °F      Min. Dew Point Temp. 38.7 °F      Min. Relative Humidity 23%

| Cumulative-to-date Data Recovery Rates   | Period: January 1, 2008 through   | September 30, 2008 |
|--|---|--------------------|
| <b>10-Meter Level</b><br><br>10-Meter Vector Wind Speed: <u>97.9</u> %<br>10-Meter Vector Wind Direction: <u>97.9</u> %<br>10-Meter Scalar Wind Speed: <u>97.9</u> %<br>10-Meter Scalar Wind Direction: <u>99.9</u> %<br>10-Meter Sigma Theta: <u>99.9</u> %<br><br>10-Meter Vertical Wind Speed: <u>99.7</u> %<br>Sigma W: <u>99.7</u> %<br>Sigma Phi: <u>97.8</u> %<br>10-Meter Temperature: <u>99.9</u> % | <b>2-Meter Level</b><br><br>2-Meter Temperature: <u>99.9</u> %<br>Delta Temperature: <u>99.9</u> %<br>Relative Humidity: <u>100</u> %<br>Dew Point Temperature: <u>99.9</u> %<br>Solar Radiation: <u>100</u> %<br>Barometric Pressure: <u>100</u> % |                    |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: SEPTEMBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: SEPTEMBER 2008

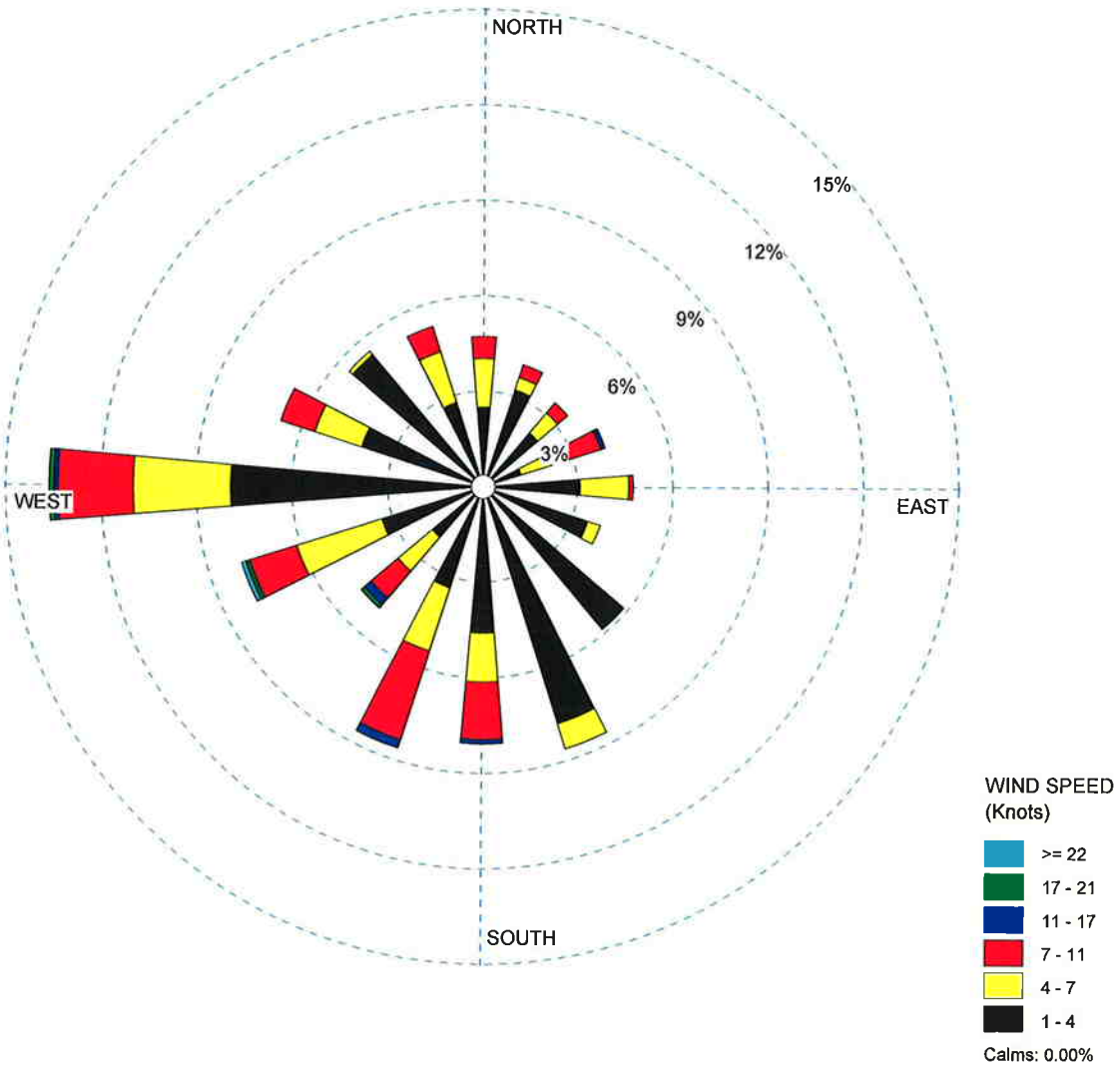
| SITE / PARAMETER                           | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|--|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|  |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>                      |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)                    | 0.2                         | 27.6                        | 4.6                       | 100.0                           | 100.0          |
| Vector Wind Direction (deg)                | 1                           | 360                         | 248                       | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)                    | 1.0                         | 28.6                        | 5.1                       | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)               | 1                           | 360                         | 247                       | 100.0                           | 100.0          |
| Sigma Theta (deg.)                         | 5.7                         | 70.1                        | 24.1                      | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)                  | -0.21                       | 1.57                        | 0.09                      | 100.0                           | 100.0          |
| Sigma W (mph)                              | 0.12                        | 3.09                        | 0.76                      | 100.0                           | 100.0          |
| Sigma Phi (deg)                            | 2.88                        | 20.7                        | 8.9                       | 100.0                           | 100.0          |
| Temperature (deg-F)                        | 41.4                        | 90.8                        | 63.5                      | 100.0                           | 100.0          |
| <u>2-Meter Level</u>                       |                             |                             |                           |                                 |                |
| Temperature (deg-F)                        | 40.4                        | 91.7                        | 63.6                      | 100.0                           | 100.0          |
| 10-m - 2-m Delta Temp (F-deg)              | -4.68                       | 4.14                        | -0.09                     | 100.0                           | 100.0          |
| Relative Humidity (percent)                | 23.3                        | 98.2                        | 76.0                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)              | 38.7                        | 71.5                        | 54.9                      | 100.0                           | 100.0          |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                         | 919.0                       | 4213.1 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)              | 29.01                       | 30.26                       | 29.83                     | 100.0                           | 100.0          |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program**  
**Lakeshore/Willis Ave Monitoring Site - 10-meter Tower - September 2008**

DISPLAY:

**Wind Speed**  
**Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008**  
**Sep 1 - Sep 30**  
**00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**720 hrs.**

AVG. WIND SPEED:

**4.41 Knots**

DATE:

**10/23/2008**

PROJECT NO.:

**444540-02300**

|   |  |
|---|--|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> October 23, 2008 |
|---|--|

**Subject:** Submittal of Wastebed 13 Meteorological Data for: **SEPTEMBER 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Wastebed 13 monitoring site in September and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: SEPTEMBER 2008**

General Predominance for winds from:   southwest  

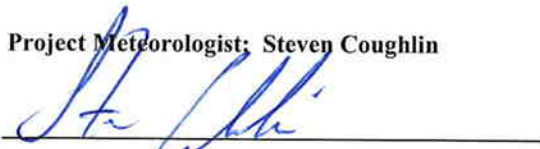
**10-meter level**

|                    |                |                   |                     |
|--------------------|----------------|-------------------|---------------------|
| Primary Peak WD:   | <u>  SW  </u>  | Max. Wind Speed : | <u>  29.2 mph  </u> |
| Secondary Peak WD: | <u>  WSW  </u> | Min. Wind Speed : | <u>  0.8 mph  </u>  |

**2-meter level**

|                   |                    |                      |                    |                        |                   |
|-------------------|--------------------|----------------------|--------------------|------------------------|-------------------|
| Max. Temperature: | <u>  90.3 °F  </u> | Max. Dew Point Temp. | <u>  71.4 °F  </u> | Max. Relative Humidity | <u>  100.0%  </u> |
| Min. Temperature: | <u>  37.6 °F  </u> | Min. Dew Point Temp. | <u>  37.6 °F  </u> | Min. Relative Humidity | <u>  25.5%  </u>  |

|   |                   |  |                           |
|---|-------------------|--|---------------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> |                   | <b>Period: January 1, 2008 through</b> | <b>September 30, 2008</b> |
| <u><b>10-Meter Level</b></u>                  |                   | <u><b>2-Meter Level</b></u>            |                           |
| 10-Meter Vector Wind Speed:                   | <u>  97.6  </u> % | 2-Meter Temperature:                   | <u>  99.9  </u> %         |
| 10-Meter Vector Wind Direction:               | <u>  97.6  </u> % | Delta Temperature:                     | <u>  99.9  </u> %         |
| 10-Meter Scalar Wind Speed:                   | <u>  97.6  </u> % | Relative Humidity:                     | <u>  100  </u> %          |
| 10-Meter Scalar Wind Direction:               | <u>  99.9  </u> % | Dew Point Temperature:                 | <u>  99.9  </u> %         |
| 10-Meter Sigma Theta:                         | <u>  99.9  </u> % | Net Radiation:                         | <u>  99.9  </u> %         |
|   |                   | Barometric Pressure:                   | <u>  100  </u> %          |
| 10-Meter Vertical Wind Speed:                 | <u>  99.7  </u> % |  |                           |
| Sigma W:                                      | <u>  99.7  </u> % | <u><b>Surface</b></u>                  |                           |
| Sigma Phi:                                    | <u>  97.5  </u> % |  |                           |
| 10-Meter Temperature:                         | <u>  99.9  </u> % | Precipitation (Rain):                  | <u>  100  </u> %          |

|  |   |
|--|---|
| <p><b>Project Meteorologist: Steven Coughlin</b></p>  | <p><b>Distribution:</b></p> P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: SEPTEMBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

- S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.
- N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.
- A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: SEPTEMBER 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|                                   |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)           | 0.3                         | 28.2                        | 4.4                       | 100.0                           | 100.0          |
| Vector Wind Direction (deg)       | 3                           | 359                         | 209                       | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)           | 0.8                         | 29.2                        | 4.8                       | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)      | 3                           | 360                         | 208                       | 100.0                           | 100.0          |
| Sigma Theta (deg.)                | 6.4                         | 63.7                        | 22.3                      | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)         | -0.40                       | 0.88                        | 0.10                      | 100.0                           | 100.0          |
| Sigma W (mph)                     | 0.05                        | 3.00                        | 0.68                      | 100.0                           | 100.0          |
| Sigma Phi (deg)                   | 2.72                        | 26.3                        | 8.1                       | 100.0                           | 100.0          |
| Temperature (deg-F)               | 39.0                        | 90.1                        | 62.3                      | 100.0                           | 100.0          |
| <u>2-Meter Level</u>              |                             |                             |                           |                                 |                |
| Temperature (deg-F)               | 37.6                        | 90.3                        | 62.6                      | 100.0                           | 100.0          |
| 10-m - 2-m Delta Temp (F-deg)     | -5.32                       | 5.61                        | -0.22                     | 100.0                           | 100.0          |
| Relative Humidity (percent)       | 25.5                        | 100.0                       | 81.6                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 37.6                        | 71.4                        | 55.9                      | 100.0                           | 100.0          |
| Net Radiation (W/m <sup>2</sup> ) | -65.5                       | 563.6                       | 1621.9 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)     | 28.91                       | 30.15                       | 29.72                     | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                           |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.25                        | 2.30 (Total)              | 100.0                           | 100.0          |

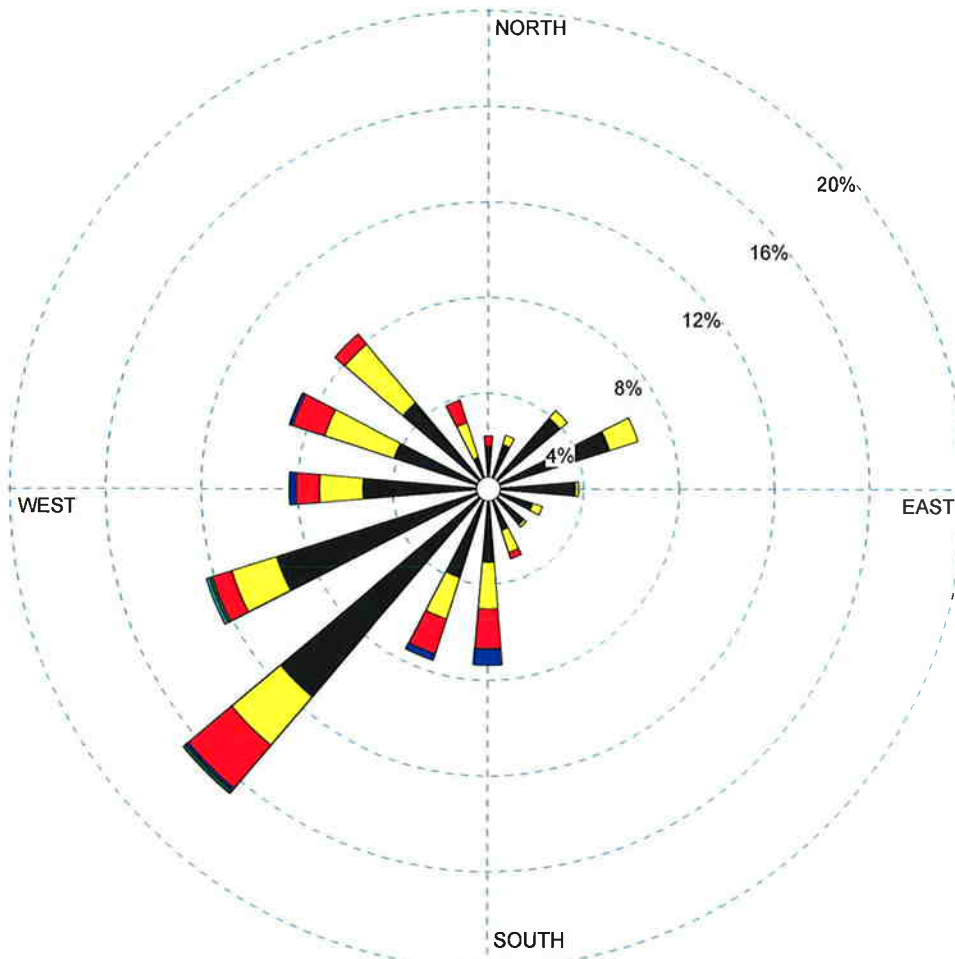


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-meter Tower - September 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
Sep 1 - Sep 30  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**720 hrs.**

AVG. WIND SPEED:

**4.14 Knots**

DATE:

**10/22/2008**

PROJECT NO.:

**444540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> December 10, 2008 |
|---|---|

**Subject:** Submittal of Lakeshore/Willis Ave Meteorological Data for: **OCTOBER 2008**

|   |  |
|---|--|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report<br><input checked="" type="checkbox"/> Final Report<br><input checked="" type="checkbox"/> Data Summaries<br><input type="checkbox"/> AIRS Diskette<br><input type="checkbox"/> Client Data Disk<br><input type="checkbox"/> Other (as noted) |
|---|--|

**Program Operations/Data Collection Activities Summary:**

- An intermittent problem of electrical nature within the Lakeshore tower temperature system resulted in periods of erroneously high recorded temperature during the month. These periods, which affected both measured levels of temperature, delta temperature, and dew point, began on October 7 and reoccurred at various times during the month. The erroneous data has been removed from the database and the affected hours are reported as a non-scheduled outage ("N").
- No other operational problems occurred at the Lakeshore monitoring site in October and monthly data recovery rates for all remaining parameters are 100 percent.


**Climatic Summary: OCTOBER 2008**

General Predominance for winds from: due west

**10-meter level**  
 Primary Peak WD: W      Max. Wind Speed : 17.7 mph  
 Secondary Peak WD: WSW      Min. Wind Speed : 0.7 mph

**2-meter level**  
 Max. Temperature: 77.1 °F      Max. Dew Point Temp. 63.7 °F      Max. Relative Humidity 99%  
 Min. Temperature: 29.7 °F      Min. Dew Point Temp. 24.0 °F      Min. Relative Humidity 29%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through | October 31, 2008 |
|--|---------------|---------------------------------|------------------|
| <b>10-Meter Level</b>                  |               | <b>2-Meter Level</b>            |                  |
| 10-Meter Vector Wind Speed:            | <u>98.1</u> % | 2-Meter Temperature:            | <u>97.2</u> %    |
| 10-Meter Vector Wind Direction:        | <u>98.1</u> % | Delta Temperature:              | <u>97.1</u> %    |
| 10-Meter Scalar Wind Speed:            | <u>98.1</u> % | Relative Humidity:              | <u>100</u> %     |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> % | Dew Point Temperature:          | <u>97.2</u> %    |
| 10-Meter Sigma Theta:                  | <u>99.9</u> % | Solar Radiation:                | <u>100</u> %     |
| 10-Meter Vertical Wind Speed:          | <u>99.8</u> % | Barometric Pressure:            | <u>100</u> %     |
| Sigma W:                               | <u>99.8</u> % |                                 |                  |
| Sigma Phi:                             | <u>98.0</u> % |                                 |                  |
| 10-Meter Temperature:                  | <u>97.1</u> % |                                 |                  |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: OCTOBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: OCTOBER 2008

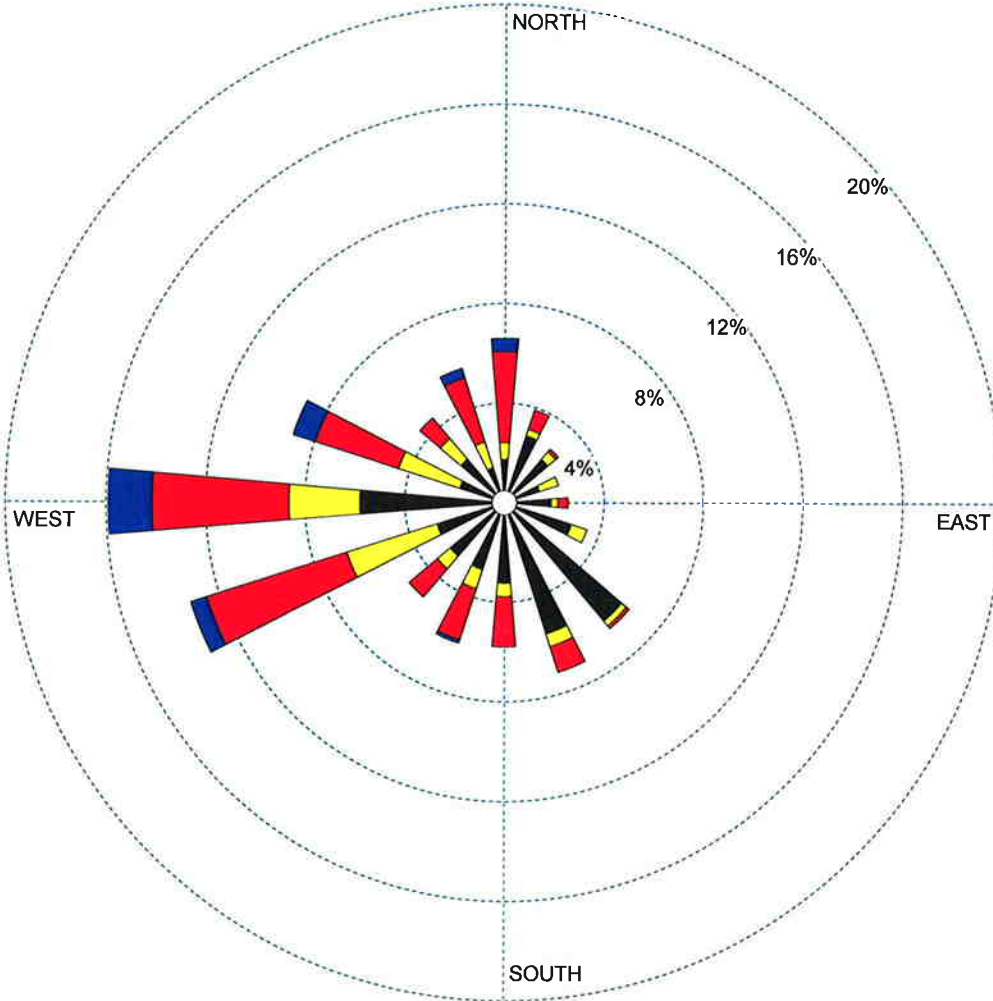
| SITE / PARAMETER                           | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE  | MONTHLY DATA RECOVERY RATES (%) |                |
|--|-----------------------------|-----------------------------|---------------------------|---------------------------------|----------------|
|  |                             |                             |                           | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                             |                             |                           |                                 |                |
| <u>10-Meter Level</u>                      |                             |                             |                           |                                 |                |
| Vector Wind Speed (mph)                    | 0.1                         | 17.2                        | 5.7                       | 100.0                           | 100.0          |
| Vector Wind Direction (deg)                | 1                           | 360                         | 248                       | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)                    | 0.7                         | 17.7                        | 6.2                       | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)               | 2                           | 360                         | 247                       | 100.0                           | 100.0          |
| Sigma Theta (deg.)                         | 4.8                         | 71.1                        | 21.8                      | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)                  | -0.19                       | 0.87                        | 0.17                      | 100.0                           | 100.0          |
| Sigma W (mph)                              | 0.07                        | 2.49                        | 0.82                      | 100.0                           | 100.0          |
| Sigma Phi (deg)                            | 2.50                        | 19.6                        | 7.9                       | 100.0                           | 100.0          |
| Temperature (deg-F)                        | 29.7                        | 77.1                        | 51.6                      | 72.4                            | 72.4           |
| <u>2-Meter Level</u>                       |                             |                             |                           |                                 |                |
| Temperature (deg-F)                        | 28.4                        | 77.8                        | 51.5                      | 72.4                            | 72.4           |
| 10-m - 2-m Delta Temp (F-deg)              | -2.41                       | 3.73                        | 0.06                      | 72.4                            | 72.4           |
| Relative Humidity (percent)                | 29.3                        | 99.2                        | 74.2                      | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)              | 24.0                        | 63.7                        | 41.9                      | 72.4                            | 72.4           |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                         | 763.2                       | 3214.7 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)              | 29.26                       | 30.42                       | 29.84                     | 100.0                           | 100.0          |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-meter Tower - October 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
Oct 1 - Oct 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**5.36 Knots**

DATE:

**12/5/2008**

PROJECT NO.:

**444540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> November 15, 2008 |
|---|---|

**Subject: Submittal of Wastebed 13 Meteorological Data for: OCTOBER 2008**

|  |  |
|--|--|
| <b>Data:</b> <input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b> <input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|--|--|

**Program Operations/Data Collection Activities Summary:**

- No operational problems occurred at the Wastebed 13 monitoring site in October and monthly data recovery rates for all parameters are 100 percent.

**Climatic Summary: OCTOBER 2008**

General Predominance for winds from:           southwest through west-southwest          

**10-meter level**

|                              |                                   |
|------------------------------|-----------------------------------|
| Primary Peak WD: <u>WSW</u>  | Max. Wind Speed : <u>21.2 mph</u> |
| Secondary Peak WD: <u>SW</u> | Min. Wind Speed : <u>0.8 mph</u>  |

**2-meter level**

|                                  |                                     |                                      |
|----------------------------------|-------------------------------------|--------------------------------------|
| Max. Temperature: <u>78.2 °F</u> | Max. Dew Point Temp. <u>64.0 °F</u> | Max. Relative Humidity <u>100.0%</u> |
| Min. Temperature: <u>24.5 °F</u> | Min. Dew Point Temp. <u>22.8 °F</u> | Min. Relative Humidity <u>28.0%</u>  |

|   |  |                         |
|---|--|-------------------------|
| <b>Cumulative-to-date Data Recovery Rates</b> | <b>Period: January 1, 2008 through</b> | <b>October 31, 2008</b> |
|---|--|-------------------------|

|   |  |
|---|--|
| <b>10-Meter Level</b>   | <b>2-Meter Level</b>   |
| 10-Meter Vector Wind Speed: <u>97.8</u> %<br>10-Meter Vector Wind Direction: <u>97.8</u> %<br>10-Meter Scalar Wind Speed: <u>97.8</u> %<br>10-Meter Scalar Wind Direction: <u>99.9</u> %<br>10-Meter Sigma Theta: <u>99.9</u> %<br><br>10-Meter Vertical Wind Speed: <u>99.7</u> %<br>Sigma W: <u>99.7</u> %<br>Sigma Phi: <u>97.8</u> %<br>10-Meter Temperature: <u>99.9</u> % | 2-Meter Temperature: <u>99.9</u> %<br>Delta Temperature: <u>99.9</u> %<br>Relative Humidity: <u>100</u> %<br>Dew Point Temperature: <u>99.9</u> %<br>Net Radiation: <u>99.9</u> %<br>Barometric Pressure: <u>100</u> %<br><br><b>Surface</b><br><br>Precipitation (Rain): <u>100</u> % |

|   |   |
|---|---|
| <b>Project Meteorologist: Steven Coughlin</b><br><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|---|---|

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: OCTOBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: OCTOBER 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|--------------------------|---------------------------------|----------------|
|                                   |                             |                             |                          | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                          |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                          |                                 |                |
| Vector Wind Speed (mph)           | 0.1                         | 20.8                        | 5.9                      | 100.0                           | 100.0          |
| Vector Wind Direction (deg)       | 2                           | 360                         | 226                      | 100.0                           | 100.0          |
| Scalar Wind Speed (mph)           | 0.8                         | 21.2                        | 6.3                      | 100.0                           | 100.0          |
| Scalar Wind Direction (deg.)      | 1                           | 360                         | 225                      | 100.0                           | 100.0          |
| Sigma Theta (deg.)                | 6.2                         | 70.2                        | 20.0                     | 100.0                           | 100.0          |
| Vertical Wind Speed (mph)         | -0.21                       | 1.30                        | 0.21                     | 100.0                           | 100.0          |
| Sigma W (mph)                     | 0.04                        | 2.30                        | 0.76                     | 100.0                           | 100.0          |
| Sigma Phi (deg)                   | 2.23                        | 25.3                        | 6.9                      | 100.0                           | 100.0          |
| Temperature (deg-F)               | 28.5                        | 76.1                        | 49.0                     | 100.0                           | 100.0          |
| <u>2-Meter Level</u>              |                             |                             |                          |                                 |                |
| Temperature (deg-F)               | 24.5                        | 78.2                        | 47.9                     | 100.0                           | 100.0          |
| 10-m - 2-m Delta Temp (F-deg)     | -6.49                       | 9.27                        | 1.04                     | 100.0                           | 100.0          |
| Relative Humidity (percent)       | 28.0                        | 100.0                       | 78.1                     | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 22.8                        | 64.0                        | 40.2                     | 100.0                           | 100.0          |
| Net Radiation (W/m <sup>2</sup> ) | -70.5                       | 405.9                       | 856.5 (Avg. Daily Total) | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)     | 29.14                       | 30.29                       | 29.73                    | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                          |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.32                        | 5.16 (Total)             | 100.0                           | 100.0          |

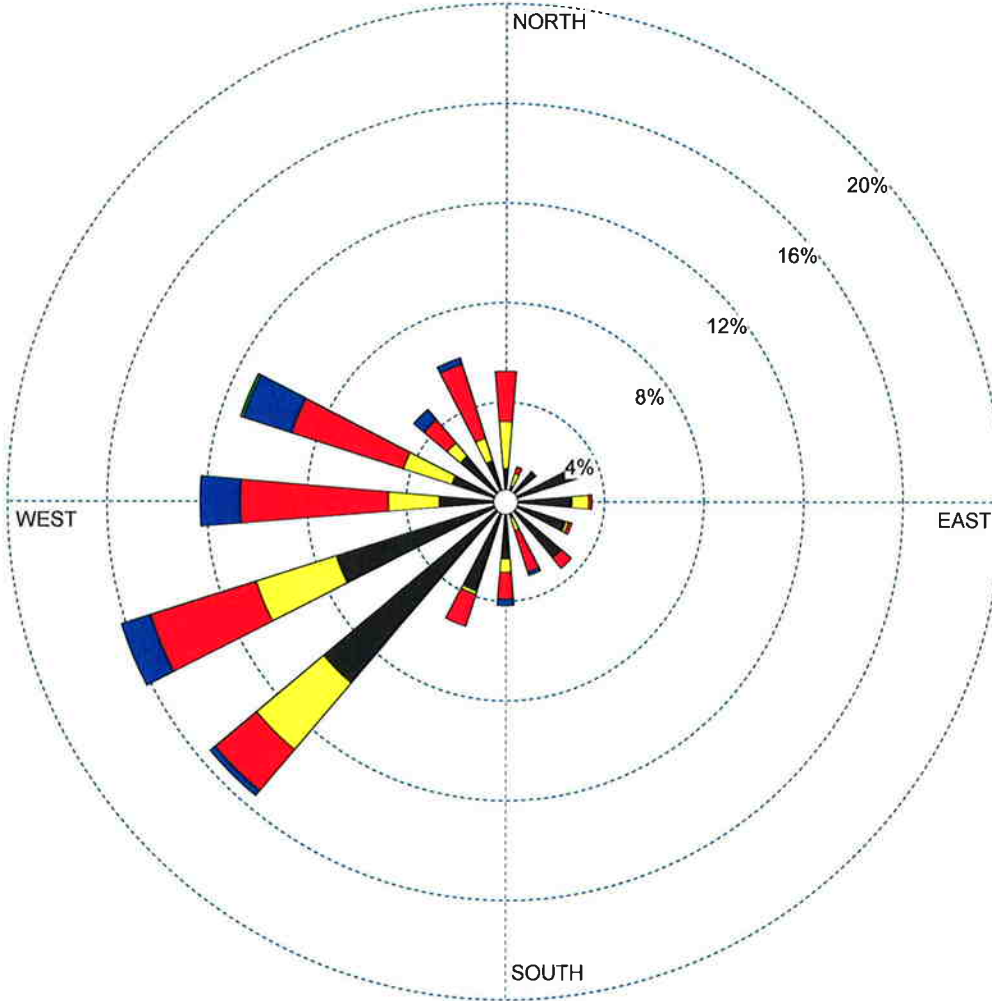


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-meter Tower - October 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(Knots)

- >= 22
- 17 - 21
- 11 - 17
- 7 - 11
- 4 - 7
- 1 - 4

Calms: 0.00%

COMMENTS:

DATA PERIOD:

**2008  
Oct 1 - Oct 31  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**744 hrs.**

AVG. WIND SPEED:

**5.45 Knots**

DATE:

**11/5/2008**

PROJECT NO.:

**444540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> December 30, 2008 |
|---|---|

**Subject: Submittal of Lakeshore/Willis Ave Meteorological Data for: NOVEMBER 2008**

|   |  |
|---|--|
| <b>Data:</b><br>___ Preliminary<br><input checked="" type="checkbox"/> Validated<br>___ Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br>___ Preliminary Report<br><input checked="" type="checkbox"/> Final Report<br><input checked="" type="checkbox"/> Data Summaries<br>___ AIRS Diskette<br>___ Client Data Disk<br>___ Other (as noted) |
|---|--|

**Program Operations/Data Collection Activities Summary:**

- An intermittent problem of electrical nature within the Lakeshore tower temperature system resulted in periods of erroneously high recorded temperature during the month. These periods, which affected both measured levels of temperature, delta temperature, and dew point, occurred at various times during the month until a site visit and troubleshooting activities on November 18. Subsequent to this visit, there were no occurrences of this problem again during the month. The erroneous data has been removed from the database and the affected hours are reported as a non-scheduled outage ("N").
- A performance audit was conducted at the Lakeshore/Willis Ave monitoring site on November 19. Minor periods of data are reported as scheduled down ("S") on this day to reflect these audit activities.
- A period of wind speed data is reported as missing ("N") on November 30. This missing data is the result of a period of freezing rain and the subsequent buildup of ice on the wind speed sensor and cups.

**Climatic Summary: NOVEMBER 2008**

General Predominance for winds from: west-southwest through due west

**10-meter level**  
 Primary Peak WD: WSW      Max. Wind Speed : 19.4 mph  
 Secondary Peak WD: W      Min. Wind Speed : 1.1 mph

**2-meter level**  
 Max. Temperature: 71.9 °F      Max. Dew Point Temp. 56.6 °F      Max. Relative Humidity 99%  
 Min. Temperature: 17.5 °F      Min. Dew Point Temp. 14.6 °F      Min. Relative Humidity 35%

| Cumulative-to-date Data Recovery Rates |               | Period: January 1, 2008 through |               | November 30, 2008 |  |
|--|---------------|---------------------------------|---------------|-------------------|--|
| <u>10-Meter Level</u>                  |               | <u>2-Meter Level</u>            |               |                   |  |
| 10-Meter Vector Wind Speed:            | <u>98.2</u> % | 2-Meter Temperature:            | <u>94.3</u> % |                   |  |
| 10-Meter Vector Wind Direction:        | <u>98.2</u> % | Delta Temperature:              | <u>94.3</u> % |                   |  |
| 10-Meter Scalar Wind Speed:            | <u>98.2</u> % | Relative Humidity:              | <u>100</u> %  |                   |  |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> % | Dew Point Temperature:          | <u>94.3</u> % |                   |  |
| 10-Meter Sigma Theta:                  | <u>99.9</u> % | Solar Radiation:                | <u>100</u> %  |                   |  |
|  |               | Barometric Pressure:            | <u>100</u> %  |                   |  |
| 10-Meter Vertical Wind Speed:          | <u>99.8</u> % |                                 |               |                   |  |
| Sigma W:                               | <u>99.8</u> % |                                 |               |                   |  |
| Sigma Phi:                             | <u>98.1</u> % |                                 |               |                   |  |
| 10-Meter Temperature:                  | <u>94.3</u> % |                                 |               |                   |  |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

-----  
 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 LAKESHORE/WILLIS AVE MONITORING SITE – 10-METER TOWER  
 -----

METEOROLOGICAL DATA SUMMARY FOR: NOVEMBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M SOLAR RADIATION                         | SOLAR RAD              | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
LAKESHORE/WILLIS AVE MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: NOVEMBER 2008

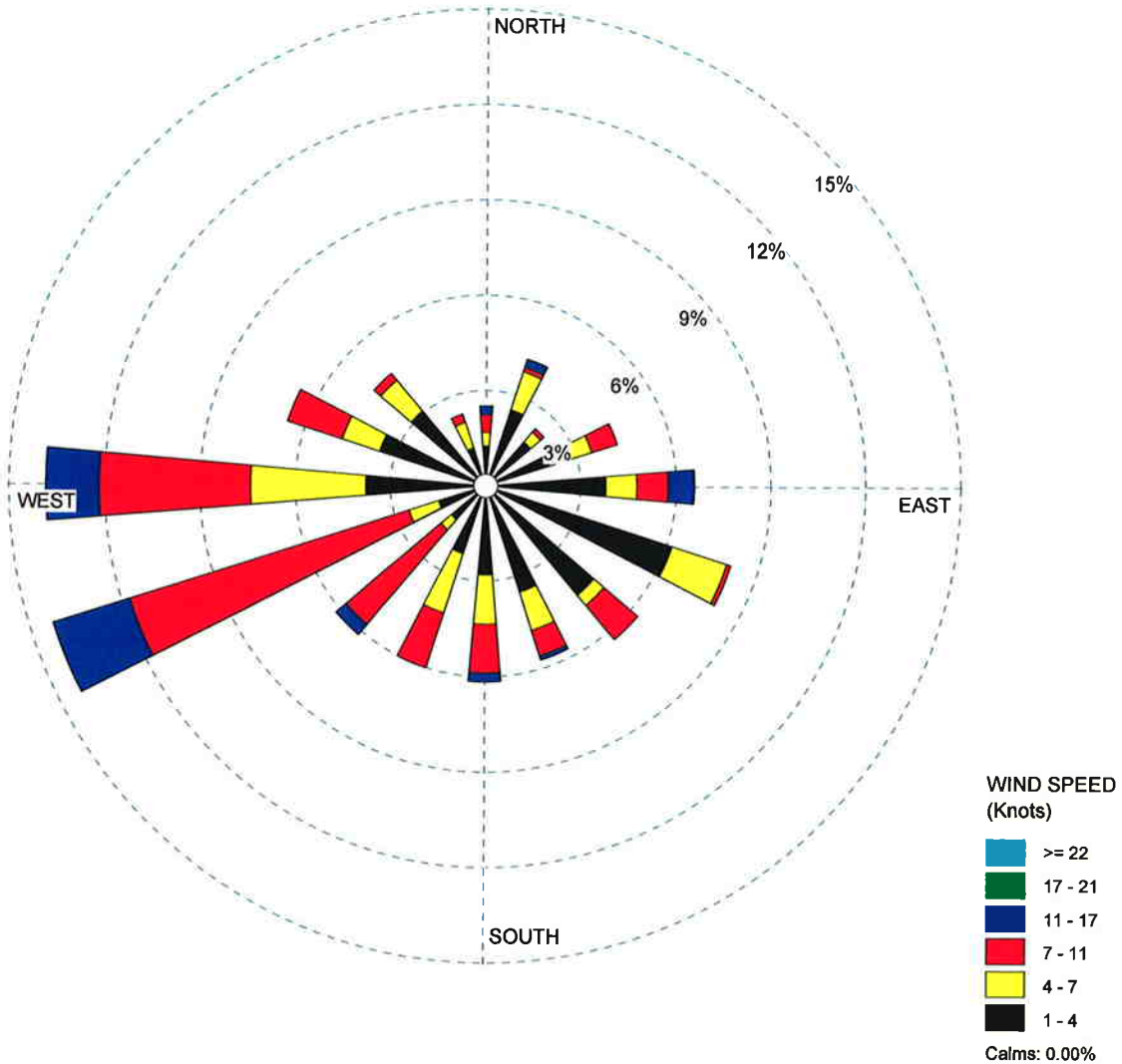
| <u>SITE / PARAMETER</u>                    | <u>MONTHLY<br/>MINIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MAXIMUM<br/>VALUE</u> | <u>MONTHLY<br/>MEAN<br/>VALUE</u> | <u>MONTHLY DATA RECOVERY RATES (%)</u> |                        |
|--|--------------------------------------|--------------------------------------|-----------------------------------|--|------------------------|
|  |                                      |                                      |                                   | <u>OPERATING<br/>SCHEDULE</u>          | <u>TOTAL<br/>HOURS</u> |
| <u>LAKESHORE/WILLIS AVE 10-METER TOWER</u> |                                      |                                      |                                   |  |                        |
| <u>10-Meter Level</u>                      |                                      |                                      |                                   |  |                        |
| Vector Wind Speed (mph)                    | 0.2                                  | 18.5                                 | 6.3                               | 99.7                                   | 99.4                   |
| Vector Wind Direction (deg)                | 1                                    | 358                                  | 248                               | 99.7                                   | 99.4                   |
| Scalar Wind Speed (mph)                    | 1.1                                  | 19.4                                 | 6.6                               | 99.7                                   | 99.4                   |
| Scalar Wind Direction (deg.)               | 2                                    | 357                                  | 247                               | 100.0                                  | 99.7                   |
| Sigma Theta (deg.)                         | 4.7                                  | 78.2                                 | 18.3                              | 100.0                                  | 99.7                   |
| Vertical Wind Speed (mph)                  | -0.13                                | 1.07                                 | 0.24                              | 100.0                                  | 99.7                   |
| Sigma W (mph)                              | 0.11                                 | 2.02                                 | 0.78                              | 100.0                                  | 99.7                   |
| Sigma Phi (deg)                            | 2.59                                 | 19.9                                 | 7.0                               | 100.0                                  | 99.4                   |
| Temperature (deg-F)                        | 17.6                                 | 71.3                                 | 37.0                              | 65.4                                   | 65.1                   |
| <u>2-Meter Level</u>                       |                                      |                                      |                                   |  |                        |
| Temperature (deg-F)                        | 17.5                                 | 71.9                                 | 36.8                              | 65.4                                   | 65.1                   |
| 10-m - 2-m Delta Temp (F-deg)              | -2.25                                | 3.66                                 | 0.15                              | 65.4                                   | 65.1                   |
| Relative Humidity (percent)                | 35.4                                 | 98.6                                 | 78.2                              | 100.0                                  | 100.0                  |
| Dew Point Temperature (deg-F)              | 14.6                                 | 56.6                                 | 30.6                              | 65.4                                   | 65.1                   |
| Solar Radiation (W/m <sup>2</sup> )        | 0.0                                  | 633.8                                | 1484.7 (Avg. Daily Total)         | 100.0                                  | 100.0                  |
| Barometric Pressure (in. Hg.)              | 28.98                                | 30.28                                | 29.71                             | 100.0                                  | 100.0                  |

WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Lakeshore/Willis Ave Monitoring Site - 10-meter Tower - November 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008  
Nov 1 - Nov 30  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.00%**

TOTAL COUNT:

**716 hrs.**

AVG. WIND SPEED:

**5.76 Knots**

DATE:

**12/30/2008**

PROJECT NO.:

**444540-02300**

|   |   |
|---|---|
| <b>To:</b> Mr. Tom Drachenberg<br>Parsons<br>290 Elwood Davis Road - Suite 312<br>Liverpool, NY 13088 | <b>Client:</b> Honeywell<br><b>Project:</b> Onondaga Lake - Meteorological Monitoring Program<br><b>Job No.:</b> 444540-02300<br><b>Date:</b> December 15, 2008 |
|---|---|

**Subject: Submittal of Wastebed 13 Meteorological Data for: NOVEMBER 2008**

|   |   |
|---|---|
| <b>Data:</b><br><input type="checkbox"/> Preliminary<br><input checked="" type="checkbox"/> Validated<br><input type="checkbox"/> Adjusted<br>(list parameters) | <b>Attached/Enclosed:</b><br><input type="checkbox"/> Preliminary Report <input type="checkbox"/> AIRS Diskette<br><input checked="" type="checkbox"/> Final Report <input type="checkbox"/> Client Data Disk<br><input checked="" type="checkbox"/> Data Summaries <input type="checkbox"/> Other (as noted) |
|---|---|

**Program Operations/Data Collection Activities Summary:**

- A performance audit was conducted at the Wastebed 13 meteorological monitoring site on November 19 and 20. As a result, minor periods of data are reported as scheduled down ("S") on November 20 to reflect these audit activities.
- A period of wind speed and vertical wind speed data (and associated parameters) is reported as missing ("N") on November 30. This missing data results from a period of freezing rain and a subsequent buildup of ice on each of the wind speed and vertical wind speed sensors.
- No other operational problems occurred at the Wastebed 13 monitoring site in November and monthly data recovery rates for all parameters ranged from 98.9 to 100 percent.

**Climatic Summary: NOVEMBER 2008**

General Predominance for winds from: west-southwest

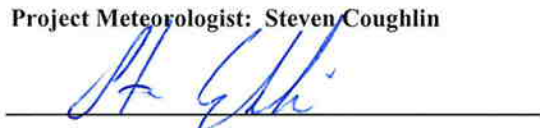
**10-meter level**

|                    |            |                   |                 |
|--------------------|------------|-------------------|-----------------|
| Primary Peak WD:   | <u>WSW</u> | Max. Wind Speed : | <u>20.3 mph</u> |
| Secondary Peak WD: | <u>SW</u>  | Min. Wind Speed : | <u>0.6 mph</u>  |

**2-meter level**

|                   |                |                      |                |                        |             |
|-------------------|----------------|----------------------|----------------|------------------------|-------------|
| Max. Temperature: | <u>70.3 °F</u> | Max. Dew Point Temp. | <u>59.0 °F</u> | Max. Relative Humidity | <u>100%</u> |
| Min. Temperature: | <u>14.7 °F</u> | Min. Dew Point Temp. | <u>13.7 °F</u> | Min. Relative Humidity | <u>33%</u>  |

| Cumulative-to-date Data Recovery Rates | Period: January 1, 2008 through | November 30, 2008      |               |
|--|---------------------------------|------------------------|---------------|
| <b>10-Meter Level</b>                  |                                 |                        |               |
| 10-Meter Vector Wind Speed:            | <u>97.9</u> %                   | 2-Meter Temperature:   | <u>99.9</u> % |
| 10-Meter Vector Wind Direction:        | <u>97.9</u> %                   | Delta Temperature:     | <u>99.9</u> % |
| 10-Meter Scalar Wind Speed:            | <u>97.9</u> %                   | Relative Humidity:     | <u>100</u> %  |
| 10-Meter Scalar Wind Direction:        | <u>99.9</u> %                   | Dew Point Temperature: | <u>99.9</u> % |
| 10-Meter Sigma Theta:                  | <u>99.9</u> %                   | Net Radiation:         | <u>99.9</u> % |
|  |                                 | Barometric Pressure:   | <u>100</u> %  |
| 10-Meter Vertical Wind Speed:          | <u>99.7</u> %                   | <b>Surface</b>         |               |
| Sigma W:                               | <u>99.7</u> %                   | Precipitation (Rain):  | <u>100</u> %  |
| Sigma Phi:                             | <u>97.9</u> %                   |                        |               |
| 10-Meter Temperature:                  | <u>99.9</u> %                   |                        |               |

|  |   |
|--|---|
| <b>Project Meteorologist: Steven Coughlin</b><br> | <b>Distribution:</b><br>P. Petrone - Parsons<br>G. Pacheco - Parsons<br>T. Fritts - Parsons |
|--|---|

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 HONEYWELL - ONONDAGA LAKE – METEOROLOGICAL MONITORING PROGRAM  
 WASTEBED 13 MONITORING SITE – 10-METER TOWER  
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METEOROLOGICAL DATA SUMMARY FOR: NOVEMBER 2008

PARAMETER IDENTIFICATION AND SITE DESCRIPTION

| <u>PARAMETER</u>                            | <u>ABBREVIATION</u>    | <u>UNITS OF MEASUREMENT</u> |
|---|------------------------|-----------------------------|
| 10-M WIND SPEED (VECTOR AVERAGE)            | VECTOR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (VECTOR AVERAGE)        | VECTOR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M WIND SPEED (SCALAR AVERAGE)            | SCALAR WIND SPEED      | MILES PER HOUR              |
| 10-M WIND DIRECTION (SCALAR AVERAGE)        | SCALAR WIND DIR.       | DEGREES FROM TRUE NORTH     |
| 10-M STD. DEV. OF HORIZONTAL WIND DIRECTION | SIGMA THETA            | DEGREES                     |
| 10-M VERTICAL WIND SPEED                    | VERT WIND SPEED        | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND SPEED       | SIGMA W                | MILES PER HOUR              |
| 10-M STD. DEV. OF VERTICAL WIND DIRECTION   | SIGMA PHI              | DEGREES                     |
| WIND PERSISTENCE FACTOR                     | WIND PERS.             | ---                         |
| 10-METER TEMPERATURE                        | 10-M TEMP.             | DEGREES FAHRENHEIT          |
| 2-METER TEMPERATURE                         | 2-M TEMP.              | DEGREES FAHRENHEIT          |
| DELTA TEMPERATURE                           | 10-M – 2-M DELTA TEMP. | FAHRENHEIT DEGREES          |
| 2-M RELATIVE HUMIDITY                       | 2M REL. HUM.           | PERCENT                     |
| 2-M DEW POINT TEMPERATURE                   | 2-M DEW POINT TEMP.    | DEGREES FAHRENHEIT          |
| 2-M NET RADIATION                           | NET RAD                | WATTS PER SQUARE METER      |
| 2-M BAROMETRIC PRESSURE                     | BAR PRESS              | INCHES OF MERCURY           |
| SFC PRECIPITATION (RAIN)                    | RAIN                   | INCHES OF WATER             |

THE FOLLOWING DATA CODES ARE USED IN THIS REPORT:

S SIGNIFIES MISSING DATA AS A RESULT OF A SCHEDULED OUTAGE.

N SIGNIFIES MISSING DATA AS A RESULT OF A NON-SCHEDULED OUTAGE.

A DASH (-) INDICATES INSUFFICIENT DATA TO CALCULATE THE VALUE.

ALL TIMES ARE LOCAL STANDARD TIME (LST) AND INDICATE HOUR STARTING TIMES.

THE DAILY AVERAGE WIND SPEED AND DIRECTION ARE COMPUTED AS THE VECTOR, OR RESULTANT WIND FOR THE DAY BASED ON HOURLY VALUES.

HONEYWELL - ONONDAGA LAKE - METEOROLOGICAL MONITORING PROGRAM  
WASTEBED 13 MONITORING SITE - 10-METER TOWER

MONTHLY DATA COLLECTION SUMMARY

DATA COLLECTION SUMMARY FOR THE MONTH OF: NOVEMBER 2008

| SITE / PARAMETER                  | MONTHLY<br>MINIMUM<br>VALUE | MONTHLY<br>MAXIMUM<br>VALUE | MONTHLY<br>MEAN<br>VALUE | MONTHLY DATA RECOVERY RATES (%) |                |
|-----------------------------------|-----------------------------|-----------------------------|--------------------------|---------------------------------|----------------|
|                                   |                             |                             |                          | OPERATING<br>SCHEDULE           | TOTAL<br>HOURS |
| <u>WASTEBED 13 10-METER TOWER</u> |                             |                             |                          |                                 |                |
| <u>10-Meter Level</u>             |                             |                             |                          |                                 |                |
| Vector Wind Speed (mph)           | 0.1                         | 19.8                        | 6.0                      | 99.2                            | 98.9           |
| Vector Wind Direction (deg)       | 2                           | 360                         | 198                      | 99.2                            | 98.9           |
| Scalar Wind Speed (mph)           | 0.6                         | 20.3                        | 6.3                      | 99.2                            | 98.9           |
| Scalar Wind Direction (deg.)      | 2                           | 359                         | 197                      | 100.0                           | 99.7           |
| Sigma Theta (deg.)                | 4.2                         | 70.4                        | 18.0                     | 100.0                           | 99.7           |
| Vertical Wind Speed (mph)         | -0.16                       | 0.93                        | 0.18                     | 99.4                            | 99.2           |
| Sigma W (mph)                     | 0.06                        | 2.25                        | 0.73                     | 99.4                            | 99.2           |
| Sigma Phi (deg)                   | 1.85                        | 19.8                        | 6.7                      | 99.2                            | 98.9           |
| Temperature (deg-F)               | 16.8                        | 68.3                        | 40.0                     | 100.0                           | 99.6           |
| <u>2-Meter Level</u>              |                             |                             |                          |                                 |                |
| Temperature (deg-F)               | 14.7                        | 70.3                        | 38.5                     | 100.0                           | 99.9           |
| 10-m - 2-m Delta Temp (F-deg)     | -4.68                       | 9.46                        | 1.44                     | 100.0                           | 99.6           |
| Relative Humidity (percent)       | 32.9                        | 99.5                        | 82.6                     | 100.0                           | 100.0          |
| Dew Point Temperature (deg-F)     | 13.7                        | 59.0                        | 33.2                     | 100.0                           | 99.9           |
| Net Radiation (W/m <sup>2</sup> ) | -88.1                       | 298.9                       | 38.3 (Avg. Daily Total)  | 100.0                           | 100.0          |
| Barometric Pressure (in. Hg.)     | 28.87                       | 30.16                       | 29.59                    | 100.0                           | 100.0          |
| <u>Surface Level</u>              |                             |                             |                          |                                 |                |
| Precipitation (Rain in inches)    | 0.00                        | 0.20                        | 2.43 (Total)             | 100.0                           | 100.0          |

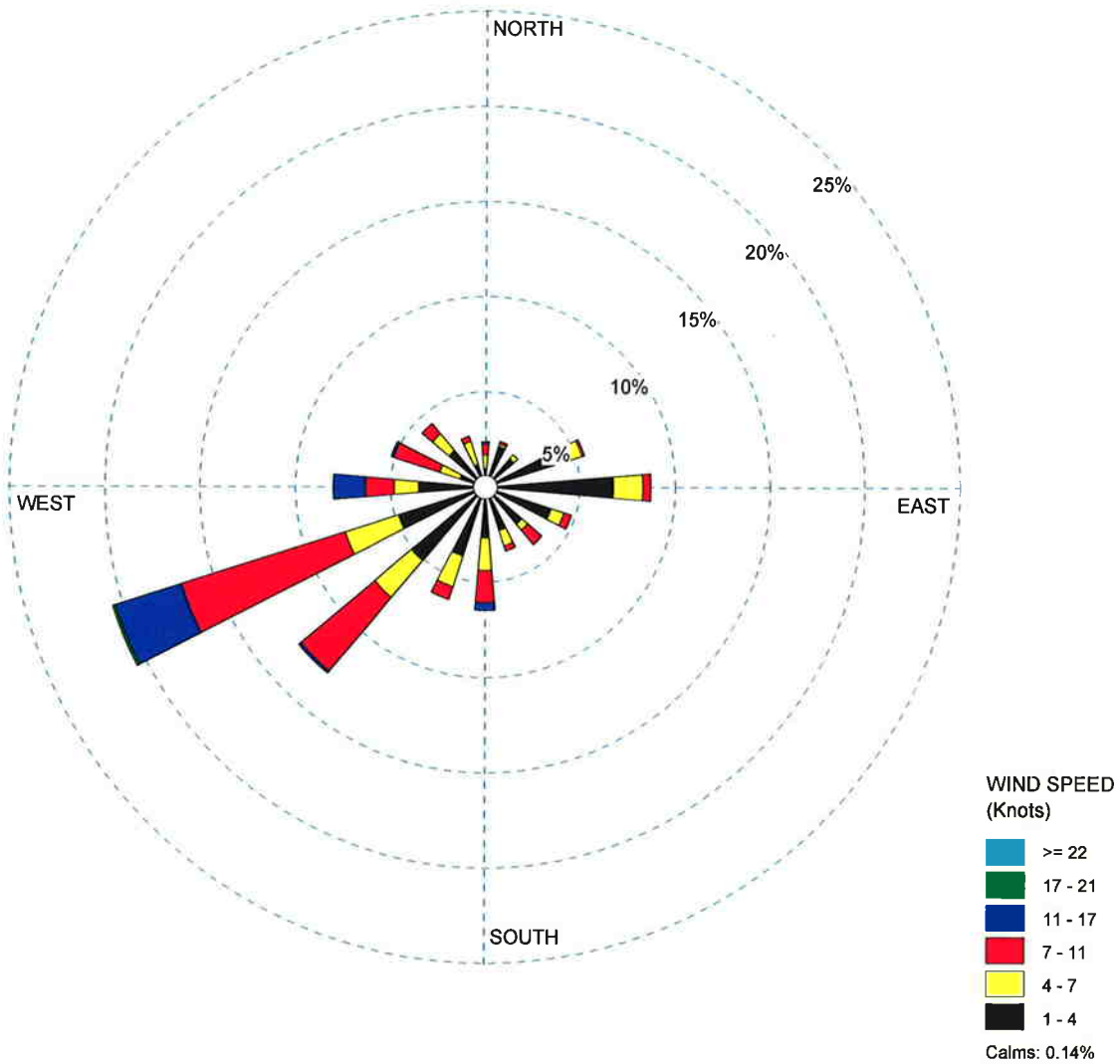


WIND ROSE PLOT:

**Honeywell - Onondaga Lake - Meteorological Monitoring Program  
Wastebed 13 Monitoring Site - 10-meter Tower - November 2008**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**2008  
Nov 1 - Nov 30  
00:00 - 23:00**

COMPANY NAME:

**PARSONS**

MODELER:

CALM WINDS:

**0.14%**

TOTAL COUNT:

**712 hrs.**

AVG. WIND SPEED:

**5.52 Knots**

DATE:

**12/10/2008**

PROJECT NO.:

**444540-02300**